

2011 | S I D ANNUAL MEETING

May 4 – 7, 2011

JW Marriott Desert Ridge Resort and Spa
Phoenix, Arizona

Meeting Program



Society for
Investigative
Dermatology



The Duke Department of Dermatology presents the 2011 Society for Investigative Dermatology Annual Meeting.

Jointly sponsored by

Duke School of Medicine

and



Society for
Investigative
Dermatology



Society for Investigative Dermatology

Mission

To advance and promote the sciences relevant to skin health and disease through education, advocacy and scholarly exchange of scientific information.

Vision

The SID will be the pre-eminent organization for the science of skin health and diseases. It will be a leading purveyor of educational programming. It will promote a culture of discovery and serve as the premier forum for the exchange of scientific information relating to dermatologic research. It will build cross-disciplinary bridges to provide catalytic leadership in attaining intellectual, political, and financial support for skin-related scientific investigation. The SID will be—and be viewed as—a significant force in shaping public policy. As a result of recruiting, nurturing, and mentoring the next generation of scientists, it will be a financially robust and self-sustaining organization.

Core Values

- Integrity
- Collegiality
- Shared beliefs
- Innovation
- Leadership



COMMERCIAL SUPPORT (Confirmed as of April 1, 2011)



2011 ANNUAL MEETING EXHIBITORS

BCCNS Life Support Network
CellnTec
Cicatricial Alopecia Research Foundation
Coalition of Skin Diseases
Elsevier, Inc.
F.I.R.S.T.
LUCID, Inc.
National Alopecia Areata Foundation
National Eczema Association
National Foundation for Ectodermal Dysplasias
Pachyonychia Congenita Project
The Sturge-Weber Foundation
TissueGnostics GMBH
Zen-Bio, Inc.

FUTURE ANNUAL MEETINGS

May 9 – 12, 2012
Raleigh Convention Center
Raleigh, North Carolina

May 8 - 11, 2013
International Investigative Dermatology
Edinburgh, Scotland

May 7 -10, 2014
Albuquerque Convention Center
Albuquerque, New Mexico

OFFICERS

Kathleen Green, PhD
President
Victoria Werth, MD
Vice President
Kim B. Yancey, MD
President-elect
Robert Modlin, MD
Vice President-elect
Richard Clark, MD
Immediate Past President
Robert A. Swerlick, MD
Secretary-Treasurer
Russell P. Hall, MD
Assistant Secretary-Treasurer
Paul Bergstresser, MD
JID Editor
Lowell Goldsmith, MD MPH
SID Senior Medical & Scientific Advisor

BOARD OF DIRECTORS

Angela Christiano, PhD
Lisa Beck, MD
Todd Becker, MD/PhD
Richard Eckert, PhD
Richard Gallo, MD/PhD
Jodi Johnson, PhD
Alexa Kimball, MD MPH
Andrew Kowalczyk, PhD
Brian Nickoloff, MD
Joyce Rico, MD
David Rubenstein, MD/PhD
Mark Udey, MD/PhD

WELCOME TO THE 71ST SID ANNUAL MEETING

On behalf of the Society for Investigative Dermatology (SID), we welcome you to the 71st Annual Meeting. The name of our host city, Phoenix, was officially recognized on May 4, 1868. It conjures up images of renewal and rebirth, apropos to the cycles of discovery that mark the path of innovation. This year in the 'Sun City', we come together—an international community of investigators—to reinforce and extend the frontiers of scientific knowledge about skin health and disease.

The scientific program has been developed to inform and engage members from multiple specialties and disciplines in order to establish and enhance venues for dissemination and exchange of scientific information. We thank the 2010-2011 Committee on Scientific Programs for their dedication in developing this program.

Co-Chairs

James T Elder, MD/PhD
Michael Girardi, MD

Committee Members

Jack Arbiser, MD/PhD
Anthony Gaspari, MD
My Mahoney, PhD
Anthony Oro, MD/PhD
Mitchell Denning, PhD
Tom Hornyak, MD/PhD
David Margolis, MD/PhD
Julie Segre, PhD

Our Society strives to offer programming that reaches all members of the dermatology and cutaneous biology research communities. A founding value of the Society in 1937 was to pave the career path for young investigators, and provide a dynamic forum in which a diverse group of scientists can interact. We remain committed to this day.

In concert with the 2011 "Year of the Mentor" theme designated by our Journal Editor, Paul Bergstresser, we have scheduled a variety of activities for exploration of a career in research, and many networking opportunities. We ask all meeting attendees to participate in the SID Mentor Network Survey—more information will be available during the meeting.

Plans are underway for events to celebrate our rich history. Join us for the SID's 75th Anniversary Celebration at next year's annual meeting, May 9-12 in Raleigh, North Carolina.

Welcome to Phoenix. We encourage you to return your meeting evaluation forms so we can incorporate your feedback into the development of future educational offerings.



Kathleen J. Green, PhD
President



Robert Swerlick, MD
Secretary-Treasurer



Russell Hall, MD
Dep. Secretary-Treasurer





The Coalition of Skin Diseases
salutes

Paul Bergstresser, MD

Editor, *Journal of Investigative Dermatology*
for his designation of 2010 as
“Year of the Patient”
and his ongoing commitment
to individuals
affected by skin disease.

**In all that he does, he leads with his
heart and compassion for others.**

www.coalitionofskindiseases.org

MEETING INFORMATION & POLICIES

Reproduction and Photography Policy

Any photography, filming, taping, recording or reproduction in any medium of any of the programs, exhibits, or lectures (oral or posters) presented at the 2011 SID Annual Meeting is strictly forbidden. **Failure to comply with this rule may lead to the removal of your Meeting credentials.**

On-site Registration

On-site registration will take place at the SID Registration Counter (Grand Canyon Foyer 6) at the JW Marriott Desert Ridge during the following hours:

Wednesday, May 4, 2011 • 8:00 am - 8:00 pm

Thursday, May 5, 2011 • 7:30 am - 4:00 pm

Friday, May 6, 2011 • 7:30 am - 4:00 pm

Saturday, May 7, 2011 • 7:30 am - 12:00 pm

Badges

Badges are issued at the SID Registration Counter (Grand Canyon Foyer 6). Meeting attendees are required to wear their badges at all times for admission to all sessions and other Meeting activities.

Special Services for the Physically Challenged

This year's facilities are fully accessible to the physically challenged. If you have any special needs, please stop at the Registration Counter upon arrival or call the SID office at 216-579-9300.

Placement Services

The SID is pleased to offer a placement service to its members. A placement/job postings page is available to members on the SID website at www.sidnet.org. In addition, prospective employers and candidates may conduct interviews or post additional announcements at the Meeting. A board will be available in the registration area.

Technical Exhibits

Exhibits will be on display during the following times in the Grand Saguaro Ballroom of the JW Marriott Desert Ridge:

Thursday, May 5, 2011 • 10:00 am - 12:00 pm

Friday, May 6, 2011 • 11:15 am - 1:15 pm

Saturday, May 7, 2011 • 10:00 am - 12:00 pm

The SID welcomes representatives from the following companies.

BCCNS Life Support Network

CellInTec

Cicatricial Alopecia Research Foundation

Coalition of Skin Diseases

Elsevier, Inc.

F.I.R.S.T.

LUCID, Inc.

Medicis

National Alopecia Areata Foundation

National Eczema Association

National Foundation for Ectodermal Dysplasias

Pachyonychia Congenita Project

The Sturge-Weber Foundation

TissueGnostics GMBH

Zen-Bio, Inc.

CME STATEMENT & OBJECTIVES

The Duke Department of Dermatology presents the 2011 Society for Investigative Dermatology Annual Meeting.
Jointly sponsored by:



The CME Mission of the Society for Investigative Dermatology (SID) is to advance and promote scientific evidence relevant to skin health and disease through education and scholarly exchange of scientific information, with the intent to foster improvement in the competence (abilities, skills and strategies) of dermatology researchers and clinicians.

Commercial Support Statement

This CME activity is supported by educational grants from Abbott Laboratories, Medicis, and Merz Pharmaceuticals, LLC.

Purpose

The educational programming of the SID is designed to develop, maintain, and/or increase the abilities, skills, and professional performance of its target audiences. SID CME activities will:

- 1) Disseminate updated evidence-based knowledge of skin biology/disease and applications for maintaining health and preventing, diagnosing, and treating disease in a manner that fosters scientific excellence, elevates the standard of care, and meets high ethical standards.
- 2) Provide target audiences with a relevant forum for the exchange of cutting-edge scientific ideas, information, and methodology.
- 3) Advance the science involved in basic skin biology and clinical care of patients with skin disease.
- 4) Provide exposure to novel science (both concepts and methods) which may be relevant in the future to understanding and treatment skin disease.

Target Audiences

The primary target audiences for SID CME activities include all of the sectors of the dermatology community, consisting of research investigators, clinicians, research and clinical trainees, members of industry, and community advocates for skin health/disease.

Expected Results

Activities are primarily designed to improve competence, defined as the skills, abilities and strategies a physician would put into practice in the evaluation, diagnosis and management of patients with skin diseases. These activities will bring clinicians to the cutting edge of new diagnostic techniques, provide increased understanding of the pathogenesis of disease and in the long term improve patient outcome using evidence based data. For researchers, education is designed to improve research skills, abilities and strategies.

Results of SID education are expected to include a change in knowledge and competence as measured by post meeting evaluations, an ability to describe how new knowledge may be applied to research; a reported intent to apply new knowledge by making changes in research strategies; and a description of how new knowledge has been applied.

Faculty Listing

Activity Medical Director:

Russell P. Hall, III, MD
Chairman, Department of Dermatology
Duke University Medical Center

Activity Co-Director:

Robert Swerlick, MD
Associate Professor and Chair
Emory University

Summary of Faculty Disclosure/Conflict Resolution

Staff and Content Validation Reviewer Disclosure

The staff involved with this activity and any content validation reviewers of this activity have reported no relevant financial relationships with commercial interests.

Resolution of Conflicts of Interest

In accordance with the ACCME Standards for Commercial Support of CME, the Duke University School of Medicine implemented mechanisms, prior to the planning and implementation of this CME activity, to identify and resolve conflicts of interest for all individuals in a position to control content of this CME activity.

Planning Committee/Faculty Disclosure

The following speakers and/or planning committee members have indicated they have no relationship(s) with industry to disclose relative to the content of this CME activity:

Scott Atwood, PhD
Akerke Baibergenova, MD
Carl Baker, MD PhD
Jamie Bernard, PhD
Ricardo Berrios, MD
Cedric Blanpain, MD PhD
Sara Brown, MBChB ,MD
Erin Burns, MS
Rita Cabral, PhD
Anna Celli, PhD
Aileen Chang, BA
Alexendra Charruyer, PharmD, PhD
M Chen, PhD
Jiang Chen, MD
Shu Shien Chin, BS
Teng-Leong Chew, PhD
John Cho, PhD
Angela Christiano, PhD
Andrea Christman, BA
Rachael Clark, MD PhD
Oscar Colegio, MD PhD
Edward Cowen, MD
Rutao Cui, MD
Brenda Curtis, MD
Mitra Dowlatshahi, BA
James Elder, MD PhD
Peter Elias, MD
Anna Engberg, BA
Jamison Feramisco, MD PhD
Hillary Frankel, AB, MD
Teresa Fu, BS
Takuya Furuhashi, MD
Shuo Geng, PhD
Spiros Getsios, PhD
Lisa Godsel, PhD
Douglas Grossman, MD
Robert Gruber, MD
Thomas Haarmann-Stemmann, Dr
Eva Hadaschik, MD
Kevin Hamill, PhD
Cameron Harrison, MD
Karen Hastings, MD PhD
Matthew Hayden, MD
Claire Higgins, PhD
Robert Hoffman, PhD
Valerie Horsley, PhD
Michael Hughes, PhD
Botond Igartyo, PhD
Munenari Itoh, MD PhD
Ali Jabbari, MD PhD
Heidi Jacobe, MD MScS
Ahmad Jalili, MD PhD
Jaroslav Janda, PhD
Andrew Johnston, PhD
Paul Jou, MS, BS, BA
Dan Kaplan, MD PhD
Ritika Khandpur, MD, MHA
Paul Khavari, MD PhD
Maija Kiuru, MD PhD
Kristina Kligya, PhD
I-Hsin Kuo, MS
Mazen Kurban, MD
Ute Laggner, MD PhD
Sarah Lamore, MS
Sinead Langan, MD, MRCP, MSc, PhD

Robert Lavker, PhD
Lu Le, MD PhD
Matthew LeBoeuf, MD
Terry Lechler, PhD
Gloria Lefkowitz, BS
Wen-Hwa Li, MS, MBA
Shaowei Li, MD, PhD
Yanhua Liang, MD
Samantha Lin, BSc
Andrew Lin, BA
Jennifer Lippincott-Schwartz, MD
Fan Liu, BA
Liang Liu, PhD
Luisa Lunardon, MD
Michela Manni, PhD
Yamamoto Mayuko, MD
John McGrath, MD
Jeremiah Miller, PhD
Fumi Miyagawa, MD PhD
Anandaroop Mukhopadhyay, PhD
Jun Muto, MD
Sarah Nakib, MD, MPH
Kevin Nash, MD PhD
Christopher Negro, BA
Toshifumi Nomura, MD PhD
Janna Nousbeck, PhD
Ehrhardt Proksch, MD PhD
Sophia Rangwala, AB
Hamid Rezvani, PhD
Sabine Ring, PhD
Douglas Robertson, MD
Lara Rosenbaum, BS
Julie Ryan, PhD, MPH
Ravi Sahu, PhD
Aman Samrao, MD
Yardena Samuels, PhD
Nicole Seminara, MD
Vivian Shi, BS
Jan Simon, MD
Frances Smith, PhD
Katrina Spaunhurst, BA
Arnaud Teichert, PhD
Nancy Thomas, MD PhD
Tian Tian, PhD
Jakub Tolar, MD PhD
Gaku Tsuji, MD
Mudit Vaid, PhD
Monique Verhaegen, PhD
Archana Vishwanath, BA
Kevin Wang, MD PhD
Zhenping Wang, PhD
Rei Watanabe, MD
Maria Wei, MD PhD
Tongyu Wikramanayake
Georg Wondrak, PhD
Nabia Yusuf, PhD
Mingfeng Zhang, MD
Jonathan Zippin , MD PhD

Galderma
Matthias Schmuth, MD, fulfills the role of Principal Investigator for Abbott & Pfizer
John Spaunhurst, DVM, PhD, fulfills the role of PI for P&G
John Stanley, MD, fulfills the role of Own Stock for GE, Life Sciences
Enrique Torchia, PhD, fulfills the role of Expert Reviewer for Roche
Jeffrey Travers, MD, fulfills the role of Expert Reviewer for Eli Lilly
Hensin Tsao, MD, fulfills the role of Consultant for Genentec, Metmark & Quest
Casey Weaver, MD, fulfills the role of Sci Cofounder for Eleven Pharma

Unapproved Use Disclosure

Duke School of Medicine requires CME faculty (speakers) to disclose to attendees when products or procedures being discussed are off-label, unlabeled, experimental, and/or investigational (not FDA approved); and any limitations on the information that is presented, such as data that are preliminary or that represent ongoing research, interim analyses, and/or unsupported opinion. This information is intended solely for continuing medical education and is not intended to promote off-label use of these medications. If you have questions, contact the medical affairs department of the manufacturer for the most recent prescribing information. Faculty will not be discussing information about pharmaceutical agents that is outside of U.S. Food and Drug Administration approved labeling.

Disclaimer

The information provided at this CME activity is for continuing education purposes only and is not meant to substitute for the independent medical judgment of a healthcare provider relative to diagnostic and treatment options of a specific patient's medical condition.

For more information about the SID Annual Meeting and Registration please contact Carolyn Slade, Director of Meetings & Educational Programs at 216.579.9300.

Instructions on How to Receive Credit

In order to receive CME credit, participants must sign-in, review the CME information (accreditation, learning objectives, faculty disclosures, etc.) and attend the CME activity. Participants should also complete the activity evaluation form and return it to the Society for Investigative Dermatology via fax to 216.579.9333 or mail to:

Society for Investigative Dermatology
CME
526 Superior Avenue E, Suite 540
Cleveland, OH 44114

Accreditation

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the Duke University School of Medicine and the Society for Investigative Dermatology. The Duke University School of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

Credit Designation

The Duke University School of Medicine designates this educational activity for a maximum of 36.00 AMA PRA Category 1 Credit(s)TM. Physicians should only claim credit commensurate with the extent of their participation in the activity.

The following speakers and/or planning committee members have indicated that they have relationship(s) with industry to disclose:

April Armstrong, MD, fulfills the role of Speaker for Abbott Laboratories
Pamela Aubert, MD, fulfills the role of Principal Investigator for Pfizer
Karen Blecher, BA, fulfills the role of None for Biogen
Kevin Cooper, MD, fulfills the role of Consultant for Anacor & Bolt
Kristina Duffin, MD, fulfills the role of Consultant for Pfizer, Amgen, & Eli Lilly
Joel Gelfand, MD, MSCE, fulfills the role of Consultant for Amgen & Abbott
Michael Girardi, MD fulfills the role of Advisory Board Member for Pfizer
Stephen Katz, MD, PhD, fulfills the role of Editor for McGraw-Hill
James Lee, MD, PhD, fulfills the role of Employment for Graceway Pharma
Michael Ming fulfills the role of Editor for Elsevier
Bruce Morgan fulfills the role of None for Shiseido Ltd.
Anthony Oro, MD, PhD, fulfills the role of Advisory Board Member for Genentec
Amy Paller, MD, fulfills the role of Consultant for Allyn
David Rubenstein, MD, PhD, fulfills the role of Speaker for Amgen, Biogen & Abbott
Caitriona Ryan, MD, fulfills the role of Advisory Board Member for Janssen and Speaker for

MEETING-AT-A-GLANCE

Wednesday, May 4, 2011

Resident Retreat for Future Academicians	7:30 am - 3:00 pm
Desert Suite III and V	
National Psoriasis Foundation	8:00 am - 11:00 am
Chairman's Boardroom	
SID Board of Directors Meeting	8:00 am - 2:00 pm
Desert Suite I	
Registration	8:00 am - 8:00 pm
Grand Canyon Foyer 6	
International PC Consortium (PC Project)	9:00 am - 1:00 pm
Desert Suite VIII	
Translational Research Symposium <i>Clearing the Pipeline</i>	12:00 pm - 3:00 pm
Grand Canyon 6 - 7	
Irvin H. Blank Forum <i>Developments in Personalized Medicine for Skin Disease</i>	3:00 pm - 5:00 pm
Grand Canyon 6 - 7	
Albert M. Kligman/Phillip Frost Leadership Lecture <i>The Nature of the Mammalian Permeability Barrier</i>	5:00 pm - 5:30 pm
Peter Elias, MD	
Grand Canyon 6 - 7	
State-of-the-Art Plenary Lecture 1 <i>How Skin-Resident Dendritic Cell Subsets Control Immune Responses</i>	5:30 pm - 6:00 pm
Dan Kaplan, MD/PhD	
Grand Canyon 6 - 7	
State-of-the-Art Plenary Lecture 2 <i>Towards Deciphering the Genetic Landscape of Melanoma</i>	6:00 pm - 6:30 pm
Yardena Samuels, PhD	
Grand Canyon 6 - 7	
Welcome Reception	7:00 pm - 9:00 pm
Ballroom Lawn	

Indicates CME Credit Offered

Thursday, May 5, 2011

Society for Pediatric Dermatology	7:00 am - 8:00 am
Desert Suite I	
Registration	7:30 am - 4:00 pm
Grand Canyon Foyer 6	
Plenary Session I	8:00 am - 9:00 am
Grand Canyon 6 - 7	
Eugene M. Farber Lecture <i>Psoriasis: Narrowing the Immunologic Target</i>	9:00 am - 9:30 am
Kevin Cooper, MD	
Grand Canyon 6 - 7	
Naomi M. Kanof Lecture <i>How p53 Works</i>	9:30 am - 10:00 am
Sir David Lane, PhD	
Grand Canyon 6 - 7	
American Skin Association Achievement Awards	10:00 am - 10:10 am
Grand Canyon 6 - 7	
David Martin Carter Mentor Award <i>Presented to John S. Strauss, MD and John A. Parrish, MD</i>	10:10 am - 10:15 am
Grand Canyon 6 - 7	
Clinical Scholars Program	10:00 am - 11:30 am
Grand Canyon 8	
Poster Session I/Technical Exhibits Open with Coffee Break <i>Odd 001-281/Even 282-562</i>	10:00 am - 12:00 pm
Grand Saguaro Ballroom	
BCCNS Life Support Network	10:00 am - 12:00 pm
Grand Canyon 9 - 10	
Research in Cutaneous Surgery Symposium	10:00 am - 1:00 pm
Grand Canyon 11 - 12	
Mentorship Luncheon <i>TICKETED EVENT; PRE-REGISTRATION REQUIRED</i>	12:00 pm - 2:00 pm
Desert Suite III and V	
Symposium I <i>New Therapeutics for Autoimmune Diseases</i>	12:00 pm - 2:00 pm
Grand Canyon 8	
Young Investigator and Trainee Symposium <i>Developing an Academic Career</i>	2:00 pm - 5:00 pm
Grand Canyon 8	
Cutaneous T Cell Lymphoma Symposium	2:00 pm - 5:30 pm
Grand Canyon 6 - 7	
Concurrent Minisymposia	2:00 pm - 5:30 pm
1. Pigmentation and Melanoma Wildflower Salon B	
2. Hair and Cutaneous Development Wildflower Salon A	
3. Epidermal Structure and Function Grand Canyon 4 - 5	
4. Immunology I: Adaptive Immunity Grand Canyon 9 - 10	
5. Genetic Disease, Gene Regulation & Gene Therapy Grand Canyon 11 - 12	

Social Event <i>TICKETED EVENT; PRE-REGISTRATION REQUIRED</i>	6:00 pm - 10:00 pm
See page 52 for additional information. Buses depart from the Ballroom Entrance beginning at 5:45 pm.	
Corona Ranch	



Friday, May 6, 2011

Registration	7:30 am - 4:00 pm
Grand Canyon Foyer 6	
Business Meeting for Members	7:30 am - 8:15 am
Grand Canyon 6 - 7	
Plenary Session II	8:15 am - 9:15 am
Grand Canyon 6 - 7	
SIDES Program	9:00 am - 3:00 pm
Wildflower C	
Stephen Rothman Award	9:15 am - 9:25 am
<i>Presented to John R. Stanley, MD</i>	
Grand Canyon 6 - 7	
Herman Beerman Lecture	9:25 am - 9:55 am
<i>Super-resolution Imaging with Photoactivatable Fluorescent Proteins</i>	
Jennifer Lippincott-Schwartz, PhD	
Grand Canyon 6 - 7	
Celebrating NIAMS 25th Anniversary	9:55 am - 10:10 am
David Bickers, MD	
Grand Canyon 6 - 7	
State-of-the-Art Plenary Lecture 3	10:15 am - 10:45 am
<i>Defining the Cell Lineages at the Origin of Skin Cancers</i>	
EMBO Young Investigator Lecture	
Cedric Blanpain, MD/PhD	
Grand Canyon 6 - 7	
State-of-the-Art Plenary Lecture 4	10:45 am - 11:15 am
<i>Intrinsic and Extrinsic Regulation of Skin Stem Cells</i>	
Valerie Horsley, PhD	
Grand Canyon 6 - 7	
Poster Session II/Technical Exhibits Open with Coffee Break	11:15 am - 1:15 pm
<i>Even 002-280/Odd 563-845</i>	
Grand Saguaro Ballroom	
Clinical Scholars Program	11:30 am - 1:30 pm
Grand Canyon 8	
SID Technical Workshop	12:00 pm - 2:00 pm
<i>Confocal Microscopy and Imaging Techniques</i>	
Grand Canyon 6 - 7	
Women's Derm Society Luncheon & Forum	12:00 pm - 2:00 pm
Desert Suite III and V	
Concurrent Minisymposia	2:00 pm - 5:30 pm
6. Immunology II: Innate Immunity and Microbiology	
Wildflower A	
7. Tissue Regeneration, Stem Cells and Wound Healing	
Wildflower B	
8. Carcinogenesis & Cancer Genetics	
Grand Canyon 11 - 12	
9. Epidemiology/Health Services Research	
Grand Canyon 9 - 10	
JID Editorial Board Meeting	4:00 pm - 6:00 pm
Pinnacle Peak 2	
North American Hair Research Society Scientific Meeting	6:00 pm - 9:30 pm
Desert Suites III and V	
Galderma Japan Scientific Forum	6:00 pm - 9:30 pm
Desert Suites IV and VI	
Trainee Dinner Session	7:30 pm - 9:30 pm
Grand Canyon 4 - 5	

Saturday, May 7, 2011

SID Board of Directors Meeting	7:00 am - 8:00 am
Desert Suite I	
Registration	7:30 am - 12:00 pm
Grand Canyon Foyer 6	
American DermatoEpidemiology Network	8:00 am - 12:30 pm
Business/Scientific Session	
Grand Sonoran A - B	
Plenary Session III	8:00 am - 9:00 am
Grand Sonoran E - F	
William Montagna Lecture	9:00 am - 9:30 am
<i>Developing New Therapies for Epidermolysis Bullosa: The Hard Graft</i>	
John McGrath, MD	
Grand Sonoran E - F	
Julius Stone Lecture	9:30 am - 10:00 am
<i>The Interplay of IL-17- and IFNg-producing CD4 T Cells in Immune-mediated Inflammation</i>	
Casey Weaver, MD	
Grand Sonoran E - F	
Clinical Scholars Program	10:00 am - 12:00 pm
Grand Sonoran G	
Poster Session III/Technical Exhibits Open with Coffee Break	10:00 am - 12:00 pm
<i>Odd 283-565/Even 564-844</i>	
Grand Saguaro Ballroom	
Concurrent Minisymposia	12:30 pm - 4:00 pm
10. Auto Immunity and Inflammation	
Grand Sonoran C-D	
11. Cell Adhesion/Matrix and Vascular Biology	
Wildflower Salon A	
12. Human Clinical Research and Therapeutics	
Grand Sonoran G	
13. Photobiology	
Wildflower C	
Phoenix Dermatologic Society/Arizona Dermatologic Society	2:30 pm - 5:30 pm
Grand Sonoran A - B	

EDUCATIONAL TRACKS

The SID is pleased to offer three educational program tracks within the 2011 Annual Meeting: Translational Research Track, Clinical Scholars Track and Young Investigator & Trainee Track.

The SID has been increasing the variety of sessions offered at the Annual Meeting that are geared toward residents, fellows, students and clinicians. The track system is an easy way for attendees to find and select the components of the Meeting that are best suited to their interests. The tracks include portions of the Meeting that are the most inter-related, providing attendees with a cohesive learning experience. By participating in a track, attendees will have the added benefit of attending sessions with their peers, providing significant opportunities for networking. You must be registered to attend educational track programming. Spaces are limited, and early registration is recommended. Registration will remain open until all spaces are filled.

The following pages outline the programming that is suggested to attendees participating in educational tracks. Track participants are encouraged to attend other portions of the Meeting as well.

Translational Research Track

- **Designed for investigators who are considering or are actively involved in translating cutaneous biology research findings into clinical applications**

This track combines clinically-oriented elements of the Meeting program with special lectures, including the Translational Research Symposium. This year's symposium, "Clearing the Pipeline" includes the following:

- Is There a Place for the Academic Innovator?
- How Can the Licensing Office Maximize Your Innovation?
- Licensing Opportunities: What Is Industry Looking for in Terms of Creative and Marketable Ideas?
- How, Where and When Should the Trials Be Conducted?
- What Do You Need from the FDA and What Does the FDA Need from You?
- Panel Discussions

Clinical Scholars Track

- **Designed for practicing dermatologists and educators who need overviews of current research topics and insight into the latest developments in skin disease and health research**

The Clinical Scholars program focuses on providing the latest findings on cutting-edge research in a way that better reaches dermatologists not directly involved in bench research. This program combines clinically-oriented elements of the Meeting with special lectures on topics such as:

- B-RAF Inhibitors: Basic Science and Clinical Experience
- Psoriasis and the Risk of Systemic Disease: Implications for Clinical Practice
- Genomewide Association Studies in Dermatologic Diseases
- Mechanism-based Therapy Using Hedgehog Pathway Inhibitors

Young Investigator & Trainee Track

- **Designed for early career dermatology investigators and residents to learn about the latest developments in skin research as well as to gain insight into career development in dermatological research**

This track combines clinically-oriented elements of the Meeting with elements of the Clinical Scholars program and a special symposium for young investigators. This year's symposium, "Developing an Academic Career" includes the following lecture topics:

- Mentoring & Finding a Niche
- Developing a Career in Clinical Research
- Finding Funding, Part 1: Foundations & Other Sources to Get Started—What's Out There?
- Finding Funding, Part 2: NIH Funding Programs for Young Investigators
- Climbing the Academic Ladder

CLINICAL SCHOLARS TRACK — SUGGESTED PROGRAMMING

Wednesday, May 4, 2011

Irvin H. Blank Forum	3:00 pm - 5:00 pm
<i>Developments in Personalized Medicine for Skin Disease</i>	
Grand Canyon 6 - 7	
Kligman/Frost Leadership Lecture	5:00 pm - 5:30 pm
<i>The Nature of the Mammalian Permeability Barrier</i>	
Peter Elias, MD	
Grand Canyon 6 - 7	
State-of-the-Art Plenary Lecture 1	5:30 pm - 6:00 pm
<i>How Skin-Resident Dendritic Cell subsets Control Immune Responses</i>	
Dan Kaplan, MD/PhD	
Grand Canyon 6 - 7	
State-of-the-Art Plenary Lecture 2	6:00 pm - 6:30 pm
<i>Towards Deciphering the Genetic Landscape of Melanoma</i>	
Yardena Samuels, PhD	
Grand Canyon 6 - 7	
Welcome Reception	7:00 pm - 9:00 pm
Ballroom Lawn	

Thursday, May 5, 2011

Plenary Session I	8:00 am - 9:00 am
Grand Canyon 6 - 7	
Naomi M. Kanof Lecture	9:30 am - 10:00 am
<i>How p53 Works</i>	
Sir David Lane, PhD	
Grand Canyon 6 - 7	
Clinical Scholars Program	10:00 am - 11:30 am
Grand Canyon 8	
Symposium I	12:00 pm - 2:00 pm
<i>New Therapeutics for Autoimmune Diseases</i>	
Grand Canyon 8	
Cutaneous T Cell Lymphoma Symposium	2:00 pm - 5:30 pm
Grand Canyon 6 - 7	
Concurrent Minisymposia	2:00 pm - 5:30 pm
1. Pigmentation and Melanoma Wildflower Salon B	
2. Hair and Cutaneous Development Wildflower Salon A	
3. Epidermal Structure and Function Grand Canyon 4 - 5	
4. Immunology I: Adaptive Immunity Grand Canyon 9 - 10	
5. Genetic Disease, Gene Regulation & Gene Therapy Grand Canyon 11 - 12	
Social Event	6:00 pm - 10:00 pm
<i>TICKETED EVENT; PRE-REGISTRATION REQUIRED</i>	
<i>See page 52 for additional information. Buses depart from the Ballroom</i>	
<i>Entrance beginning at 5:45 pm.</i>	
<i>Corona Ranch</i>	

Friday, May 6, 2011

Plenary Session II	8:15 am - 9:15 am
Grand Canyon 6 - 7	
Beerman Lecture	9:25 am - 9:55 am
<i>Super-resolution Imaging with Photoactivatable Fluorescent Proteins</i>	
Jennifer Lippincott-Schwartz, PhD	
Grand Canyon 6 - 7	
State-of-the-Art Plenary Lecture 3	10:15 am - 10:45 am
<i>Defining the Cell Lineages at the Origin of Skin Cancers</i>	
EMBO Young Investigator Lecture	
Cedric Blanpain, MD/PhD	
Grand Canyon 6 - 7	
State-of-the-Art Plenary Lecture 4	10:45 am - 11:15 am
<i>Intrinsic and Extrinsic Regulation of Skin Stem Cells</i>	
Valerie Horsley, PhD	
Grand Canyon 6 - 7	
Clinical Scholars Program	11:30 am - 1:30 pm
Grand Canyon 8	
Concurrent Minisymposia	2:00 pm - 5:30 pm
6. Immunology II: Innate Immunity and Microbiology Wildflower A	
7. Tissue Regeneration, Stem Cells and Wound Healing Wildflower B	
8. Carcinogenesis & Cancer Genetics Grand Canyon 11 - 12	
9. Epidemiology/Health Services Research Grand Canyon 9 - 10	

Saturday, May 7, 2011

Plenary Session III	8:00 am - 9:00 am
Grand Sonoran E-F	
William Montagna Lecture	9:00 am - 9:30 am
<i>Developing New Therapies for Epidermolysis Bullosa: The Hard Graft</i>	
John McGrath, MD	
Grand Sonoran E-F	
Julius Stone Lecture	9:30 am - 10:00 am
<i>The Interplay of IL-17- and IFNg-producing CD4 T Cells in Immune-mediated Inflammation</i>	
Casey Weaver, MD	
Grand Sonoran E-F	
Clinical Scholars Program	10:00 am - 12:00 pm
Grand Sonoran G	
Concurrent Minisymposia	12:30 pm - 4:00 pm
10. Auto Immunity and Inflammation Grand Sonoran C-D	
11. Cell Adhesion/Matrix and Vascular Biology Wildflower Salon A	
12. Human Clinical Research and Therapeutics Grand Sonoran G	
13. Photobiology Wildflower C	



TRANSLATIONAL RESEARCH TRACK — SUGGESTED PROGRAMMING

Wednesday, May 4, 2011

Translational Research Symposium	12:00 pm - 3:00 pm
<i>Clearing the Pipeline</i>	
Grand Canyon 6 - 7	
Irvin H. Blank Forum	3:00 pm - 5:00 pm
<i>Developments in Personalized Medicine for Skin Disease</i>	
Grand Canyon 6 - 7	
Albert M. Kligman/Phillip Frost Leadership Lecture	5:00 pm - 5:30 pm
<i>The Nature of the Mammalian Permeability Barrier</i>	
Peter Elias, MD	
Grand Canyon 6 - 7	
State-of-the-Art Plenary Lecture 1	5:30 pm - 6:00 pm
<i>How Skin-Resident Dendritic Cell Subsets Control Immune Responses</i>	
Dan Kaplan, MD/PhD	
Grand Canyon 6 - 7	
State-of-the-Art Plenary Lecture 2	6:00 pm - 6:30 pm
<i>Towards Deciphering the Genetic Landscape of Melanoma</i>	
Yardena Samuels, PhD	
Grand Canyon 6 - 7	
Welcome Reception	7:00 pm - 9:00 pm
Ballroom Lawn	

Thursday, May 5, 2011

Plenary Session I	8:00 am - 9:00 am
Grand Canyon 6 - 7	
Farber Lecture	9:00 am - 9:30 am
<i>Psoriasis: Narrowing the Immunologic Target</i>	
Kevin Cooper, MD	
Grand Canyon 6 - 7	
Naomi M. Kanof Lecture	9:30 am - 10:00 am
<i>How p53 Works</i>	
Sir David Lane, PhD	
Grand Canyon 6 - 7	
Research in Cutaneous Surgery Symposium	10:00 am - 1:00 pm
Grand Canyon 11 - 12	
Cutaneous T Cell Lymphoma Symposium	2:00 pm - 5:30 pm
Grand Canyon 6 - 7	
Concurrent Minisymposia	2:00 pm - 5:30 pm
1. Pigmentation and Melanoma Wildflower Salon B	
2. Hair and Cutaneous Development Wildflower Salon A	
3. Epidermal Structure and Function Grand Canyon 4 - 5	
4. Immunology I: Adaptive Immunity Grand Canyon 9 - 10	
5. Genetic Disease, Gene Regulation & Gene Therapy Grand Canyon 11 - 12	
Social Event	6:00 pm - 10:00 pm
<i>TICKETED EVENT; PRE-REGISTRATION REQUIRED</i>	
<i>See page 52 for additional information. Buses depart from the Ballroom</i>	
<i>Entrance beginning at 5:45 pm.</i>	
Corona Ranch	

Friday, May 6, 2011

Plenary Session II	8:15 am - 9:15 am
Grand Canyon 6 - 7	
Herman Beerman Lecture	9:25 am - 9:55 am
<i>Super-resolution Imaging with Photoactivatable Fluorescent Proteins</i>	
Jennifer Lippincott-Schwartz, PhD	
Grand Canyon 6 - 7	
State-of-the-Art Plenary Lecture 3	10:15 am - 10:45 am
<i>Defining the Cell Lineages at the Origin of Skin Cancers</i>	
EMBO Young Investigator Lecture	
Cedric Blanpain, MD/PhD	
Grand Canyon 6 - 7	
State-of-the-Art Plenary Lecture 4	10:45 am - 11:15 am
<i>Intrinsic and Extrinsic Regulation of Skin Stem Cells</i>	
Valerie Horsley, PhD	
Grand Canyon 6 - 7	
Poster Session II/Technical Exhibits Open with Coffee Break	11:15 am - 1:15 pm
<i>Even 002-280/Odd 563-845</i>	
Grand Saguaro Ballroom	
SID Technical Workshop	12:00 pm - 2:00 pm
<i>Confocal Microscopy and Imaging Techniques</i>	
Grand Canyon 6 - 7	
Concurrent Minisymposia	2:00 pm - 5:30 pm
6. Immunology II: Innate Immunity and Microbiology Wildflower A	
7. Tissue Regeneration, Stem Cells and Wound Healing Wildflower B	
8. Carcinogenesis & Cancer Genetics Grand Canyon 11 - 12	
9. Epidemiology/Health Services Research Grand Canyon 9 - 10	

Saturday, May 7, 2011

Plenary Session III	8:00 am - 9:00 am
Grand Sonoran E - F	
William Montagna Lecture	9:00 am - 9:30 am
<i>Developing New Therapies for Epidermolysis Bullosa: The Hard Graft</i>	
John McGrath, MD	
Grand Sonoran E - F	
Julius Stone Lecture	9:30 am - 10:00 am
<i>The Interplay of IL-17- and IFNg-producing CD4 T Cells in Immune-mediated Inflammation</i>	
Casey Weaver, MD	
Grand Sonoran E - F	
Poster Session III/Technical Exhibits Open with Coffee Break	10:00 am - 12:00 pm
<i>Odd 283-565/Even 564-844</i>	
Grand Saguaro Ballroom	
Concurrent Minisymposia	12:30 pm - 4:00 pm
10. Auto Immunity and Inflammation Grand Sonoran C - D	
11. Cell Adhesion/Matrix and Vascular Biology Wildflower Salon A	
12. Human Clinical Research and Therapeutics Grand Sonoran G	
13. Photobiology Wildflower C	



YOUNG INVESTIGATOR & TRAINEE TRACK — SUGGESTED PROGRAMMING

Wednesday, May 4, 2011

Irvin H. Blank Forum <i>Developments in Personalized Medicine for Skin Disease</i> Grand Canyon 6 -7	3:00 pm - 5:00 pm
Albert M. Kligman/Phillip Frost Leadership Lecture <i>The Nature of the Mammalian Permeability Barrier</i> Peter Elias, MD Grand Canyon 6 - 7	5:00 pm - 5:30 pm
State-of-the-Art Plenary Lecture 1 <i>How Skin-Resident Dendritic Cell Subsets Control Immune Responses</i> Dan Kaplan, MD/PhD Grand Canyon 6 - 7	5:30 pm - 6:00 pm
State-of-the-Art Plenary Lecture 2 <i>Towards Deciphering the Genetic Landscape of Melanoma</i> Yardena Samuels, PhD Grand Canyon 6 - 7	6:00 pm - 6:30 pm
Welcome Reception Ballroom Lawn	7:00 pm - 9:00 pm

Thursday, May 5, 2011

Plenary Session I Grand Canyon 6 -7	8:00 am - 9:00 am
Eugene M. Farber Lecture <i>Psoriasis: Narrowing the Immunologic Target</i> Kevin Cooper, MD Grand Canyon 6 - 7	9:00 am - 9:30 am
Naomi M. Kanof Lecture <i>How p53 Works</i> Sir David Lane, PhD Grand Canyon 6 - 7	9:30 am - 10:00 am
Clinical Scholars Program Grand Canyon 8	10:00 am - 11:30 am
Mentorship Luncheon <i>TICKETED EVENT; PRE-REGISTRATION REQUIRED</i> Desert Suite III and V	12:00 pm - 2:00 pm
Young Investigator and Trainee Symposium <i>Developing an Academic Career</i> Grand Canyon 8	2:00 pm - 5:00 pm
Social Event <i>TICKETED EVENT; PRE-REGISTRATION REQUIRED</i> See page 52 for additional information. Buses depart from the Ballroom Entrance beginning at 5:45 pm. Corona Ranch	6:00 pm - 10:00 pm

Friday, May 6, 2011

Plenary Session II Grand Canyon 6 - 7	8:15 am - 9:15 am
Herman Beerman Lecture <i>Super-resolution Imaging with Photoactivatable Fluorescent Proteins</i> Jennifer Lippincott-Schwartz, PhD Grand Canyon 6 - 7	9:25 am - 9:55 am
State-of-the-Art Plenary Lecture 3 <i>Defining the Cell Lineages at the Origin of Skin Cancers</i> EMBO Young Investigator Lecture Cedric Blanpain, MD/PhD Grand Canyon 6 - 7	10:15 am - 10:45 am
State-of-the-Art Plenary Lecture 4 <i>Intrinsic and Extrinsic Regulation of Skin Stem Cells</i> Valerie Horsley, PhD Grand Canyon 6 - 7	10:45 am - 11:15 am
Clinical Scholars Program Grand Canyon 8	11:30 am - 1:30 pm
Concurrent Minisymposia 6. Immunology II: Innate Immunity and Microbiology Wildflower A 7. Tissue Regeneration, Stem Cells and Wound Healing Wildflower B 8. Carcinogenesis & Cancer Genetics Grand Canyon 11 - 12 9. Epidemiology/Health Services Research Grand Canyon 9 - 10	2:00 pm - 5:30 pm
Trainee Dinner Session Grand Canyon 4 - 5	7:30 pm - 9:30 pm

Saturday, May 7, 2011

Plenary Session III Grand Sonoran E - F	8:00 am - 9:00 am
William Montagna Lecture <i>Developing New Therapies for Epidermolysis Bullosa: The Hard Graft</i> John McGrath, MD Grand Sonoran E - F	9:00 am - 9:30 am
Julius Stone Lecture <i>The Interplay of IL-17- and IFNg-producing CD4 T Cells in Immune-mediated Inflammation</i> Casey Weaver, MD Grand Sonoran E - F	9:30 am - 10:00 am
Clinical Scholars Program Grand Sonoran G	10:00 am - 12:00 pm
Concurrent Minisymposia 10. Auto Immunity and Inflammation Grand Sonoran C - D 11. Cell Adhesion/Matrix and Vascular Biology Wildflower Salon A 12. Human Clinical Research and Therapeutics Grand Sonoran G 13. Photobiology Wildflower C	12:30 pm - 4:00 pm



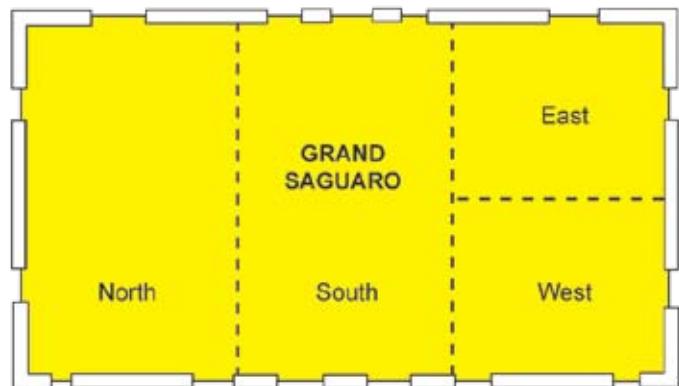
JW MARRIOTT DESERT RIDGE MAPS

Level 1

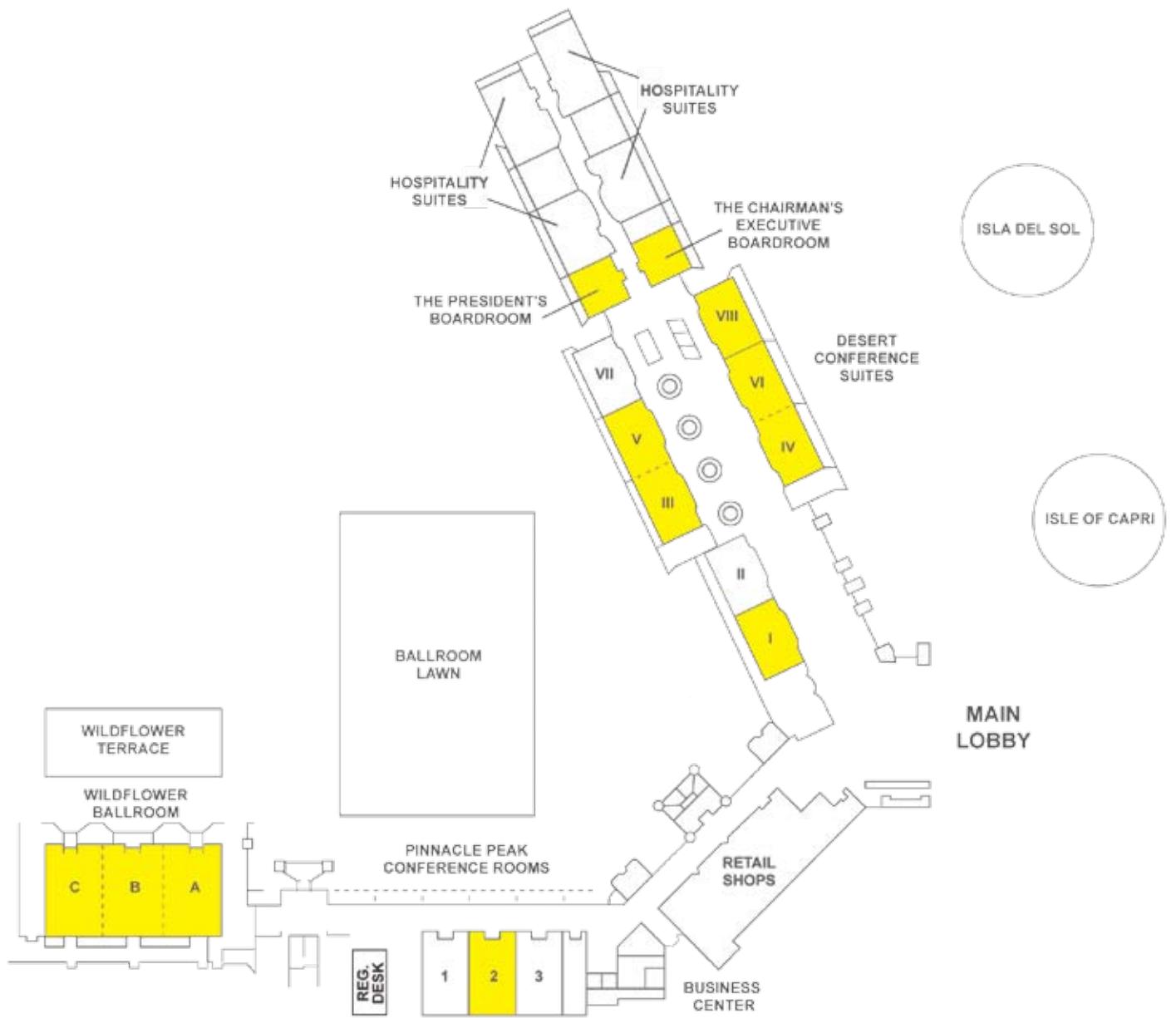


REG. DESK

REG. DESK



Level 2



NOTES



Session Information

<p>15 Pre-Meeting: Tuesday Session</p> <p>15 International Pachyonychia Congenita Consortium</p> <p>17 Wednesday Sessions</p> <p>17 Meeting-at-a-Glance</p> <p>18 International Pachyonychia Congenita Consortium</p> <p>19 Translational Research Symposium</p> <p>20 Irvin H. Blank Forum</p> <p>21 Albert M. Kligman / Phillip Frost Leadership Lecture</p> <p>22 State-of-the-Art Plenary Lecture 1</p> <p>23 State-of-the-Art Plenary Lecture 2</p> <p>24 Welcome Reception</p> <p>27 Thursday Sessions</p> <p>27 Meeting-at-a-Glance</p> <p>28 Society for Pediatric Dermatology</p> <p>29 Plenary Session I</p> <p>30 Eugene M. Farber Lecture</p> <p>31 Naomi M. Kanof Lecture</p> <p>32 American Skin Association Achievement Awards & David Martin Carter Mentor Award</p> <p>33 Clinical Scholars Program</p> <p>34 Research in Cutaneous Surgery Symposium</p> <p>36 Mentorship Luncheon</p> <p>37 Symposium 1: New Therapeutics for Autoimmune Diseases</p> <p>38 Young Investigator & Trainee Symposium</p> <p>40 Cutaneous T Cell Lymphoma Symposium</p> <p>42 Concurrent Minisymposium 1: Pigmentation & Melanoma</p> <p>44 Concurrent Minisymposium 2: Hair & Cutaneous Development</p> <p>46 Concurrent Minisymposium 3: Epidermal Structure & Function</p> <p>48 Concurrent Minisymposium 4: Immunology I: Adaptive Immunity</p> <p>50 Concurrent Minisymposium 5: Genetic Disease, Gene Regulation & Gene Therapy</p> <p>52 Social Event at Corona Ranch</p>	<p>55 Friday Sessions</p> <p>55 Meeting-at-a-Glance</p> <p>56 Business Meeting for Members</p> <p>57 Plenary Session II</p> <p>58 Stephen Rothman Award</p> <p>59 Herman Beerman Lecture</p> <p>60 Celebrating NIAMS 25th Anniversary</p> <p>61 State-of-the-Art Plenary Lecture 3</p> <p>62 State-of-the-Art Plenary Lecture 4</p> <p>63 Clinical Scholars Program</p> <p>64 SID Technical Workshop</p> <p>65 Concurrent Minisymposium 6: Immunology II: Innate Immunity & Microbiology</p> <p>67 Concurrent Minisymposium 7: Tissue Regeneration, Stem Cells & Wound Healing</p> <p>69 Concurrent Minisymposium 8: Carcinogenesis & Cancer Genetics</p> <p>71 Concurrent Minisymposium 9: Epidemiology / Health Services Research</p> <p>73 North American Hair Research Society Scientific Meeting</p> <p>75 Trainee Dinner Session</p> <p>77 Saturday Sessions</p> <p>77 Meeting-at-a-Glance</p> <p>78 American DermatoEpidemiology Network Business/Scientific Session</p> <p>79 Plenary Session III</p> <p>80 William Montagna Lecture</p> <p>81 Julius Stone Lecture</p> <p>82 Clinical Scholars Program</p> <p>83 Concurrent Minisymposium 10: Auto-immunity & Inflammation</p> <p>85 Concurrent Minisymposium 11: Cell Adhesion / Matrix and Vascular Biology</p> <p>87 Concurrent Minisymposium 12: Human Clinical Research & Therapeutics</p> <p>89 Concurrent Minisymposium 13: Photobiology</p>
---	--

PRE-MEETING ANCILLARY SESSION: INTERNATIONAL PACHYONYCHIA CONGENITA CONSORTIUM

NO CME CREDIT OFFERED

Hosted by Pachyonychia Congenita Project

Tuesday, May 3, 2011
9:00 am – 4:30 pm (Pre-meeting Breakfast — 7:30 am – 8:30 am)
Desert Suite VIII

ANCILLARY MEETING: OPEN TO ALL MEETING ATTENDEES

Keynote Speaker

W.H. Irwin McLean, PhD, DSc
 Colleges of Life Sciences & Medicine, University of Dundee, Dundee, United Kingdom

Section 1: Diagnostics and Genetics

Chair: C. David Hansen, MD, University of Utah

Gabrielle Richard, MD, FACMG
 GeneDx, Gaithersburg, Maryland

Frances J.D. Smith, PhD
 Colleges of Life Sciences & Medicine, University of Dundee, Dundee, United Kingdom

Keith Choate, MD/PhD
 Yale University, New Haven, Connecticut

Jean Tang, MD/PhD and Katrina Spanhurst, MD
 Stanford University, Palo Alto, California

Adam I. Rubin, MD
 Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania

Eli Sprecher, MD/PhD
 Tel Aviv Sourasky Medical Center, Tel Aviv, Israel

Hosted Lunch

Section 2: Research Studies

Chair: Leonard Milstone, MD, Yale University

Fernando Larcher, PhD
 CIEMAT, Madrid, Spain

Jiang Chen, MD
 University of Colorado at Denver, Aurora, Colorado

Kellie J. White, PhD
 Emory University School of Medicine, Atlanta, Georgia

Jean Christopher Chamcheu, PhD
 University of Wisconsin-Madison, Madison, Wisconsin

Amy S. Paller, MD
 Northwestern University, Chicago, Illinois

Roger L. Kaspar, PhD
 TransDerm, Inc., Santa Cruz, California

Hosted Dinner — 6:30 pm

For additional information, please contact:
 Mary Schwartz, Director, PC Project
 Tel: 877-628-7300 (toll free) / Fax: 877-628-7399
 email: Mary.Schwartz@pachyonychia.org

ANCILLARY MEETINGS

TUESDAY, MAY 3, 2011

**Resident Retreat for Future
Academicians**
 6:00 pm - 9:00 pm
 Desert Suite III and V

NOTES

WEDNESDAY MEETING-AT-A-GLANCE

Wednesday, May 4, 2011

Resident Retreat for Future Academicians Desert Suite III and V	7:30 am - 3:00 pm
National Psoriasis Foundation Chairman's Boardroom	8:00 am - 11:00 am
SID Board of Directors Meeting Desert Suite I	8:00 am - 2:00 pm
Registration Grand Canyon Foyer 6	8:00 am - 8:00 pm
International PC Consortium (PC Project) Desert Suite VIII	9:00 am - 1:00 pm
Translational Research Symposium <i>Clearing the Pipeline</i> Grand Canyon 6 - 7	12:00 pm - 3:00 pm
Irvin H. Blank Forum <i>Developments in Personalized Medicine for Skin Disease</i> Grand Canyon 6 - 7	3:00 pm - 5:00 pm
Albert M. Kligman/Phillip Frost Leadership Lecture <i>The Nature of the Mammalian Permeability Barrier</i> Peter Elias, MD Grand Canyon 6 - 7	5:00 pm - 5:30 pm
State-of-the-Art Plenary Lecture 1 <i>How Skin-Resident Dendritic Cell Subsets Control Immune Responses</i> Dan Kaplan, MD/PhD Grand Canyon 6 - 7	5:30 pm - 6:00 pm
State-of-the-Art Plenary Lecture 2 <i>Towards Deciphering the Genetic Landscape of Melanoma</i> Yardena Samuels, PhD Grand Canyon 6 - 7	6:00 pm - 6:30 pm
Welcome Reception Ballroom Lawn	7:00 pm - 9:00 pm

Indicates CME Credit Offered

ANCILLARY MEETINGS

WEDNESDAY, MAY 4, 2011

**Resident Retreat for Future
Academicians**

7:30 am - 3:00 pm

Desert Suite III and V

National Psoriasis Foundation

8:00 am - 11:00 am

Chairman's Boardroom

SID Board of Directors Meeting

8:00 am - 2:00 pm

Desert Suite I

Meeting Registration

8:00 am - 8:00 pm

Grand Canyon Foyer 6

ANCILLARY MEETINGS**WEDNESDAY, MAY 4, 2011**

Resident Retreat for Future Academicians
7:30 am - 3:00 pm
Desert Suite III and V

National Psoriasis Foundation
8:00 am - 11:00 am
Chairman's Boardroom

SID Board of Directors Meeting
8:00 am - 2:00 pm
Desert Suite I

Meeting Registration
8:00 am - 8:00 pm
Grand Canyon Foyer 6

**INTERNATIONAL PACHYONYCHIA CONGENITA CONSORTIUM
(PC PROJECT)****NO CME CREDIT OFFERED****Hosted by Pachyonychia Congenita Project**

Wednesday, May 4, 2011
9:00 am – 11:30 am (Pre-meeting Breakfast — 7:30 am – 8:30 am)
Desert Suite VIII

ANCILLARY MEETING: OPEN TO ALL MEETING ATTENDEES

Section 3: PC Clinical Studies
Co-Chair: Eli Sprecher, MD/PhD; Amy Paller, MD

Presentation of the general goals of the PC Physician Network with operative steps to move forward on three major fronts:

- Publicizing PC in medicine and to the public
- Publishing care guidelines for PC
- Multi-center clinical studies

Following the session, the IPCC will join the SID Translational Research Symposium, 12:00 pm - 3:00 pm, in Grand Canyon 6 -7.

For additional information, please contact:

Mary Schwartz, Director, PC Project
Tel: 877-628-7300 (toll free) / Fax: 877-628-7399
email: Mary.Schwartz@pachyonychia.org

TRANSLATIONAL RESEARCH SYMPOSIUM

CLEARING THE PIPELINE

3 CME CREDITS

Wednesday, May 4, 2011

12:00 pm - 3:00 pm

Grand Canyon 6 - 7

OPEN TO TRANSLATIONAL RESEARCH TRACK PARTICIPANTS ONLY



Introduction

Hensin Tsao, MD/PhD

Associate Professor, Dept. of Dermatology

Harvard Medical School, Boston, Massachusetts

Is There a Place for the Academic Innovator?

R. Rox Anderson, MD

Harvard Medical School, Boston, Massachusetts



How Can the Licensing Office Maximize Your Innovation?

Irina Erenburg, PhD

Associate Director, Partners Research Ventures & Licensing

Mass General Hospital, Boston, Massachusetts

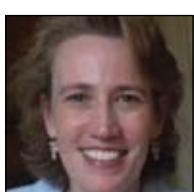


Licensing Opportunities: What is Industry Looking for in Terms of Creative and Marketable Ideas?

James H. Lee, MD/PhD

Executive Vice President and Chief Medical Officer

Graceway Pharmaceuticals, Exton, Pennsylvania



How, Where and When Should the Trials be Conducted?

Alexa Kimball, MD MPH

Vice Chair, Dept. of Dermatology

Mass General Hospital, Boston, Massachusetts



What Do You Need from the FDA and What Does the FDA Need from You?

Lynn Drake, MD, FAAD

Lecturer in Dermatology

Harvard Medical School, Boston, Massachusetts

Panel Discussion

R. Rox Anderson, MD; Irina Erenburg, PhD; James H. Lee, MD/PhD;
Alexa Kimball, MD MPH; Lynn Drake, MD, FAAD

ANCILLARY MEETINGS

WEDNESDAY, MAY 4, 2011

Resident Retreat for Future Academicians

7:30 am - 3:00 pm

Desert Suite III and V

National Psoriasis Foundation

8:00 am - 11:00 am

Chairman's Boardroom

SID Board of Directors Meeting

8:00 am - 2:00 pm

Desert Suite I

Meeting Registration

8:00 am - 8:00 pm

Grand Canyon Foyer 6

ANCILLARY MEETINGS**WEDNESDAY, MAY 4, 2011**

Resident Retreat for Future Academicians
7:30 am - 3:00 pm
Desert Suite III and V

National Psoriasis Foundation
8:00 am - 11:00 am
Chairman's Boardroom

SID Board of Directors Meeting
8:00 am - 2:00 pm
Desert Suite I

Meeting Registration
8:00 am - 8:00 pm
Grand Canyon Foyer 6

IRVIN H. BLANK FORUM
DEVELOPMENTS IN PERSONALIZED MEDICINE FOR SKIN DISEASE**2 CME CREDITS**

Wednesday, May 4, 2011
3:00 pm - 5:00 pm
Grand Canyon 6 - 7

OPEN TO ALL MEETING ATTENDEES

Introduction

Doug Grossman, MD/PhD
Associate Professor of Dermatology and Oncological Sciences
Investigator, Huntsman Cancer Institute
University of Utah, Salt Lake City, Utah

**Targeting B-RAF and Drug Resistance in Melanoma**

Roger Lo, MD/PhD
Assistant Professor
University of California, Los Angeles, California

**Stem Cell Based Correction of Genetic Skin Disease**

Paul Khavari, MD/PhD
Chairman and Carl J. Herzog Professor, Dept. of Dermatology
Stanford University, Stanford, California

**Pemphigus: A Model for the Development of Mechanism-based Therapies**

David Rubenstein, MD/PhD
Louis C. Skinner Jr. Distinguished Professor
University of North Carolina Chapel Hill, Chapel Hill, North Carolina

**RNAi Delivery for Skin Disease**

Amy Paller, MD
Professor and Chair, Dept. of Dermatology
Northwestern University, Chicago, Illinois

Final Q & A and Wrap-up

Doug Grossman, MD/PhD



ALBERT M. KLIGMAN / PHILLIP FROST LEADERSHIP LECTURE

THE NATURE OF THE MAMMALIAN PERMEABILITY BARRIER

.5 CME CREDITS

Wednesday, May 4, 2011

5:00 pm - 5:30 pm

Grand Canyon 6 - 7

OPEN TO ALL MEETING ATTENDEES

LECTURER BIO



Peter Elias, MD
Professor
University of California, San Francisco, California

Dr. Elias is a staff physician in the Dermatology Research Unit, VAMC-San Francisco, and head of a multidisciplinary research group, focused on structure, function and metabolic basis for the epidermal permeability barrier; pathogenesis of ichthyoses and inflammatory dermatoses; and mechanisms of normal differentiation. Dr. Elias has trained numerous students from all over the world in stratum corneum morphology and in methods to elucidate its biological functions. Several of his post-doctoral fellows have become leaders in the field in their respective countries, where barrier research groups have since been established and are now flourishing, such as in South Korea, Germany and China.

LECTURESHIP HISTORY

Established in 2007 by Dr. Phillip Frost, the lectureship is intended to honor Dr. Albert M. Kligman, whose great commitment to dermatology and numerous contributions to the specialty has inspired generations of researchers and practitioners. The award is made to an individual in acknowledgment of significant contributions in the past five years to the understanding of structure and function of skin.

ANCILLARY MEETINGS

WEDNESDAY, MAY 4, 2011

Resident Retreat for Future

Academicians

7:30 am - 3:00 pm

Desert Suite III and V

National Psoriasis Foundation

8:00 am - 11:00 am

Chairman's Boardroom

SID Board of Directors Meeting

8:00 am - 2:00 pm

Desert Suite I

Meeting Registration

8:00 am - 8:00 pm

Grand Canyon Foyer 6

ANCILLARY MEETINGS

WEDNESDAY, MAY 4, 2011

Resident Retreat for Future
Academicians
7:30 am - 3:00 pm
Desert Suite III and V

National Psoriasis Foundation
8:00 am - 11:00 am
Chairman's Boardroom

SID Board of Directors Meeting
8:00 am - 2:00 pm
Desert Suite I

Meeting Registration
8:00 am - 8:00 pm
Grand Canyon Foyer 6

STATE-OF-THE-ART PLENARY LECTURE 1

HOW SKIN-RESIDENT DENDRITIC CELL SUBSETS CONTROL IMMUNE RESPONSES

.5 CME CREDITS

Wednesday, May 4, 2011

5:30 pm - 6:00 pm
Grand Canyon 6 - 7

OPEN TO ALL MEETING ATTENDEES

LECTURER BIO



Dan Kaplan, MD/PhD
Zelickson Professor
University of Minnesota, Minneapolis, Minnesota

Dr. Kaplan is Assistant Professor of Dermatology at the University of Minnesota. His research focus is the early events after antigen exposure in the skin that allows for the development of appropriate immune responses to pathogens while limiting responses directed against commensal organisms, concentrating on two opposing dendritic cell (DC) subsets in the skin.

STATE-OF-THE-ART PLENARY LECTURE 2

TOWARDS DECIPHERING THE GENETIC LANDSCAPE OF MELANOMA

.5 CME CREDITS

Wednesday, May 4, 2011

6:00 pm - 6:30 pm

Grand Canyon 6 - 7

OPEN TO ALL MEETING ATTENDEES

LECTURER BIO



Yardena Samuels, PhD
National Institutes of Health
Bethesda, Maryland

Dr. Samuels is Head of the Molecular Cancer Genetics Section at the National Institutes of Health. Dr. Samuels is using high-throughput DNA sequencing to search for additional mutated genes in melanoma. She is currently examining the genes encoding tyrosine and serine protein kinases, which play important roles in regulating the cellular events that lead to tumor formation. These genes are associated with a variety of human cancers and may be targets for therapeutic intervention.

ANCILLARY MEETINGS

WEDNESDAY, MAY 4, 2011

Resident Retreat for Future

Academicians

7:30 am - 3:00 pm

Desert Suite III and V

National Psoriasis Foundation

8:00 am - 11:00 am

Chairman's Boardroom

SID Board of Directors Meeting

8:00 am - 2:00 pm

Desert Suite I

Meeting Registration

8:00 am - 8:00 pm

Grand Canyon Foyer 6

ANCILLARY MEETINGS

WEDNESDAY, MAY 4, 2011

**Resident Retreat for Future
Academicians**
7:30 am - 3:00 pm
Desert Suite III and V

National Psoriasis Foundation
8:00 am - 11:00 am
Chairman's Boardroom

SID Board of Directors Meeting
8:00 am - 2:00 pm
Desert Suite I

Meeting Registration
8:00 am - 8:00 pm
Grand Canyon Foyer 6

WELCOME RECEPTION

NO CME CREDIT OFFERED

Wednesday, May 4, 2011
7:00 pm - 9:00 pm
Ballroom Lawn

OPEN TO ALL MEETING ATTENDEES

Join us for a Welcome Reception to kick off the Meeting. All attendees are invited, free of charge, to gather for drinks and hors d'oeuvres and mingle with colleagues.



JW Marriott Desert Ridge Ballroom Lawn

NOTES

NOTES



THURSDAY MEETING-AT-A-GLANCE

Thursday, May 5, 2011

Society for Pediatric Dermatology	7:00 am - 8:00 am
Desert Suite I	
Registration	7:30 am - 4:00 pm
Grand Canyon Foyer 6	
Plenary Session I	8:00 am - 9:00 am
Grand Canyon 6 - 7	
Eugene M. Farber Lecture	9:00 am - 9:30 am
<i>Psoriasis: Narrowing the Immunologic Target</i>	
Kevin Cooper, MD	
Grand Canyon 6 - 7	
Naomi M. Kanof Lecture	9:30 am - 10:00 am
<i>How p53 Works</i>	
Sir David Lane, PhD	
Grand Canyon 6 - 7	
American Skin Association Achievement Awards	10:00 am - 10:10 am
Grand Canyon 6 - 7	
David Martin Carter Mentor Award	10:10 am - 10:15 am
<i>Presented to John S. Strauss, MD and John A. Parrish, MD</i>	
Grand Canyon 6 - 7	
Clinical Scholars Program	10:00 am - 11:30 am
Grand Canyon 8	
Poster Session I/Technical Exhibits Open with Coffee Break	10:00 am - 12:00 pm
<i>Odd 001-281/Even 282-562</i>	
Grand Saguaro Ballroom	
BCCNS Life Support Network	10:00 am - 12:00 pm
Grand Canyon 9 - 10	
Research in Cutaneous Surgery Symposium	10:00 am - 1:00 pm
Grand Canyon 11 - 12	
Mentorship Luncheon	12:00 pm - 2:00 pm
<i>TICKETED EVENT; PRE-REGISTRATION REQUIRED</i>	
Desert Suite III and V	
Symposium I	12:00 pm - 2:00 pm
<i>New Therapeutics for Autoimmune Diseases</i>	
Grand Canyon 8	
Young Investigator and Trainee Symposium	2:00 pm - 5:00 pm
<i>Developing an Academic Career</i>	
Grand Canyon 8	
Cutaneous T Cell Lymphoma Symposium	2:00 pm - 5:30 pm
Grand Canyon 6 - 7	
Concurrent Minisymposia	2:00 pm - 5:30 pm
1. Pigmentation and Melanoma (Wildflower Salon B)	
2. Hair and Cutaneous Development (Wildflower Salon A)	
3. Epidermal Structure and Function (Grand Canyon 4 - 5)	
4. Immunology I: Adaptive Immunity (Grand Canyon 9 - 10)	
5. Genetic Disease, Gene Regulation & Gene Therapy (Grand Canyon 11 - 12)	
Social Event	6:00 pm - 10:00 pm
<i>TICKETED EVENT; PRE-REGISTRATION REQUIRED</i>	
<i>See page 52 for additional information. Buses depart from the Ballroom Entrance beginning at 5:45 pm.</i>	
Corona Ranch	

Indicates CME Credit Offered

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 - 10

THURSDAY SESSIONS

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 - 10

SOCIETY FOR PEDIATRIC DERMATOLOGY

NO CME CREDIT OFFERED

Moderator: Amy Paller, MD

Thursday, May 5, 2011

7:00 am - 8:00 am

Desert Suite I

OPEN TO ALL MEETING ATTENDEES

Overview of Pediatric Dermatology at SID

Presentations

1. **Pathogenesis(pathway)-based therapy and genetic basis for lateralization in CHILD syndrome.** *7:18 am, Poster #315*
Presented by Amy Paller, MD, Northwestern University
2. **Increased DNA repair in xeroderma pigmentosum group C cells by induction of readthrough of stop codons.** *7:26 am, Poster #377*
Presented by Christiane Kuschal, MD, National Cancer Institute and Kenneth Kraemer, MD, National Cancer Institute
3. **Copy number variation analysis in PHACE syndrome.** *7:34 am, Poster #428*
Presented by Dawn Siegel, MD, Medical College of Wisconsin 7:34
4. **Oral azathioprine therapy improves the clinical and cutaneous antimicrobial response in children with moderate to severe atop dermatitis.** *7:42 am, Poster #537*
Presented by Wynnis Tom, MD, UCSD - Rady Children's Hospital

Concluding Remarks

PLENARY SESSION I

1 CME CREDIT

Presiders: Kim Yancey, MD and Kathleen Green, PhD

Thursday, May 5, 2011

8:00 am - 9:00 am

Grand Canyon 6 - 7

OPEN TO ALL MEETING ATTENDEES

1. **Hematopoietic and mesenchymal stem cell transplantation for recessive dystrophic and junctional epidermolysis bullosa.** Jakub Tolar, John A McGrath, Douglas R Keene, Maria Hordinsky, Mark J Osborn, Megan J Riddle, Ana Junqueira Bertin, David Woodley, Mei Chen, Alain Hovnanian, Katsuto Tamai, Bruce R Blazar and John E Wagner. Minneapolis, MN; London, United Kingdom; Portland, OR; Minneapolis, MN; Los Angeles, CA; Paris, France and Osaka, Japan. *8:00 am, Poster #535*

2. **The role of desmocollin 3 in skin tumor development and progression.** Jiangli Chen, Charlene O'Shea, James E Fitzpatrick, Marankel Koster and Peter J Koch. Aurora, CO. *8:12 am, Poster #195*

3. **Oral prednisone use and risk of keratinocyte carcinoma: The VA topical tretinoin chemoprevention trial.** Akerke T Baibergenova and Martin A Weinstock. Toronto, Canada; Providence, RI and Providence, RI. *8:24 am, Poster #205*

4. **Interference with the IL-1 network leads to impaired cutaneous response to vaccinia virus scarification.** Tian Tian, Q Jin, K Dubin, G F Murphy, T S Kupper and R C Fuhlbrigge. Boston, MA and Palo Alto, CA. *8:36 am, Poster #640*

5. **Type IV collagen binding-site within type VII collagen is a pathogenic epitope for EBA autoantibodies.** X. Wang, R. Gupta, A. Garlapati, J. Cogan, D. Woodley and M. Chen. Los Angeles, CA. *8:48 am, Poster #039*

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 -10

THURSDAY SESSIONS

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 - 10

EUGENE M. FARBER LECTURE

PSORIASIS: NARROWING THE IMMUNOLOGIC TARGET

.5 CME CREDITS

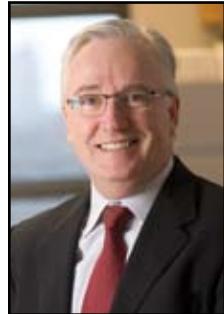
Thursday, May 5, 2011

9:00 am - 9:30 am

Grand Canyon 6 - 7

OPEN TO ALL MEETING ATTENDEES

LECTURER BIO



Kevin Cooper, MD

Professor and Chair, Department of Dermatology

University Hospitals of Cleveland / Case Western Reserve University
Cleveland, Ohio

Dr. Cooper is Professor and Chairman of the Department of Dermatology at Case Western Reserve University (CWRU), and Director of the NIAMS Skin Diseases Research Center and NIAMS Psoriasis Center for Research at CWRU. He is also Director of the Murdough Family Center for Psoriasis at University Hospitals Case Medical Center. His research interests include Psoriasis, Atopic Dermatitis, Immunobiology, Photobiology, Autoimmunity, UV and Solar Effects, Immunomodulatory Therapy.

LECTURESHIP HISTORY

The Eugene M. Farber endowment was established by the family of Eugene M. Farber, MD, who devoted his scientific career to understanding the pathogenesis of psoriasis. In 2007, the SID Board of Directors voted to create the Eugene M. Farber Endowed Lecture. It is presented at the Society's Annual Meeting by an investigator whose work is relevant to expanding our insights into the pathophysiology and treatment of psoriasis.



NAOMI M. KANOF LECTURE

HOW p53 WORKS

.5 CME CREDITS

Thursday, May 5, 2011

9:30 am - 10:00 am

Grand Canyon 6 - 7

OPEN TO ALL MEETING ATTENDEES

LECTURER BIO



Sir David Lane, PhD
p53 Laboratory
Immunos, Singapore

Dr. Lane is Chief Scientist of A*STAR and Director of the p53 Laboratory, which primarily focuses on research on p53 using both mammalian and zebrafish systems. He is one of the scientists credited with the landmark discovery of cancer gene p53 in 1979. p53, called the "Guardian of the Genome" is considered the most significant of all the genes altered in cancer cells because mutations of the gene are known to cause almost 50% of all human cancers.

LECTURESHIP HISTORY

Established in 1988, this award was established to honor the memory of Naomi Kanof, MD. The Naomi M. Kanof Lectureship honors an individual making significant contributions to the improvement of health through clinical research. Clinical research is broadly defined as any scientific endeavor with a direct application to improving the prevention, diagnosis or treatment of clinical disease. This investigative work can be based in the laboratory and should be implemented or just ready to be implemented in clinical practice.

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 -10

THURSDAY SESSIONS

ANCILLARY MEETINGS**THURSDAY, MAY 5, 2011****Society for Pediatric Dermatology***Open to all Meeting Attendees*

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 - 10

**AMERICAN SKIN ASSOCIATION ACHIEVEMENT AWARDS &
DAVID MARTIN CARTER MENTOR AWARD****NO CME CREDIT OFFERED****Thursday, May 5, 2011**

10:00 am - 10:15 am

Grand Canyon 6 - 7

OPEN TO ALL MEETING ATTENDEES**American Skin Association Achievement Awards**

The American Skin Association presents its 2011 Achievement Awards to Allan Balmain, PhD; Jean Bologna, MD; Jeffrey Callen, MD; Joel Gelfand, MD; and Akira Takashima, MD/PhD.

David Martin Carter Mentor Award

The American Skin Association presents the 2011 David Martin Carter Mentor Awards to John S. Strauss, MD and John A. Parrish, MD.

CLINICAL SCHOLARS PROGRAM

1.5 CME CREDITS

Thursday, May 5, 2011
10:00 am - 11:30 am
Grand Canyon 8

OPEN TO CLINICAL SCHOLARS & YOUNG INVESTIGATOR/TRAINEE TRACK PARTICIPANTS ONLY

Plenary Presentations

1. **Reversal of local immune evasion mechanisms and regression of human Merkel cell carcinoma by intralesional injection of interferon-beta.** 10:00 am, Poster #547
Presented by Paul Nghiem, MD/PhD, Associate Professor of Dermatology, University of Washington, Fred Hutchinson Cancer Center, Seattle, Washington

2. **The dermis is not sterile: Discovery of a microbiome within and beneath the epidermis.** 10:20 am, Poster #621
Presented by Richard Gallo, MD/PhD, Chief of Dermatology, University of California, San Diego, LaJolla, California

Lecture



B-RAF inhibitors: Basic Science and Clinical Experience
Roger S. Lo, MD/PhD
Department of Dermatology
UCLA Medical Center, Los Angeles, California

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology
Open to all Meeting Attendees
7:00 am - 8:00 am
Desert Suite I

Meeting Registration
7:30 am - 4:00 pm
Grand Canyon Foyer 6

BCCNS Life Support Network
10:00 am - 12:00 pm
Grand Canyon 9 -10

THURSDAY SESSIONS

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology
Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 - 10

RESEARCH IN CUTANEOUS SURGERY SYMPOSIUM

NO CME CREDIT OFFERED

Presiders: Sherrif Ibrahim MD/PhD; Murad Alam, MD; Jeremy Bordeaux, MD MPH;
and Fiona Zwald, MD

Thursday, May 5, 2011

10:00 am - 1:00 pm

Grand Canyon 11 - 12

OPEN TO ALL MEETING ATTENDEES

1. **MicroRNA profiles in cutaneous squamous cell carcinomas: A personalized medicine approach.** Katherine A Gordon, Olivera Stojadinovic, Sonal Choudhary, Elizabeth Lebrun, Shari Jackson, Keyvan Nouri and Marjana Tomic-Canic. Miami, FL. *10:00 am, Poster #101*
2. **Expression of epidermal growth factor receptor (EGFR) and detection of mutant EGFR (EGFR^{VIII}) in human cutaneous squamous cell carcinoma.** M. DeMara, N. Duncan, S. Wong, M. Neuburg, Z. Lazarova and E B Olasz. Milwaukee, WI. *10:10 am, Poster #108*
3. **SerpinA1: A novel biomarker for progression of cutaneous squamous cell carcinoma.** Mehdi Farshchian, Atte Kivilahti, Risto Ala-aho, Pilvi Riihilä, Markku Kallajoki, Reidar Grénman, Juha Peltonen, Taina Pihlajaniemi, Ritva Heljasvaa and Veli-Matti Kähäri. Turku, Finland and Oulu, Finland. *10:20 am, Poster #150*
4. **Predictors of patient satisfaction in Mohs surgery: Analysis of pre-, intra- and post-operative factors in a large prospective cohort.** Maryam M Asgari, E Margaret Warton, Romain Neugebauer and Mary-Margaret Chren. Oakland, CA and San Francisco, CA. *10:30 am, Poster #258*
5. **Laser assisted delivery of allogeneic porcine mesenchymal stem cells.** Stephen Davis, Jill Waibel, Marcela Salgado, Luis Rodriguez-Menocal, Dwayne Ford and Evangelos V Badiavas. Miami, FL. *10:40 am, Poster #843*
6. **Cutaneous expression of neutrophil elastase in relation to IgA autoantibodies to nonapeptides of gliadin and tissue transglutaminase in dermatitis herpetiformis.** Marian Dmochowski, Justyna Gornowicz, Agnieszka Seraszek, Elzbieta Kaczmarek and Monika Bowszyc-Dmochowska. Poznan, Poland. *10:50 am, Poster #009*
7. **Use of a magnet-containing barbell in the tongue to operate the tongue drive system.** Julia Minocha, Jaimee Holbrook, Behnaz Yousefi, Jeonghee Kim, Xueliang Huo, Diane Rowles, Brenda Bartlett, Lisa Ruppert, Sean Johnson-Bice, Dennis West, Emir Veledar, Elliot Roth, Maysam Ghovanloo and Anne Laumann. Chicago, IL and Atlanta, GA. *11:00 am, Poster #482*
8. **Drug allergy in hematopoietic stem cell transplantation.** Jennifer Gordon, Anand Haryani, Rademaker Alfred, Jayesh Mehta and Jonathan Cotliar. Chicago, IL. *11:10 am, Poster #825*
9. **HIV infection and non-melanoma skin cancer risk.** Michael J Silverberg, Wendy Leyden, E Margaret Warton, Eric A Engles and Maryam M Asgari. Oakland, CA and Rockville, MD. *11:20 am, Poster #554*
10. **Biophotometric analysis reveals that self-perpetuating focal areas of hyperemia invariably precede cutaneous neoplasia and are suppressed by topical celecoxib treatment.** Raymond L Konger, Ravi P Sahu, Zhengbin Xu and Young L Kim. Indianapolis, IN and West Lafayette, IN. *11:30 am, Poster #163*

RESEARCH IN CUTANEOUS SURGERY SYMPOSIUM (CONT'D)

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 -10

11. **Time interval from diagnostic biopsy to surgical excision for melanoma at 4 institutions: Is it acceptable?** Laura S Huff, Caroline A Chang, Paul Blomquist, Nellie Konnikov and Robert P Dellavalle. Aurora, CO; Boston, MA; Boston, MA and Denver, CO. *11:40 am, Poster #749*
12. **Real-time cell cycle imaging: Melanomas are composed of differentially cycling tumor cells in a subcompartment-specific distribution.** Nikolas K Haass, Andrea Anfosso, Ichiko Kinjyo, Osami Kanagawa and Wolfgang Weninger. Sydney, Australia and Yokohama City, Japan. *11:50 pm, Poster #151*
13. **Early UV exposure and risk of multiple non-melanoma skin cancers in U.S. men and women.** Erin X Wei, Jiali Han, Tricia Li and Abrar A Qureshi. Boston, MA. *12:00 pm, Poster #213*
14. **Shh and Akt1 signaling pathways converge through mammalian target of rapamycin (mTOR) signaling to drive the growth of BCCs.** Jungho Back, Yucui Zhu, Xiuwei Tang, Mohammad Athar, Arianna L Kim and David R Bickers. New York, NY and Birmingham, AL. *12:10 pm, Poster #133*
15. **Definition of an “invasion signature gene set” at the leading edge of cutaneous squamous cell carcinoma (SCC) generated by laser capture microdissection (LCM).** Hiroshi Mitsui, Mayte Suárez-Fariñas, Kejal R Shah, Milène Kennedy, Erika Billick, Israel Coats, John A Carucci and James G Krueger. New York, NY. *12:20 pm, Poster #095*
16. **Rapamycin augments the chemopreventive effects of sulindac and suppresses UVB-induced cutaneous photocarcinogenesis in Ptch^{+/−} hairless mice.** Sandeep C Chaudhary, Deepali Kurundkar, Tripti Singh, Zhiping Weng, Craig A Elmets, Levy Kopelovich and Mohammad Athar. Birmingham, AL and Bethesda, MD. *12:30 pm, Poster #152*
17. **Severity of sun damage in full-face ultraviolet photographs of 12 year-old children relates to phenotypic skin cancer risk factors.** Ryan G Gamble, Jenny Aalborg, Nancy L Asdigian, Victoria Gonzalez, Laura S Huff, Neil F Box, Lori A Crane and Robert P Dellavalle. Aurora, CO and Denver, CO. *12:40 pm, Poster #240*
18. **A chemopreventive approach to familial melanoma.** Vidhya Hariharan, JackB Longley and Isabelle Caroline Le Poole. Maywood, IL and Madison, WI. *12:50 pm*

THURSDAY SESSIONS

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 - 10

MENTORSHIP LUNCHEON

NO CME CREDIT OFFERED

Thursday, May 5, 2011

12:00 pm - 2:00 pm

Desert Suite III and IV

TICKETED EVENT; PRE-REGISTRATION REQUIRED

Young investigators are invited to attend this luncheon to hear about the value of mentorship to young investigators, learn about opportunities available through the SID, and to network.



SYMPOSIUM I

NEW THERAPEUTICS FOR AUTOIMMUNE DISEASES

2 CME CREDITS

Thursday, May 5, 2011

12:00 pm - 2:00 pm

Grand Canyon 8

OPEN TO ALL MEETING ATTENDEES

Welcome and Introduction

Michael Hertl, MD

Professor and Chairman, Department of Dermatology

Phillips-University of Marburg, Marburg, Germany

Victoria Werth, MD

Professor, Department of Dermatology

University of Pennsylvania, Philadelphia, Pennsylvania

B-cell biology related to non-depleting B cell regulatory approaches in autoimmune disease

Peter E. Lipsky, MD

Charlottesville, Virginia

The role of Th17 cells in autoimmunity and potential therapeutic target and Jak inhibitors-a new class of immunosuppressive drugs

John O'Shea, MD

Scientific Director, Molecular Immunology and Inflammation Branch

NIAMS, Bethesda, Maryland

Novel therapies: IgG-mediated autoimmunity in pemphigus

Michael Hertl, MD

Professor and Chairman, Department of Dermatology

Phillips-University of Marburg, Marburg, Germany

Immunosuppression and stem cell transplantation therapies for autoimmune disease

Keith M. Sullivan, MD

Professor, Department of Medicine, Division of Cellular Therapy

Duke University, Durham, North Carolina

Wrap-up

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 -10

THURSDAY SESSIONS

ANCILLARY MEETINGS**THURSDAY, MAY 5, 2011****Society for Pediatric Dermatology***Open to all Meeting Attendees*

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 - 10

YOUNG INVESTIGATOR & TRAINEE SYMPOSIUM**DEVELOPING AN ACADEMIC CAREER****3 CME CREDITS****Thursday, May 5, 2011****2:00 pm - 5:00 pm****Grand Canyon 8****OPEN TO YOUNG INVESTIGATOR/TRAINEE TRACK PARTICIPANTS ONLY****Welcome and Introduction**

Kristina Callis Duffin, MD

**Mentoring & Finding a Niche**

Stephen Katz, MD/PhD

Director

NIAMS, Bethesda, Maryland

**Developing a Career in Clinical Research**

Joel Gelfand, MD, MSCE

Assistant Professor

University of Pennsylvania, Philadelphia, Pennsylvania

**Finding Funding: Part 1: Foundations and Other Sources to Get Started:
What's Out There?**

Julie Block

National Eczema Association, San Rafael, California

Bruce Bebo, PhD

National Psoriasis Foundation, Portland, Oregon

George Hambrick, MD

American Skin Association, New York, New York

Kim Yancey, MD

The Dermatology Foundation, Dallas, Texas

Finding Funding: Part 2: NIH Funding Programs for Young Investigators

Carl Baker, MD/PhD

Program Director, Division of Skin and Rheumatic Diseases

National Institutes of Health, Bethesda, Maryland

YOUNG INVESTIGATOR & TRAINEE SYMPOSIUM

DEVELOPING AN ACADEMIC CAREER

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 -10



Climbing the Academic Ladder

Amy Paller, MD

Professor and Chair, Department of Dermatology
Northwestern University, Chicago, Illinois



Linking Bench to Bedside: Establishing Fruitful Collaborations Between Clinical and Academic Researchers

James T. Elder, MD/PhD

Professor

University of Michigan, Ann Arbor, Michigan



Establishing a Clinical Niche

Adam Rubin, MD

Assistant Professor

University of Pennsylvania, Philadelphia, Pennsylvania



Wrap-up

Kristina Callis Duffin, MD

Assistant Professor

University of Utah, Salt Lake City, Utah

THURSDAY SESSIONS

ANCILLARY MEETINGS**THURSDAY, MAY 5, 2011****Society for Pediatric Dermatology***Open to all Meeting Attendees*

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 - 10

CUTANEOUS T CELL LYMPHOMA SYMPOSIUM**NO CME CREDIT OFFERED****Presiders: Gary S. Wood, MD and Sam T. Hwang, MD/PhD****Thursday, May 5, 2011****2:00 pm - 5:30 pm****Grand Canyon 6 - 7****OPEN TO ALL MEETING ATTENDEES****Introduction****Cutaneous Lymphoma Foundation Young Investigator Award**

Oleg Akilov , MD/PhD University of Pittsburgh

Autoantibody to HSC70 in patients with tumor stage of mycosis fungoides. Oleg E Akilov,Peter E Yeh, Brian Hood, Thomas P Conrads, Louis D Falo and Larisa J Geskin. Pittsburgh, PA. **2:12 pm, Poster #611**

- 1. Migration patterns of T_{EM} and T_{CM} in humans: Lessons from CTCL lesional morphology.** Rachael A Clark, Rei Watanabe, Marianne Tawa, Natalie Adams, Andrew Dorosario, David C Fisher and Thomas S Kupper. Boston, MA. **2:24 pm, Poster #593**
- 2. Age-matched multiplex analysis reveals global immune dysregulation in patients with CTCL.** Larisa J Geskin, Oleg E Akilov, Diana E Linzer, Yan Lin, Louis D Falo and Anna E Lokshin. Pittsburgh, PA. **2:36 pm, Poster #551**
- 3. Regulation of FAS expression in cutaneous T-Cell lymphoma.** Jianqiang Wu and Gary S Wood. Madison, WI. **2:48 pm, Poster #122**
- 4. In-situ expression of fas apoptotic pathway proteins in archival samples of cutaneous t-cell lymphoma (ctcl), cutaneous anaplastic large cell lymphoma (alcl) and lymphomatoid papulosis (lyp).** Nathalie Stutz, Ryan D Johnson and Gary S Wood. Madison, WI. **3:00 pm, Poster #112**
- 5. Serum proteins responsible for pruritus in cutaneous T cell lymphoma.** Hiraku Suga, Makoto Sugaya, Tomomitsu Miyagaki, Hanako Ohmatsu, Hideki Fujita and Shinichi Sato. Tokyo, Japan. **3:12 pm, Poster #486**
- 6. Effect of extracorporeal photopheresis on dendritic cell populations in patients with Sézary syndrome and graft-versus-host disease and its correlation with the clinical response.** Lisa Shiue, Madeleine Duvic, Meghali Goswami, Amin Alousi, Chitra Hosing and Xiao Ni. Houston, TX. **3:24 pm, Poster #484**
- 7. Positive results of a pivotal phase II trial testing a manufactured 0.02% mechlorethamine gel in mycosis fungoides (MF).** Stuart Lessin, Madeleine Duvic, Joan Guitart, Amit Pandya, Bruce Strober, Elise Olsen, Christopher Hull, Elizabeth Knobler, Alain Rook, Ellen Kim, Mark Naylor, David Adelson, Alexa Kimball, Gary Wood, Hong Wu, Barry Walker and Youn Kim. Philadelphia, PA; Houston, TX; Chicago, IL; Dallas, TX; New York, NY; Durham, NC; Salt Lake City, UT; Oklahoma City, OK; Boston, MA; Madison, WI; Radnor, PA and Palo Alto, CA. **3:36 pm, Poster #503**
- 8. Total skin electron beam and non-myeloablative allogeneic hematopoietic stem-cell transplantation in advanced mycosis fungoides and sezary syndrome.** Lotika Singh, Chitra Hosing and Madeleine Duvic. Houston, TX. **3:48 pm, Poster #542**

CUTANEOUS T CELL LYMPHOMA SYMPOSIUM (CONT'D)

THURSDAY SESSIONS

9. Comparing the effects of 9-cis UAB30, a novel rexinoid, and bexarotene on the rates of proliferation and apoptosis in human cutaneous T-cell lymphoma cell lines. Zoe Verney, Venkatram Attigada, Craig Elmets, Donald Muccio, Clinton Grubbs and Pi-Ling Chang. Birmingham, AL. 4:00 pm, Poster #074
10. Sirt1 histone deacetylase (HDAC) is increased in cutaneous t-cell lymphoma (CTCL) and its inhibition induces apoptosis. Minakshi Nihal, Nihal Ahmad and Gary S Wood. Madison, WI. 4:12 pm, Poster #137
11. Digital transcriptome subtraction for pathogen sequence detection and gene expression profiling in CTCL. Ezra D Mirvish, Huichen Feng, Rebecca G Pomerantz, Louis D Falo, Yuan Chang, Patrick S Moore and Larisa J Geskin. Pittsburgh, PA. 4:24 pm, Poster #165
12. Disease stage-related decreases in distinct superantigen-related T cell receptor-V β s in cutaneous T-cell lymphoma. Rebecca G Pomerantz, Ezra D Mirvish, Timothy J Patton, Louis D Falo and Larisa J Geskin. Pittsburgh, PA. 4:36 pm, Poster #168
13. Association of the numbers of CD163 $^{+}$ macrophages in lesional skin and serum levels of soluble CD163 with disease progression of cutaneous T cell lymphoma. Makoto Sugaya, Tomomitsu Miyagaki, Hanako Ohmatsu, Hiraku Suga, Hiromichi Kai, Masahiro Kamata, Yayoi Tada and Shinichi Sato. Tokyo, Japan. 4:48 pm, Poster #478
14. CD45RO loss in histopathological specimens of lymphomatoid papulosis. Derek V Chan, Savina Aneja, Kord S Honda and Kevin D Cooper. Cleveland, OH. 5:00 pm, Poster #604

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 -10

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 - 10

CONCURRENT MINISYMPPOSIUM 1

PIGMENTATION & MELANOMA

3.5 CME CREDITS

Presiders: Anand Ganesan, MD/PhD and Maria Wei, MD/PhD

Thursday, May 5, 2011

2:00 pm - 5:30 pm

Wildflower Salon B

OPEN TO ALL MEETING ATTENDEES

1. **The MEF2C transcription factor regulates melanocyte development, interacts directly with SOX10 and is a candidate gene for Waardenburg Syndrome.** Maria L Wei, Pooja Agarwal, Michael Verzi, Thuyen Nguyen, David McCulley, Shan-Mei Xu, Evdokia Dodou, Joshua Anderson and Brian Black. San Francisco, CA. 2:00 pm, *Poster #725*
2. **WIP1 coordinates melanogenic gene transcription and melanosome formation via TORC1 inhibition.** Hsiang Ho, Rubina Kapadia, Sejad Al-Tahan, Safoora Ahmad and Anand Ganesan. Irvine, CA. 2:12 pm, *Poster #723*
3. **Role of oxidative stress and unfolded protein response in development of vitiligo.** Siavash Toosi, Seth J Orlow and Prashiela Manga. New York, NY. 2:24 pm, *Poster #720*
4. **Differential effects of UV irradiation and visible light on skin pigmentation *in vitro*.** Connie B Lin, Nannan Chen, Dianne Rossetti, Yaping Hu, Jie Zhang, Paulo Bargo, Theresa Chen and Miri Seiberg. Skillman, NJ. 2:36 pm, *Poster #712*
5. **Linking UVB irradiation to pigmentation induction through FGF2-STAT3-PAX3 signaling in melanocytes.** Yinchuan Li, Liang Dong, Eric Pier and Rutao Cui. Boston, MA. 2:48 pm, *Poster #721*
6. **MAPK pathway regulates the expression of p18INK4c and p21Waf1/Cip1 cyclin-dependent kinase inhibitors through the AP-1 transcription factor.** Ahmad Jalili, Christine Wagner, Kirsten D Mertz, Mikhail Pashenkov, Georg Stingl, Sridhar Ramaswamy and Stephan N Wagner. Vienna, Austria; Moscow, Russian Federation and Boston, MA. 3:00 pm, *Poster #726*
7. **Targeting deregulated HIF1 signaling in human melanoma by conditional HIF1 knockdown promotes tumor progression.** Kevin T Nash, Angelo E Ayar, Monique E Verhaegen, Tim M Johnson and Anj A Dlugosz. Ann Arbor, MI. 3:12 pm, *Poster #715*
8. **Novel cAMP signaling pathways in melanoma.** Jonathan H Zippin, Cynthia Magro, Lonny Levin and Jochen Buck. New York, NY. 3:24 pm, *Poster #748*
9. **Identification of EMMPRIN as a novel receptor for S100A9: Its involvement in melanoma metastasis.** Toshihiko Hibino, Shoko Miyamoto, Masakiyo Sakaguchi, Akira Motoyama, Mami Yamamoto, Ryoji Tsuboi and Nam-ho Huh. Yokohama, Japan; Okayama, Japan and Tokyo, Japan. 3:36 pm, *Poster #751*
10. **The redox antimalarial dihydroartemisinin targets human melanoma cells but not melanocytes through induction of NOXA (*PMA/P1*)-dependent apoptosis that occurs as a function of intracellular labile iron availability.** Christopher M Cabello, Sarah D Lamore, Warner B Bair and Georg T Wondrak. Tucson, AZ. 3:48 pm, *Poster #780*

CONCURRENT MINISYMPPOSIUM 1 (CONT'D)

PIGMENTATION & MELANOMA

THURSDAY SESSIONS

11. **The effect of E-cadherin loss on melanoma progression and markers of epithelial-mesenchymal transition in a conditional mouse model.** Lara E Rosenbaum, William E Damsky and Marcus Bosenberg. New Haven, CT. 4:00 pm, Poster #753
12. **CCR7-expressing B16 melanoma cells down-regulate interferon (IFN)- γ -mediated inflammation and increase lymphangiogenesis in the tumor microenvironment.** Tomonori Takekoshi, Lei Fang, Ryan Sells and Sam T Hwang. Milwaukee, WI and Bethesda, MD. 4:12 pm, Poster #727
13. **Deficiency in IL-23, but not IL-12, promotes increased initiation and growth of melanocytic nevi induced by exposure to carcinogenic polycyclic aromatic hydrocarbons.** Tahseen Nasti, Nabiha Yusuf, Laura Timares and Craig Elmets. Birmingham AL. 4:24 pm, Poster #769
14. **Epigenetic control of gene expression programs in the skin: Distinct nuclear architecture and higher order chromatin organization of cell-type specific genes in melanocytes and keratinocytes.** Michal R Gdula, Tatyana Y Sharova, Michael Y Fessing and Andrey A Sharov. Boston, MA and Bradford, United Kingdom. 4:36 pm, Poster #762
15. **DNA methylation differences between melanomas and nevi.** Kathleen Conway, Sharon N Edmiston, Zakaria S Khondker, Pamela A Groben, Xin Zhou, Haitao Chu, Pei Fen, Kuan, Honglin Hao, Craig Carson, Marianne Berwick, David W Ollila and Nancy E Thomas. Chapel Hill, NC; Minneapolis, MN and Albuquerque, NM. 4:48 pm, Poster #776

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 -10

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 - 10

CONCURRENT MINISYMPPOSIUM 2 HAIR AND CUTANEOUS DEVELOPMENT

3.5 CME CREDITS

Presiders: Sarah Millar, PhD and Michael Rendl, MD

Thursday, May 5, 2011

2:00 pm - 5:30 pm

Wildflower Salon A

OPEN TO ALL MEETING ATTENDEES

1. **Discovery of stable RNAs in the human hair shaft by RNA-seq: Implications for serial testing in personalized medicine.** Gloria K Lefkowitz, Christopher A Cowing-Zitron, Anandaroop Mukhopadhyay and Benjamin D Yu. La Jolla, CA. 2:00 pm, Poster #448
2. **Regulation of hair morphology by the dermal papilla.** Woo Chi, David Enshell-Seijffers and Bruce A Morgan. Boston, MA. 2:12 pm, Poster #462
3. **Role of aurora kinase-A in skin development.** Enrique C Torchia, Lei Zhang, Aaron J Huebner, Subrata Sen and Dennis R Roop. Aurora, CO and Houston, TX. 2:24 pm, Poster #466
4. **Coordinated activation of Wnt signaling in epithelial and melanocyte stem cells in a shared niche initiates pigmented hair follicle regeneration.** Piul Rabbani, Makoto Takeo, Wei Chin Chou, Peggy Myung, Mark Taketo, Lynda Chin, Marcus Bosenberg and Mayumi Ito. New York, NY; Kyoto, Japan; Boston, MA; New Haven, CT and Cleveland, OH. 2:36 pm, Poster #472
5. **Hdac1 and Hdac2 act redundantly to control p63 and p53 functions in epidermal progenitor cells.** Matthew LeBoeuf, Anne Terrell, Sohum Trivedi, Xinyi Zhao, Satrajit Sinha, Jonathan Epstein, Eric Olson, Edward Morrisey and Sarah E Millar. Philadelphia, PA; Buffalo, NY and Dallas, TX. 2:48 pm, Poster #449
6. **Epigenetic modulation of skin morphogenesis via global histone acetylation.** Michael W Hughes, Ting-Xin Jiang, Sung-Jan Lin, Randy Widelitz and Cheng-Ming Chuong. Los Angeles, CA. 3:00 pm, Poster #474
7. **Regulation of hair growth by microRNA miR-31: Implications of its target gene STK40.** Thomas Andl and Liming Luan. Nashville, TN. 3:12 pm, Poster #451
8. **Trps1 and its target gene Sox9 regulate epithelial proliferation in the developing hair follicle and are associated with hypertrichosis.** Katherine A Fantauzzo and Angela M Christiano. New York, NY. 3:24 pm, Poster #455
9. **The role of p63 in hair follicle stem cell activation.** Velmurugan Balaiya, Merlin Ariefdjohan, Peter J Koch and Marankel Koster. Aurora, CO. 3:36 pm, Poster #463
10. **Hair shaft defects in the rough coat (rc) mice.** Mariya Miteva, Angel G Leiva, Joaquin J Jimenez, Katalin Csiszar and Tongyu C Wikramanayake. Miami, FL and Honolulu, HI. 3:48 pm, Poster #435
11. **Constitutive expression of Aryl hydrocarbon receptor in keratinocytes causes scarring alopecia.** Sreejith P Panicker, Taneeta Ganguly, Ali A Lattif, Mary C Consolo, Masayuki Yamamoto, Kord Honda and Pratima Karnik. Cleveland, OH and Tsukuba, Japan. 4:00 pm, Poster #460

CONCURRENT MINISYMPOSIUM 2 (CONT'D)

HAIR AND CUTANEOUS DEVELOPMENT

THURSDAY SESSIONS

12. **Epidermal DN-Mastermind-like 1 induces skin carcinomas, hair defects, and genital abnormalities.** Xiaoping Yang, Liang Zhao, Hiroyuki Nishida, Tzvete Dentchev, Warren Pear, Sarah Millar and John Seykora. Philadelphia, PA. *4:12 pm, Poster #457*
13. **Role of vitamin D receptor in hair follicle cycling through local expression.** Arnaud Teichert, Hashem Elalieh and Daniel Bikle. San Francisco, CA. *4:24 pm, Poster #446*
14. **Efficiency and efficacy of hair regeneration: Effect of dermal papilla cells on hair inductivity and quality.** Chih-Chieh Chan, Wei-Ting Lin, Jung-Yi Chan, Tsung-Hua Tsai and Sung-Jan Lin. Taipei, Taiwan and New Taipei, Taiwan. *4:36 pm, Poster #452*
15. **Positive and negative effects of RAS on Shh transcription are both mediated through ETV4.** Anandaroop Mukhopadhyay, Suguna R Krishnaswami, Christopher C Zitron, Shantanu Kumar and Benjamin D Yu. San Diego, CA. *4:48 pm, Poster #461*

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 -10

ANCILLARY MEETINGS**THURSDAY, MAY 5, 2011****Society for Pediatric Dermatology***Open to all Meeting Attendees*

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 - 10

CONCURRENT MINISYMPOSIUM 3**EPIDERMAL STRUCTURE & FUNCTION****3.5 CME CREDITS****Presiders: Richard Eckert, PhD and Daniel Bikle, MD/PhD****Thursday, May 5, 2011****2:00 pm - 5:30 pm****Grand Canyon 3 - 4****OPEN TO ALL MEETING ATTENDEES**

1. **Role of centrosomal proteins and cortical microtubules in epidermal barrier formation.** Kaelyn Sumigray and Terry Lechler. Durham, NC. **2:00 pm, Poster #279**
2. **Psoriasis-like skin lesion induced by Raf-MAPK signaling requires Stat3 activation.** Masahito Tarutani, Ken Miyoshi, Mikiro Takaishi and Shigetoshi Sano. Nankoku, Japan. **2:12 pm, Poster #272**
3. **Abca12-mediated lipid transport and Snap29-dependent trafficking of lamellar granules are critical for epidermal morphogenesis.** Qiaoli Li, Michael Frank, Masashi Akiyama, Hiroshi Shimizu, Eli Sprecher and Jouni Uitto. Philadelphia, PA; Sapporo, Japan; Nagoya, Japan and Tel Aviv, Israel. **2:24 pm, Poster #343**
4. **Loss of epidermal hypoxia-inducible factor-1alpha accelerates epidermal aging and affects reepithelialization in human and mouse.** Nsrein Ali, Hamid R Rezvani, Alain Taieb, Hubert de Verneuil and Frederic R Mazurier. Bordeaux, France. **2:36 pm, Poster #303**
5. **Involvement of multiple pathways in keratinocyte DNA degradation.** Mami Yamamoto, Teruhiko Makino, Akira Motoyama, Ryoji Tsuboi and Toshihiko Hibino. Yokohama, Japan; Tokyo, Japan and Toyama, Japan. **2:48 pm, Poster #325**
6. **Increased endogenous retinoic acid by the absence of Cyp26b1 impairs peridermal development and skin barrier formation during development.** Junko Okano, Ulrike Lichti, Maria Aronova, Guofeng Zhang, Stuart H Yuspa, Yasuo Sakai and Maria I Morasso. Bethesda, MD and Osaka, Japan. **3:00 pm, Poster #266**
7. **Impaired stratum corneum barrier and enhanced percutaneous immune responses in filaggrin knockout mice.** Hiroshi Kawasaki, Keisuke Nagao, Akiharu Kubo, Tsuyoshi Hata, Hideaki Mizuno, Taketo Yamada and Masayuki Amagai. Tokyo, Japan and Wako, Japan. **3:12 pm, Poster #269**
8. **ER stress stimulates keratinocyte cathelicidin expression via a novel NF- κ B C/EBP α dependent pathway.** Kyungho Park, Peter M Elias, Yuko Oda, Theodora Mauro, Walter M Holleran and Yoshikazu Uchida. San Francisco, CA. **3:24 pm, Poster #300**
9. **Formation and function of the corneocyte lipid envelope.** Yuxiang Zheng, David Beier, Alan Brash, Peter Elias and Debra Crumrine. Nashville, TN; Boston, MA and San Francisco, CA. **3:36 pm, Poster #310**
10. **Ovol2 converges with p63 to regulate epidermal morphogenesis.** Briana Lee and Xing Dai. Irvine, CA. **3:48 pm, Poster #323**
11. **Insulin/IGF-1 signaling controls epidermal morphogenesis by regulating asymmetric divisions.** Heike Stachelscheid, Christian Guenschmann, Annika Schmitz, Jens C Bruening and Carsten M Niessen. Cologne, Germany. **4:00 pm, Poster #339**

CONCURRENT MINISYMPOSIUM 3 (CONT'D)

EPIDERMAL STRUCTURE & FUNCTION

12. **PKC δ suppresses keratinocyte proliferation by increasing p21^{Cip1} level via a KLF4-dependent mechanism.** Yap C Chew, Gautam Adhikary and Richard L Eckert. Baltimore, MD. 4:12 pm, Poster #360
13. **Combined biological and computational approaches to understand the role of Get1/Grl3 in epidermal differentiation.** Rachel P Herndon, Ambica Bhandari, Diana Dizon, Robert Chadwick, Jacob Biesinger, Xiaohui Xie and Bogi Andersen. Irvine, CA. 4:24 pm, Poster #362
14. **ARNT-dependent expression of amphiregulin and consequent activation of EGFR/Erk pathway is essential for normal epidermal differentiation.** Douglas Robertson, Lynda Weir, Irene M Leigh and Andrey A Panteleyev. Dundee, United Kingdom. 4:36 pm, Poster #262
15. **Aryl hydrocarbon receptor modulates keratinocyte differentiation by SIRT1 expression.** Gaku Tsuji, Masakazu Takahara, Hiroshi Uchi, Satoshi Takeuchi, Fumiko Yasukawa, Yoichi Moroi and Masataka Furue. Fukuoka, Japan. 4:48 pm, Poster #328

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 -10

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 - 10

CONCURRENT MINISYMPOSIUM 4
IMMUNOLOGY I: ADAPTIVE IMMUNITY

3.5 CME CREDITS

Presiders: Daniel Kaplan, MD/PhD and Robert Fuhlbrigge, MD/PhD

Thursday, May 5, 2011

2:00 pm - 5:30 pm

Grand Canyon 9 - 10

OPEN TO ALL MEETING ATTENDEES

1. **IRF8 is an essential regulator of CD8 T cell effector function.** Fumi Miyagawa, Hong Zhang, Keiko Ozato, Yutaka Tagaya and Stephen Katz. Bethesda, MD. 2:00 pm, Poster #579
2. **Autocrine TGF β is required to prevent Langerhans cell migration.** Aleh Bobr, Botond Z Iggyarto, Krystal M Haley, Ming O Li, Richard A Flavell and Daniel H Kaplan. Minneapolis, MN; New York, NY and New Haven, CT. 2:12 pm, Poster #583
3. **Epidermal LC mediate constitutive stimulation of skin resident tregs and thereby control the inadvertent activation of skin effector memory T cells (TRM) in normal skin.** Julien Seneschal, Rachael A Clark and Thomas S Kupper. Boston, MA and Bordeaux, France. 2:24 pm, Poster #592
4. **Skin-resident DC subsets promote distinct and opposing antigen-specific T helper responses.** Botond Z Iggyarto, Krystal Haley, Daniela Ortner, Maryam Gerami-Nejad, Sandra M Zurawski, Bernard Malissen, Gerard Zurawski, Judith Berman and Daniel H Kaplan. Minneapolis, MN; Dallas, TX and Marseille, France. 2:36 pm, Poster #584
5. **Langerin+ Dermal DC, but not Langerhans cells, are required for effective CD8 mediated immune responses after skin scarification (S.S.) with Vaccinia virus (VACV).** Julien Seneschal, Xiaodong Jiang and Thomas S Kupper. Boston, MA and Bordeaux, France. 2:48 pm, Poster #589
6. **Granulocyte-derived dendritic cells (grDC) are specialized for bacterial antigen presentation.** Shuo Geng, Hironori Matsushima, Paul Kotol, Richard Gallo and Akira Takashima. Toledo, OH and San Diego, CA. 3:00 pm, Poster #563
7. **Generation of tumor-specific anti-melanoma T-cell responses by extracorporeal photochemotherapy-induced dendritic cells.** Anna K Engberg, Carole L Berger, Douglas J Hanlon and Richard L Edelson. New Haven, CT. 3:12 pm, Poster #562
8. **Re-thinking the role of chemokine receptor CCR7 in generating skin-imprinted memory and effector T cells.** Bryan Vander Lugt, Noah J Tubo, Marianne Boes, Robert C Fuhlbrigge, Thomas S Kupper and James J Campbell. Boston, MA. 3:24 pm, Poster #581
9. **IL-37 suppresses contact hypersensitivity by inhibiting maturation of dendritic cells.** Xiangna Cai, Yuchun Luo, Claudia A Nold-Petry, Marcel F Nold, Philip Bufler, Charles A Dinarello and Mayumi Fujita. Aurora, CO; Shantou, China and Munich, Germany. 3:36 pm, Poster #608
10. **Production of SJS/TEN model mice using patients PBMCs and skin.** Nao Saito, Riichiro Abe, Naoya Yoshioka, Hongjiang Qiao, Yasuyuki Fujita, Daichi Hoshina and Hiroshi Shimizu. Sapporo, Japan. 3:48 pm, Poster #561

CONCURRENT MINISYMPPOSIUM 4 (CONT'D)

IMMUNOLOGY I: ADAPTIVE IMMUNITY

THURSDAY SESSIONS

11. **β 2-adrenergic agonists bias TLR-2- and-NOD2-activated dendritic cells towards inducing an IL-17 immune response.** Michela Manni, Richard D Granstein and Georges Maestroni. New York, New York and Locarno, Switzerland. *4:00 pm, Poster #557*
12. **Adenosine produced by regulatory T cells acts as chemo-attractant for dendritic cells and promotes formation of Treg-DC clusters.** Sabine Ring, Alexander H Enk and Karsten Mahnke. Heidelberg, Germany. *4:12 pm, Poster #587*
13. **Pregnane X Receptor (PXR) regulates cutaneous immunity.** Matthias Schmuth, Andreas Elentner, Frank Gonzalez and Sandrine Dubrac. Innsbruck, Austria and Bethesda, MD. *4:24 pm, Poster #586*
14. **Blocking galectin-1 ligand biosynthesis enhances immunity against melanoma.** Filiberto Cedeno-Laurent, Matthew Opperman, Steven R Barthel, Danielle Hays, Tobias Schatton, Quian Zhan, Markus H Frank, George F Murphy and Charles J Dimitroff. Boston, MA. *4:36 pm, Poster #576*
15. **GILT modulates CD4+ T cell tolerance to the melanoma antigen TRP1.** Matthew P Rausch, Todd C Metzger, Mark S Anderson and Karen T Hastings. Phoenix, AZ and San Francisco, CA. *4:48 pm, Poster #601*

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 -10

ANCILLARY MEETINGS**THURSDAY, MAY 5, 2011****Society for Pediatric Dermatology***Open to all Meeting Attendees*

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 - 10

CONCURRENT MINISYMPOSIUM 5**GENETIC DISEASE, GENE REGULATION & GENE THERAPY****3.5 CME CREDITS****Presiders: Angela Christiano, PhD and Eli Sprecher, MD/PhD****Thursday, May 5, 2011****2:00 pm - 5:30 pm****Grand Canyon 11 - 12****OPEN TO ALL MEETING ATTENDEES**

- 1. Genomewide association study (GWAS) of infantile hemangiomas (IH).** B Drolet, D Siegel, K Duffy, Y Chiu, R Lorier, A Stoddard and U Broeckel. Milwaukee, WI. *2:00 pm, Poster #427*
- 2. Keratinocyte cell fate decisions are regulated by a novel microRNA-31/factor-inhibiting hypoxia-inducible factor 1 (FIH-1)/Notch relationship.** Han Peng, Spiro Getsios and Robert M Lavker. Chicago, IL. *2:12 pm, Poster #372*
- 3. A mutation in LIPN, encoding epidermal Lipase N, causes a late onset form of autosomal recessive congenital ichthyosis.** Shirli Israeli, Ziad Khamaysi, Dana Fuchs-Telem, Janna Nousbeck, Reuven Bergman, Ofer Sarig and Eli Sprecher. Tel Aviv, Israel and Haifa, Israel. *2:24 pm, Poster #368*
- 4. A splice site mutation in a skin-specific isoform of SMARCAD1 causes hereditary adermatoglyphia.** Janna Nousbeck, Bettina Burger, Dana Fuchs-Telem, Mor Pavlovsky, Shlomit Fenig, Ofer Sarig, Peter Itin and Eli Sprecher. Tel Aviv, Israel and Basel, Switzerland. *2:36 pm, Poster #365*
- 5. Long noncoding RNA programs active chromatin domain to coordinate homeotic gene expression.** Kevin C Wang, Yul W Yang, Bo Liu, Amartya Sanyal, Ryan Corces-Zimmerman, Yong Chen, Bryan R Lajoie, Angeline Protacio, Ryan A Flynn, Rajnish A Gupta, Joanna Wysocka, Ming Lei, Job Dekker, Jill A Helms and Howard Y Chang. Stanford, CA; Worcester, MA and Ann Arbor, MI. *2:48 pm, Poster #373*
- 6. Developing small molecule drugs to rescue nonsense mutations in disease-causing genes.** Toshifumi Nomura, Ulrike Gartner, Stuart McElroy, Leah Torrie, Celine Pourreynon, Andrew P South, Gavin Wood, Andrew Woodland, Julie Frearson, Paul Wyatt and Irwin McLean. Dundee, United Kingdom. *3:00 pm, Poster #397*
- 7. Copy number variation within the filaggrin gene contributes to risk of atopic dermatitis.** Sara J Brown, Karin Kroboth, Aileen Sandilands, Linda E Campbell, Elizabeth Pohler, Alan D Irvine, Heather J Cordell and W H Irwin McLean. Dundee, United Kingdom; Dublin, Ireland and Newcastle, United Kingdom. *3:12 pm, Poster #375*
- 8. Copy number variation (CNV) on ch4q26-27 is associated with Cantu syndrome, with hypertrichosis and cardiomegaly.** Mazen Kurban, Chong Kim, Katherine Fantauzzo and Angela M Christiano. New York, New York and Sao Paulo, Brazil. *3:24 pm, Poster #411*
- 9. Hereditary leukonychia/ porcelain nails results from mutations in PLCD1 gene.** Maija Kiuru, Mazen Kurban, Munenari Itoh, Lynn Petukhova, Yutaka Shimomura, Muhammad Wajid, Robert H Rice and Angela M Christiano. New York, NY and Davis, CA. *3:36 pm, Poster #418*
- 10. Suppressing AP1 factor signaling in suprabasal epidermis causes nuclear loricrin accumulation and a progressive symmetric erythrokeratoderma-like phenotype.** Ellen A Rorke, Gautam Adhikary and Richard L Eckert. Baltimore, MD. *3:48 pm, Poster #425*



CONCURRENT MINISYMPOSIUM 5 (CONT'D)

GENETIC DISEASE, GENE REGULATION & GENE THERAPY

THURSDAY SESSIONS

11. **Zebrafish model of lipoid proteinosis.** Qiaoli Li, Adele Donahue, Samantha Smith, John A McGrath, Noritaka Oyama and Jouni Uitto. Philadelphia, PA; London, United Kingdom and Fukushima, Japan. *4:00 pm, Poster #415*
12. **Modulating keratinocyte intracellular Ca²⁺ via the sphingolipid pathway constitutes a novel therapeutic target for Darier's Disease.** Anna Celli, Donald Mackenzie, Yongjiao Zhai, Chia Ling Tu, Daniel Bikle, Walter Holleran, Yoshikazu Uchida and Theodora Mauro. San Francisco, CA. *4:12 pm, Poster #379*
13. **Homozygosity of dominant missense mutations in keratin 17 leads to alopecia in addition to severe pachyonychia congenita.** Neil J Wilson, C D Hansen, Monica L Cardenas Perez, Anders Vahlquist, Mary E Schwartz and Frances J Smith. Dundee, United Kingdom; Salt Lake City, UT; Cali, Colombia and Uppsala, Sweden. *4:24 pm, Poster #402*
14. **Gene targeting induced by triplex-forming oligonucleotides in skin.** Yanhua Liang, Faye A Rogers, PeterM Glazer and LeonardM Milstone. New Haven, CT. *4:36 pm, Poster #421*
15. **Non-aminoglycosides can restore type VII collagen function by overcoming premature stop mutations: Implications for DEB therapy.** J Cogan, Y Hou, X Wang, L Du, R Gatti, A South, D Woodley and M Chen. Los Angeles, CA and Dundee, United Kingdom. *4:48 pm, Poster #387*

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology

Open to all Meeting Attendees

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

BCCNS Life Support Network

10:00 am - 12:00 pm

Grand Canyon 9 -10

ANCILLARY MEETINGS

THURSDAY, MAY 5, 2011

Society for Pediatric Dermatology
Open to all Meeting Attendees
7:00 am - 8:00 am
Desert Suite I

Meeting Registration
7:30 am - 4:00 pm
Grand Canyon Foyer 6

BCCNS Life Support Network
10:00 am - 12:00 pm
Grand Canyon 9 - 10

SOCIAL EVENT AT CORONA RANCH

NO CME CREDIT OFFERED

Thursday, May 5, 2011
6:00 pm - 10:00 pm
Corona Ranch

TICKETED EVENT; PRE-REGISTRATION REQUIRED

Join us at Corona Ranch for a rodeo show that highlights the most exciting portions of both Western Rodeo and a Mexican Charreada. The Charreada (Mexican Rodeo) includes several different feats of horsemanship including riding, roping, accuracy, courage and style. The Western portion showcases some of the most exciting events that made Rodeo great, including Western-style wild bull riding, Western-style wild bronco riding, and much more. The event-filled Rodeo is professionally announced and designed for 45 minutes of "edge-of-the-seat" excitement!

- Buses will begin departing for the Corona Ranch at 5:45 pm from the Ballroom Entrance of the JW Marriott Desert Ridge
- Dinner Buffet will open at 6:45 pm
- Charreada Rodeo will begin at 8:00 pm
- Buses will begin departing for the JW Marriott at 8:45 pm
- Last bus will depart for the JW Marriott at 10:15 pm

Visit www.coronaranch.com for more information.



Corona Ranch

NOTES

NOTES

FRIDAY MEETING-AT-A-GLANCE

Friday, May 6, 2011

Registration Grand Canyon Foyer 6	7:30 am - 4:00 pm
Business Meeting for Members Grand Canyon 6 - 7	7:30 am - 8:15 am
Plenary Session II Grand Canyon 6 - 7	8:15 am - 9:15 am
SIDES Program Wildflower C	9:00 am - 3:00 pm
Stephen Rothman Award <i>Presented to John R. Stanley, MD</i> Grand Canyon 6 - 7	9:15 am - 9:25 am
Herman Beerman Lecture <i>Super-resolution Imaging with Photoactivatable Fluorescent Proteins</i> Jennifer Lippincott-Schwartz, PhD Grand Canyon 6 - 7	9:25 am - 9:55 am
Celebrating NIAMS 25th Anniversary David Bickers, MD Grand Canyon 6 - 7	9:55 am - 10:10 am
State-of-the-Art Plenary Lecture 3 <i>Defining the Cell Lineages at the Origin of Skin Cancers</i> EMBO Young Investigator Lecture Cedric Blanpain, MD/PhD Grand Canyon 6 - 7	10:15 am - 10:45 am
State-of-the-Art Plenary Lecture 4 <i>Intrinsic and Extrinsic Regulation of Skin Stem Cells</i> Valerie Horsley, PhD Grand Canyon 6 - 7	10:45 am - 11:15 am
Poster Session II/Technical Exhibits Open with Coffee Break <i>Even 002-280/Odd 563-845</i> Grand Saguaro Ballroom	11:15 am - 1:15 pm
Clinical Scholars Program Grand Canyon 8	11:30 am - 1:30 pm
SID Technical Workshop <i>Confocal Microscopy and Imaging Techniques</i> Grand Canyon 6 - 7	12:00 pm - 2:00 pm
Women's Derm Society Luncheon & Forum Desert Suite III and V	12:00 pm - 2:00 pm
Concurrent Minisymposia 6. Immunology II: Innate Immunity and Microbiology (Wildflower A) 7. Tissue Regeneration, Stem Cells and Wound Healing (Wildflower B) 8. Carcinogenesis & Cancer Genetics (Grand Canyon 11 - 12) 9. Epidemiology/Health Services Research (Grand Canyon 9 - 10)	2:00 pm - 5:30 pm
JID Editorial Board Meeting Pinnacle Peak 2	4:00 pm - 6:00 pm
North American Hair Research Society Scientific Meeting Desert Suites III and V	6:00 pm - 9:30 pm
Galderma Japan Scientific Forum Desert Suites IV and VI	6:00 pm - 9:30 pm
Trainee Dinner Session Grand Canyon 4 - 5	7:30 pm - 9:30 pm

Indicates CME Credit Offered

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration 7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES) Program 9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon & Forum 12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting 4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum 6:00 pm - 9:30 pm
Desert Suite IV and VI

ANCILLARY MEETINGS**FRIDAY, MAY 6, 2011**

Meeting Registration
7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES) Program

9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon & Forum
12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting
4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum
6:00 pm - 9:30 pm
Desert Suite IV and VI

BUSINESS MEETING FOR MEMBERS**NO CME CREDIT OFFERED**

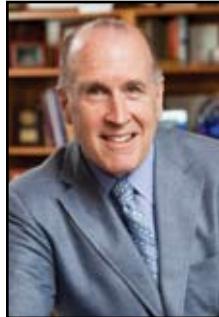
Friday, May 6, 2011
7:30 am - 8:15 am
Grand Canyon 6 - 7

OPEN TO ALL MEETING ATTENDEES

Presentations will be made by the President, Secretary-Treasurer, committee chairpersons of the SID and by the Journal editor. Members will elect new members and officers, approve the minutes of the 2010 Business Meeting and discuss SID affairs. Officials from the ESDR, JSID and SID leadership will also acknowledge travel grant recipients and provide updates on IID2013.

Appointment of Honorary Members

The SID is pleased to appoint the following honorary members.



David R. Bickers, MD
Chairman,
Dept. of Dermatology
Columbia University,
New York, New York



Ervin Epstein, MD
Children's Hospital
Oakland Research
Institute
Oakland, California



Stephen Katz, MD/PhD
Director
NIAMS,
Bethesda, Maryland

ESDR/JSID Young Investigator Collegiality awards

An initiative between the European Society for Dermatological Research (ESDR), the Society for Investigative Dermatology (SID), and the Japanese Society for Investigative Dermatology (JSID), the Young Investigator Collegiality Travel Awards are designed to promote the academic career development of researchers and clinician-scientists in investigative dermatology. The vision of the three societies is to help promising researchers obtain international exposure of their work and thereby enhance their professionalism and sense of achievement.

This year's Young Investigator Collegiality Awards are presented to Eva Hadaschik, MD; Hiroshi Kawasaki, MD; Shinji Noda, MD; and Takashi Okamoto, MD/PhD.

PLENARY SESSION II

1 CME CREDIT

Presiders: David Margolis, MD/PhD and Anthony Oro, MD/PhD

Friday, May 6, 2011

8:15 am - 9:15 am

Grand Canyon 6 - 7

OPEN TO ALL MEETING ATTENDEES

1. An investigator-initiated, phase II randomized, double-blind, placebo-controlled trial of GDC-0449 for prevention of BCCs in basal cell nevus syndrome (BCNS) patients. Jean Y Tang, Julian M Mackay-Wiggan, Michelle Aszterbaum, Joselyn Lindgren, Kris Chang, Carol Coppola, Angela Campbell, Anita Chanana, Jackleen Marji, David R Bickers and Ervin H Epstein. Oakland, CA; Redwood City, CA and New York, NY. 8:15 am, Poster #549
2. *Intu* controls hair follicle formation through regulating primary cilia formation in epidermal keratinocytes. Daisy Dai, Li Li, Huiqing Zeng, Aimin Liu and Jiang Chen. Aurora, CO and University Park, PA. 8:27 am, Poster #444
3. IL-9 is a potent mediator of tumor immunity, and its expression is negatively regulated by the Th17 transcription factor ROR γ . R Purwar, S Xiao, Y Takeda, W Elyaman, X Jiang, A Jetten, S Khouri, R Fuhlbrigge, V Kuchroo and T Kupper. Boston, MA and Triangle Park, NC. 8:39 am, Poster #595
4. Epidermal tissue differentiation and lipid barrier function requires the long non-coding RNA Linc19A. Markus Kretz, Daniel Webster, Zurab Siprashvili, Ashley Zehnder, Cari Lee, Ross Flockhart, Jennifer Chow, Grace Kim, John Rinn, Howard Chang and Paul Khavari. Palo Alto, CA. 8:51 am, Poster #396
5. Hairless is a H3K9 histone demethylase. Liang Liu, Hyunmi Kim, Alex Casta, Courtney Luke, Yuki Kobayashi, Lawrence S Shapiro and Angela M Christiano. New York, NY. 9:03 am, Poster #409

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

SID Education for Students (SIDES)

Program

9:00 am - 3:00 pm

Wildflower C

Women's Derm Society Luncheon & Forum

12:00 pm - 2:00 pm

Desert Suite III and IV

JID Editorial Meeting

4:00 pm - 6:00 pm

Pinnacle Peak 2

Galderma Japan Scientific Forum

6:00 pm - 9:30 pm

Desert Suite IV and VI

FRIDAY SESSIONS

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration
7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES) Program

9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon & Forum
12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting
4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum
6:00 pm - 9:30 pm
Desert Suite IV and VI

STEPHEN ROTHMAN AWARD

NO CME CREDIT OFFERED

Friday, May 6, 2011
9:15 am - 9:25 am
Grand Canyon 6 - 7

OPEN TO ALL MEETING ATTENDEES



The Stephen Rothman Memorial Award is presented annually for distinguished service to investigative cutaneous medicine. The recipient of this award has made major scientific achievements and excelled as a teacher and recruiter of outstanding dermatologists. The recipient is an individual who has distinctly altered the course and image of dermatology or its allied fields. It is the Society's highest award.

2011 Stephen Rothman Award Recipient

John R. Stanley, MD
Professor
University of Pennsylvania, Philadelphia, Pennsylvania



HERMAN BEERMAN LECTURE

SUPER-RESOLUTION IMAGING WITH PHOTOACTIVATABLE FLOURESCENT PROTEINS

.5 CME CREDITS

Friday, May 6, 2011

9:25 am - 9:55 am

Grand Canyon 6 - 7

OPEN TO ALL MEETING ATTENDEES

LECTURER BIO



Jennifer Lippincott-Schwartz, PhD
National Institutes of Health
Bethesda, Maryland

Jennifer Lippincott-Schwartz is Chief of the Organelle Biology Section in the Cell Biology and Metabolism Branch of the National Institutes of Health. Dr. Lippincott-Schwartz's research uses live cell imaging approaches to analyze the spatio-temporal behavior and dynamic interactions of molecules in cells. Her work covers a vast range of cell biological topics, including protein transport and the cytoskeleton, organelle assembly and disassembly, and the generation of cell polarity.

LECTURESHIP HISTORY

This award is given in recognition of Dr. Herman Beerman's long and devoted service to the SID and his efforts to secure for it a position of respect in the scientific community. The Herman Beerman Lecture is given by a distinguished medical scholar at a scientific session of the Society's Annual Meeting. Traditionally, lecturers from fields other than dermatology are chosen in order to give meeting attendees the opportunity to learn about scientific advances in other fields.

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration

7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES) Program

9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon & Forum

12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting

4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum

6:00 pm - 9:30 pm
Desert Suite IV and VI

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration
7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES) Program

9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon & Forum
12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting
4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum
6:00 pm - 9:30 pm
Desert Suite IV and VI

CELEBRATING NIAMS 25TH ANNIVERSARY

NO CME CREDIT OFFERED

Friday, May 6, 2011
9:55 am - 10:10 am
Grand Canyon 6 - 7

OPEN TO ALL MEETING ATTENDEES

Join David Bickers, MD, former SID Secretary-Treasurer (1989-1999), to celebrate the contributions made by the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) to skin disease research. The rich history with the SID includes: advocacy efforts made by the SID on behalf of the Institute and the NIH; interaction with SID members and their contributions to NIAMS policy and strategic activities; and the research made possible by NIAMS funding published in the JID. Special thanks will be made to NIAMS Director and former SID President (1994), Stephen Katz, MD/PhD.



STATE-OF-THE-ART PLENARY LECTURE 3

DEFINING THE CELL LINEAGES AT THE ORIGIN OF SKIN CANCERS

.5 CME CREDITS

EMBO Young Investigator Lecture

Friday, May 6, 2011

10:15 am - 10:45 am

Grand Canyon 6 - 7

OPEN TO ALL MEETING ATTENDEES

LECTURER BIO



Cedric Blanpain, MD/PhD
Interdisciplinary Research Institute
Brussels, Belgium

Dr. Blanpain holds a tenure position at the Belgian National Research Scientific Fund at the Interdisciplinary Research Institute, Université Libre de Bruxelles, Belgium. His research focuses on the mechanism regulating stem cell fate decision during embryonic development and tissue homeostasis and the implication of stem cell during cancer development.

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration

7:30 am - 4:00 pm

Grand Canyon Foyer 6

SID Education for Students (SIDES)

Program

9:00 am - 3:00 pm

Wildflower C

Women's Derm Society Luncheon & Forum

12:00 pm - 2:00 pm

Desert Suite III and IV

JID Editorial Meeting

4:00 pm - 6:00 pm

Pinnacle Peak 2

Galderma Japan Scientific Forum

6:00 pm - 9:30 pm

Desert Suite IV and VI

FRIDAY SESSIONS

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration
7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES) Program

9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon & Forum

12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting

4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum

6:00 pm - 9:30 pm
Desert Suite IV and VI

STATE-OF-THE-ART PLENARY LECTURE 4 INTRINSIC AND EXTRINSIC REGULATION OF SKIN STEM CELLS

.5 CME CREDITS

Friday, May 6, 2011
10:45 am - 11:15 am
Grand Canyon 6 - 7

OPEN TO ALL MEETING ATTENDEES

LECTURER BIO



Valerie Horsley, PhD
Yale University
New Haven, Connecticut

Dr. Horsley is an Assistant Professor at Yale University. Her lab studies the cellular and molecular mechanisms that control stem cell activity and function within epithelia, the tissues that line internal organs and outer surfaces. The lab uses the mouse as a genetic model system to study how adult stem cells within epithelial tissues maintain tissue homeostasis, wound healing and can contribute to cancer formation.

CLINICAL SCHOLARS PROGRAM

2 CME CREDITS

Friday, May 6, 2011
11:30 am - 1:30 pm
Grand Canyon 8

OPEN ONLY TO CLINICAL SCHOLARS & YOUNG INVESTIGATOR/TRAINEE TRACK PARTICIPANTS

Plenary Presentations

1. **Identification of a novel pro-inflammatory human skin-homing Vy9Vδ2 T cell subset and its role in the pathogenesis of psoriasis. 11:30 am, Poster #006**
Presented by Brian J. Nickoloff, MD/PhD, Professor & Vice Chairman of Research, Department of Pathology, Loyola University, Chicago, Illinois
2. **The bulge area is the major hair follicle source of nestin-expressing cells which can repair the spinal cord compared to the dermal papilla. 11:50 am, Poster #783**
Presented by Robert M. Hoffman, PhD, Professor of Surgery, President, Anticancer, Inc., University of California, San Diego, La Jolla, California

Lectures



Psoriasis and the Risk of Systematic Disease: Implications for Clinical Practice
Joel M. Gelfand, MD, MSCE
Assistant Professor
University of Pennsylvania, Philadelphia, Pennsylvania



Mitotic Recombination in Ichthyosis with Confetti causes Widespread Reversion of Dominant Mutations in KRT10
Keith Choate, MD/PhD
Associate Professor, Department of Dermatology
Stanford University, Stanford, California

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration
7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES) Program
9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon & Forum
12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting
4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum
6:00 pm - 9:30 pm
Desert Suite IV and VI

FRIDAY SESSIONS

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration
7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES) Program

9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon & Forum

12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting

4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum

6:00 pm - 9:30 pm
Desert Suite IV and VI

SID TECHNICAL WORKSHOP

CONFOCAL MICROSCOPY AND IMAGING TECHNIQUES

2 CME CREDITS

Friday, May 6, 2011
12:00 pm - 2:00 pm
Grand Canyon 6 - 7

OPEN TO ALL MEETING ATTENDEES

Welcome and Introduction

David Rubenstein, MD/PhD
Professor, Department of Dermatology
University of North Carolina, Chapel Hill, North Carolina

Kathleen J Green, PhD
Professor, Department of Pathology
Northwestern University, Chicago, Illinois

Keynote Lecture

Imaging: Visualizing the Possibilities — Navigating the Cellular Landscape with New Optical Probes, Imaging Strategies and Technical Innovations
Jennifer Lippincott-Schwartz, PhD
Senior Investigator, Chief of the Section on Organelle Biology, Cell Biology and Metabolism Branch
National Institute of Child Health & Human Development, Bethesda, Maryland

Vignettes

Moderator: Teng-Leong Chew, PhD
Director, Cell Imaging Facility & Nikon Imaging Center
Northwestern University, Chicago, Illinois

Vignette I: Shedding Light on Epidermal Morphogenesis — Zeiss Apotome and Multi-photon Strategies for Epidermal Organotypic Culture Analysis
Spiro Getsios, PhD
Assistant Professor, Department of Dermatology
Director, Skin Disease Research Center Keratinocyte Core
Northwestern University, Chicago, Illinois

Vignette II: High Throughput Quantitative Analysis — High Throughput Quantitative Analysis of Tissue Sections and Microarrays (including analysis of subcellular localization)
Georg Steiner
CEO
TissueGnostics, Los Angeles, California

Vignette III: In Vivo/Intravital Imaging — Intravital imaging: What are the Possibilities?
Bojana Gligorijevic, PhD
Research Associate, Department of Anatomy and Structural Biology
Yeshiva University, New York, New York

General Discussion and Wrap Up

Opportunity to Meet with Presenters

CONCURRENT MINISYMPOSIUM 6

IMMUNOLOGY II: INNATE IMMUNITY AND MICROBIOLOGY

3.5 CME CREDITS

Presiders: Lloyd Miller, MD/PhD and Anna DiNardo, MD/PhD

Friday, May 6, 2011

2:00 pm - 5:30 pm

Wildflower A

OPEN TO ALL MEETING ATTENDEES

1. **Cutaneous papillomatosis due to a novel laboratory mouse papillomavirus (*MusPV*) infection.** John P Sundberg, Christopher S Potter, Kathleen A Silva, Arvind Ingle, J Joh, Shin J Gim and A B Jenson. Bar Harbor, ME; Louisville, KY and Mumbai, India. 2:00 pm, Poster #643
2. **Viral envelopes induce mast cell degranulation through sphingosine 1-phosphate receptor-2 pathway.** Zhenping Wang and Anna Di Nardo. La Jolla, CA. 2:12 pm, Poster #616
3. ***Staphylococcus aureus*-derived PGN enhances the integrity of epidermal tight junctions.** I-Hsin Kuo, Anna De Benedetto, Takeshi Yoshida and Lisa A Beck. Rochester, NY. 2:24 pm, Poster #637
4. **The dermis is not sterile: Discovery of a microbiome within and beneath the epidermis.** Teruaki Nakatsuji, Shangi B Jiang, Kimberly N Kanada and Richard L Gallo. San Diego, CA. 2:36 pm, Poster #621
5. ***Staphylococcus aureus* infection in mouse skin induces antimicrobial peptide expression — the effect is partially regulated by IL-1.** Kerstin Ahrens, John S Cho, Jürgen Harder, Lloyd S Miller and Ehrhardt Proksch. Kiel, Germany and Los Angeles, CA. 2:48 pm, Poster #618
6. **Real-time kinetics and mechanism of IL-1 β production during a *S. aureus* skin infection *in vivo*.** John S Cho, Frank Hebron, Romelal Ramos, Hironori Matsushima, Akira Takashima and Lloyd Miller. Los Angeles, CA and Toledo, OH. 3:00 pm, Poster #624
7. **Mast cells and neutrophils release IL-17 through extracellular trap formation in psoriasis.** Andrew M Lin, Cory J Rubin, Ritika Khandpur, Jennifer Y Wang, MaryBeth Riblett, Srilakshmi Yalavarthi, Eneida C Villanueva, Parth Shah, Mariana J Kaplan and Allen T Bruce. Ann Arbor, MI. 3:12 pm, Poster #633
8. **Neutrophils express IL-17 and form extracellular traps in cutaneous lupus erythematosus.** Ritika Khandpur, Andrew M Lin, Cory J Rubin, MaryBeth L Riblett, Srilakshmi Yalavarthi, Eneida C Villanueva, Mariana J Kaplan and Allen T Bruce. Ann Arbor, MI. 3:24 pm, Poster #617
9. **Psoriatic patients show enhanced cathelicidin expression after injury and this is normalized by TNF- α inhibition.** Jeremiah Miller, Tissa Hata, Paul Kotol, Michelle Jackson, Doru Alexandrescu, Filamer Kabigting, Monika Gerber, Yuping Lai and Richard Gallo. La Jolla, CA. 3:36 pm, Poster #613
10. **Toll like receptor-4 (TLR4) deficiency prevents ultraviolet (UV) radiation induced cutaneous photoimmunosuppression by DNA repair mechanism.** Nabiha Yusuf. Birmingham, AL. 3:48 pm, Poster #654

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration

7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES)
Program

9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon &
Forum

12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting

4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum

6:00 pm - 9:30 pm
Desert Suite IV and VI

FRIDAY SESSIONS

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration
7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES)
Program
9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon &
Forum
12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting
4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum
6:00 pm - 9:30 pm
Desert Suite IV and VI

CONCURRENT MINISYMPOSIUM 6 (CONT'D)

IMMUNOLOGY II: INNATE IMMUNITY AND MICROBIOLOGY

11. **Ultraviolet damage to non-coding RNA triggers skin inflammation.** Jamie J Bernard, Christopher Cowing-Zitron, Teruaki Nakatsuji, Benjamin D Yu and Richard L Gallo. San Diego, CA. *4:00 pm, Poster #614*
12. **Imiquimod-induced TLR7 signaling enhances repair of DNA Damage Induced by UV in bone marrow-derived cells.** Rita Fishlevich, Yuming Zhao, Papapit Tuchinda, Hannah Liu, T C Meng, Jim Lee and Anthony Gaspari. Baltimore, MD and Exton, PA. *4:12 pm, Poster #652*
13. **Non-neuronal cholinergic activation dampens the antimicrobial peptide response to bacteria in keratinocytes.** Brenda J Curtis and Katherine A Radek. Chicago, IL. *4:24 pm, Poster #651*
14. **IFN- α activation of a vitamin D-dependent antimicrobial response depends on skin pigmentation.** Mario Fabri and Robert L Modlin. Los Angeles, CA and Cologne, Germany. *4:36 pm, Poster #635*
15. **Modulation of Toll-like receptor responses by bone morphogenic protein 4 (BMP4).** Navid Ezra, Miguel-Angel Gutierrez, Rosane Teles, Dennis Montoya, Maria Teresa Ochoa, Delphine Lee, Daniel Cruz and Robert Modlin. Los Angeles, CA. *4:48 pm, Poster #626*



CONCURRENT MINISYMPOSIUM 7

TISSUE REGENERATION, STEM CELLS AND WOUND HEALING

3.5 CME CREDITS

Presiders: Valerie Horsley, PhD and Angela Christiano, PhD

Friday, May 6, 2011

2:00 pm - 5:30 pm

Wildflower B

OPEN TO ALL MEETING ATTENDEES

1. Hair follicle neogenesis induced by fibroblast-like skin tumor cells from patients with tuberous sclerosis complex. Shaowei Li, Rajesh L Thangapazham, Ji-an Wang, Sangeetha Rajesh, Tzu-Cheg Kao, Leonard Sperling, Joel Moss and Thomas N Darling. Bethesda, MD. 2:00 pm, Poster #786
2. Quantitative hair plucking reveals stem cell activation is modulated by interactions with extra-follicular macro-environment. Chih C Chen, Maksim Plikus and Cheng M Chuong. Los Angeles, CA and Taipei, Taiwan. 2:12 pm, Poster #797
3. Germinative epithelium signature of the human hair follicle. Claire A Higgins, Keita Inoue, Colin A Jahoda and Angela M Christiano. New York, NY and Durham, United Kingdom. 2:24 pm, Poster #833
4. Gene correction of recessive dystrophic epidermolysis bullosa patient-specific induced pluripotent stem cells by homologous recombination. Munenari Itoh and Angela M Christiano. New York, NY. 2:36 pm, Poster #807
5. Induced pluripotent stem cells from individuals with lamellar ichthyosis. Joyce Teng, Erin McMillan, Tisha Kawahara, Angela Martinsen, Guo Kai Chen, James Thomson, Vijay Setaluri and Sean Palecek. Madison, WI. 2:48 pm, Poster #811
6. Skin-derived precursors as a source of progenitors for cutaneous nerve regeneration. Sanjay Pradhan, Chiachi Liu and Lu Q Le. Dallas, TX. 3:00 pm, Poster #784
7. Compromised TGF- β signaling, reduced wound healing and spontaneous skin erosions characterize CLIC4-/- mice. Padmakumar Velayuthan Chellammal, Mary Ann Stepp, Kelsey Speer, Samuel Dengler, John Edwards, Vincenzo Coppola, Lino Tessarollo and Stuart Yuspa. Bethesda, MD; Washington DC; Frederick, MD and Chapel Hill, NC. 3:12 pm, Poster #785
8. Targeted genetic alteration in hyaluronan catabolism delays wound healing in mice. Jun Muto, Aaron F Carlin, Andrea Garcia, Ajit Varki and Richard L Gallo. La Jolla, CA. 3:24 pm, Poster #800
9. Evidence for the existence of phenotypically distinct progenitors in epidermis. Alexandra Charruyer, Lauren R Strachan, Stephen Fong, Lili Yue, Malik Abdul, Maria L Mancianti and Ruby Ghadially. San Francisco, CA and Berkeley, CA. 3:36 pm, Poster #824
10. Ganglioside depletion reverses the wound healing defect of diabetes. Amy S Paller, Hristo Jordanov, Adam Whittington, Amy Sasman, Mahima Vijayaraghavan, David L Chen, Nandita Gatla, David Bach, Dan Zheng, David Giljohann, Chad A Mirkin and Xiaoqi Wang. Chicago, IL and Evanston, IL. 3:48 pm, Poster #798
11. The collagen XVII-binding protein actinin-4 regulates the directed migration of keratinocytes. Kevin J Hamill, Omar Skalli and Jonathan C Jones. Chicago, IL and Memphis, TN. 4:00 pm, Poster #822

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration

7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES)
Program

9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon &
Forum

12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting

4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum

6:00 pm - 9:30 pm
Desert Suite IV and VI

FRIDAY SESSIONS

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration
7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES) Program

9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon & Forum

12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting

4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum

6:00 pm - 9:30 pm
Desert Suite IV and VI

CONCURRENT MINISYMPOSIUM 7 (CONT'D)

TISSUE REGENERATION, STEM CELLS AND WOUND HEALING

12. **Transregulation of α 2 and α 3 integrin expression by α 6 β 4 integrin in migrating keratinocytes.** Kristina Kligys, Susan Hopkinson and Jonathan Jones. Chicago, IL. 4:12 pm, *Poster #821*
13. **Bone marrow derived mesenchymal stem cells: Regenerative medicine for pseudoxanthoma elasticum.** Qiuqie Jiang, Shunsuke Takahagi, Bethany Reutemann, Alix Grand-Pierre, Adele Donahue and Jouni Uitto. Philadelphia, PA. 4:24 pm, *Poster #826*
14. **Elastin is essential for vascular development — A zebrafish model.** Qiaoli Li, Adele Donahue, Hye Young Choi and Jouni Uitto. Philadelphia, PA and Seoul, South Korea. 4:36 pm, *Poster #830*
15. **The bulge area is the major hair follicle source of nestin-expressing cells which can repair the spinal cord compared to the dermal papilla.** Fang Liu, Aisada Uchugonova, Hiroaki Kimura, Chuansen Zhang, Ming Zhao, Lei Zhang, Karsten Koenig, Jennifer Duong, Ryoichi Aki, Norimitsu Saito, Sumiyuki Mii, Yasuyuki Amoh, Kensei Katsuoka and Robert M Hoffman. San Diego, CA; Shanghai, China; Saarbruecken, Germany; Kanazawa, Japan and Kanagawa, Japan. 4:48 pm, *Poster #783*

CONCURRENT MINISYMPOSIUM 8

CARCINOGENESIS & CANCER GENETICS

3.5 CME CREDITS

Presiders: Santosh Katiyar, PhD and Brian Pollock, MD/PhD

Friday, May 6, 2011

2:00 pm - 5:30 pm

Grand Canyon 11 - 12

OPEN TO ALL MEETING ATTENDEES

1. Engineered dendritic cell (DC)- or DNA-based vaccines raise immune responses to a carcinogen-induced point mutation of the H-ras oncogene that protects against tumor development. Kyle Rudemiller, Tahseen Nasti, George Twitty, Hee Kyung Kim, Angel Rivera, Justin Roth, Aton Holzer, Yuko Tsuruta, Nabiha Yusuf, Mohammad Athar , Craig Elmets and Laura Timares. Birmingham, AL. 2:00 pm, Poster #149
2. Relation between DNA damage accumulation, reactive oxygen species, and metabolism alteration during carcinogenesis. Hamid R Rezvani, Arianna Kim, Hubert D Verneuil, Alain Taieb, David Bickers and Frederic Mazurier. Bordeaux, France and New York, NY. 2:12 pm, Poster #114
3. Voriconazole treatment plus UVB irradiation causes malignant transformation of human HaCaT keratinocytes. Ricardo L Berrios, Abel Martin-Garrido, Michael Y Bonner, Brian P Pollack and Jack L Arbiser. Atlanta, GA and Decatur, GA. 2:24 pm, Poster #091
4. Interferon- γ /STAT1-signaling determines whether T cells promote or arrest carcinogenesis. Sonja Fischer, Thomas Wieder, Heidi Braumüller, Ellen Brenner, Wolfgang Kempf and Martin Röcken. Tuebingen, Germany. 2:36 pm, Poster #132
5. IL-17 receptor A deficient mice are resistant to chemical carcinogen induced cutaneous tumors. Donggou He, Hui Li, Nabiha Yusuf, Craig A Elmets, Mohammad Athar, Santosh Katiyar, Jun Li, John Mountz and Hui Xu. Birmingham, AL. 2:48 pm, Poster #141
6. An inflammatory response in the Δ Np63 transgenic mice reveals a pro-tumorigenic role for Δ Np63. Rose-Anne Romano and Satrajit Sinha. Buffalo, NY. 3:00 pm, Poster #124
7. Srcasm induces regression of pre-existing squamous cell carcinomas in K14-Fyn Y528F mice. Xiaoping Yang, Hiroyuko Nishida, Liang Zhao, Christine Marshall, Tzvete Dentchev and John Seykora. Philadelphia, PA. 3:12 pm, Poster #140
8. Oncogene addiction to Merkel cell polyomavirus large T antigen in Merkel cell carcinoma. Monique E Verhaegen, Christopher K Bichakjian, Melissa Voutsalath, Jack Weick, Paul Baciu, Elsa Quintana, Tracy D Stromer, Joanna Pero, Kevin T Nash, Angelo E Ayar, Timothy M Johnson and Andrzej A Dlugosz. Ann Arbor, MI. 3:24 pm, Poster #143
9. Tumor derived nitric oxide suppresses the expression of CXCL10 and leads to the poor outcome of Stage III melanoma. Keiji Tanese, Elizabeth Grimm and Suhendar Ekmekcioglu. Houston, TX and Tokyo, Japan. 3:36 pm, Poster #092
10. Fusion of the melanoma gene, p14arf on 9p, to a translocation hotspot in a gap in 22q in a patient with melanoma, deafness and DNA repair deficiency, is a negative regulator of p14arf and TBX1. Xiao Hui Tan, Sarah L Anzick, Sikandar G Khan, Takahiro Ueda, Gary Stone, John J DiGiovanna, Deborah Tamura, Daniel Wattendorf, Carmen Brewer, Chris Zalewski, Robert Walker, Andrew Griffith, John Butman, Paul Meltzer, Paul Bergstesser and Kenneth H Kraemer. Bethesda, MA; Tokyo, Japan; Bethesda, MD; Washington, DC and Dallas, TX. 3:48 pm, Poster #126

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration

7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES)
Program

9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon &
Forum

12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting

4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum

6:00 pm - 9:30 pm
Desert Suite IV and VI

FRIDAY SESSIONS

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration
7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES) Program

9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon & Forum

12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting

4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum

6:00 pm - 9:30 pm
Desert Suite IV and VI

CONCURRENT MINISYMPOSIUM 8 (CONT'D)

CARCINOGENESIS & CANCER GENETICS

11. **The deacetylase SIRT1 regulates global genome nucleotide excision repair.** Mei Ming, Christopher R Shea, Xiumei Guo, Xiaoling Li, Keyoumars Soltani, Weinong Han and Yu-Ying He. Chicago, IL and Research Triangle Park, NC. *4:00 pm, Poster #086*
12. **Differentially-expressed genes identified from patients with Langerhans cell histiocytosis.** Joanne L Selway, Paul M Seldon, Parvathy Harikumar, Kenneth Langlands and Anthony C Chu. Buckingham, United Kingdom and London, United Kingdom. *4:12 pm, Poster #090*
13. **Reprogramming genes for induced pluripotent stem cells (iPSCs) reversed changes associated with epithelial-to-mesenchymal transition of skin cancer cells.** Mikiro Takaishi, Maki Yokogawa, Junji Takeda and Shigetoshi Sano. Nankoku, Japan and Suita, Japan. *4:24 pm, Poster #093*
14. **Cross talk of melanoma cells and peritumoral fibroblasts influences melanoma proliferation: Regulation of hyaluronan synthesis in fibroblasts.** Ulf Anderegg, Anja Willenberg, Anja Saalbach and Jan C Simon. Leipzig, Germany. *4:36 pm, Poster #094*
15. **HGF transactivates keratinocyte EGFR signaling, potentiates the tumorigenic phenotype of oncogenic ras-transduced keratinocytes *in vitro* and enhances skin carcinogenesis *in vivo*.** Fan Liu, Christophe Cataisson, Raza Zaidi, Glenn Merlino and Stuart H Yuspa. Bethesda, MD and Chevy Chase, MD. *4:48 pm, Poster #098*



CONCURRENT MINISYMPOSIUM 9

EPIDEMIOLOGY / HEALTH SERVICES RESEARCH

3.5 CME CREDITS

Presiders: Joel Gelfand, MD and Abrar Qureshi, MD MPH

Friday, May 6, 2011

2:00 pm - 5:30 pm

Grand Canyon 9 - 10

OPEN TO ALL MEETING ATTENDEES

1. **Patients with psoriasis are at an increased risk of diabetes - a population based study.** Nicole M Seminara, Rahat S Azfar, Daniel B Shin, Andrea B Troxel, David J Margolis and Joel M Gelfand. Philadelphia, PA. 2:00 pm, Poster #206
2. **Psoriasis is associated with an increased prevalence of metabolic syndrome that varies directly with objectively measured severity.** Sinead Langan, Nicole Seminara, Daniel Shin, Andrea Troxel, Stephen Kimmel, Nehal Mehta, David Margolis and Joel Gelfand. Philadelphia, PA. 2:12 pm, Poster #211
3. **Familial risk of psoriasis and lymphoma in the Utah Population Database.** Kristina C Duffin, Carole Schaefer, Kerry Rowe, Gerald G Krueger, Geraldine Mineau and David E Goldgar. Salt Lake City, UT. 2:24 pm, Poster #228
4. **A prospective study of physical activity and risk of incident psoriasis in women.** Hillary C Frankel, Jiali Han, Tricia Li and Abrar A Qureshi. Boston, MA. 2:36 pm, Poster #216
5. **Patient-centered online model for follow-up management of psoriasis: A randomized controlled trial.** Cindy J Chambers, Kory Parsi, Clayton Schupp and April W Armstrong. Sacramento, CA. 2:48 pm, Poster #212
6. **An analysis of the characteristics of initial and second primary melanomas using data from the Surveillance, Epidemiology, and End Results (SEER) Program.** Michael E Ming and Daniel B Shin. Philadelphia, PA. 3:00 pm, Poster #224
7. **Calcium plus vitamin D supplementation and the risk of nonmelanoma and melanoma skin cancer.** Teresa Fu, Jean Y Tang, Erin LeBlanc, JoAnn E Manson, David Feldman, Joe Larson, Eleni Linos, Mara Z Vitolins, Nathalie C Zeitouni and Marcia L Stefanick. Redwood City, CA; Portland, OR; Boston, MA; Seattle, WA; Buffalo, NY and Winston-Salem, NC. 3:12 pm, Poster #208
8. **Menopausal hormones and skin cancer risk in postmenopausal women: The women's health initiative hormone therapy trials.** Katrina M Spaunhurst, Jean Y Tang, Elizabeth Keiser, Matthew L Anderson, Rowan T Chlebowski, Joseph C Larson, Judith Ockene, Fridtjof Thomas, Jean Wactawski-Wende, Nathalie Zeitouni and Marcia L Stefanick. Stanford, CA; Los Angeles, CA; Worcester, MA; Houston, TX; Seattle, WA; Buffalo, NY and Memphis, TN. 3:24 pm, Poster #209
9. **Atopic dermatitis prevalence and co-morbidities in the Growing Up Today Study II.** Hillary C Frankel, Lindsay Frazier, Carlos A Camargo, Jiali Han, Tricia Li and Abrar A Qureshi. Boston, MA. 3:36 pm, Poster #257

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration

7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES)

Program

9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon & Forum

12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting

4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum

6:00 pm - 9:30 pm
Desert Suite IV and VI

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration
7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES)

Program
9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon &
Forum

12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting

4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum

6:00 pm - 9:30 pm
Desert Suite IV and VI

CONCURRENT MINISYMPOSIUM 9 (CONT'D)

EPIDEMIOLOGY / HEALTH SERVICES RESEARCH

10. Risk of squamous and basal cell carcinomas in patients with inflammatory bowel disorders exposed to thiopurines: The CESAME national cohort study. Kiarash Khosrotehrani, Laurent Perrin-Birolet, Fabrice Carrat, Anne-Marie Bouvier, Jean-Baptiste Chevaux, F Carbonnel, JF Colombel, JL Dupas, P Godeberge, JP Hugot, M Lemann, S Nahon, JM Sabate, G Tucat and Laurent Beaugerie. Brisbane, Australia; Nancy, France; Paris, France and Dijon, France. 3:48 pm, Poster #239
11. Treatment for nonmelanoma skin cancer among patients with limited life expectancies. M Chren, E Linos, R Parvataneni, J Torres, S Stuart, W J Boscardin and C S Landefeld. San Francisco, CA and Stanford, CA. 4:00 pm, Poster #256
12. Pathway analysis for genome-wide association study of basal cell carcinoma. Mingfeng Zhang, Liming Liang, Abrar A Qureshi and Jiali Han. Boston, MA. 4:12 pm, Poster #223
13. Validation of the AJCC staging system for cutaneous squamous cell carcinoma and a proposed refinement to improve prognostic discrimination. Anokhi Jambusaria, Peter Kanetsky, Wei-Ting Hwang, Joel Gelfand, Faith Whalen, Rosalie Elenitsas, George Xu and Chrysalyne Schmoll. Philadelphia, PA; Jamaica Plain, MA and Danville, PA. 4:24 pm, Poster #210
14. DNA in the mail. D J Margolis, A Apter, N Mitra, I McLean and T Rebbeck. Philadelphia, PA and Dundee, United Kingdom. 4:36 pm, Poster #248
15. Hemoglobin a1c predicts healing rate in diabetic wounds. Andrea L Christman, Elizabeth Selvin, Gerald S Lazarus and Luis A Garza. Baltimore, MD. 4:48 pm, Poster #204

NORTH AMERICAN HAIR RESEARCH SOCIETY SCIENTIFIC MEETING

NO CME CREDIT OFFERED

Presider: Andrzej Dlugosz, MD

Friday, May 6, 2011

6:00 pm - 9:30 pm

Desert Suite III and V

OPEN TO ALL MEETING ATTENDEES

6:00 pm - 6:45 pm Poster Presentations & Reception

1. **Dermal papilla cells promote trichogenesis in engineered skin substitutes.** Penkanok Sriwiriyanont, Elizabeth A Maier, Kaari A Lynch, Dorothy M Supp and Steven T Boyce. Cincinnati, OH. *Poster #470*
2. **Combination of human epidermal-dermal equivalents and primary human sebocyte cultures for evaluating topical sebum inhibitors.** Wen-Hwa Li, Apostolos Pappas, Magdalena Eisinger and Li Zhang. Skillman, NJ. *Poster #441*
3. **Wound healing milieu protects against chemotherapy induced alopecia.** Julia Escandon, Olivera Stojadinovic, Lucia M Mauro, Tongyu Cao Wikramanayake, Marjana Tomic-Canic and Joaquin J Jimenez. Miami, FL. *Poster #430*
4. **The presence of antigen-specific CTLs to melanin-associated protein, MAGE3, in the patients with alopecia areata.** Taisuke Ito, Hideo Hashizume, Masahiro Takigawa and Yoshiki Tokura. Hamamatsu, Japan. *Poster #453*
5. **Murine alopecia areata immunopathogenesis is dominated by NKG2D positive CD8 T cells and NKG2D blockade protects hair follicles from cytolytic attack.** Luzhou Xing, Pallavi Singh, Claire Higgins, Sivan Harel, AngelaM Christiano and Raphael Clynes. New York, NY. *Poster #060*
6. **The circadian transcriptome in skin is hair growth cycle dependent.** Mikhail Geyfman, Qiang Liu, Alexander Ihler, Padhraic Smyth and Bogi Andersen. Irvine, CA. *Poster #473*
7. **Protection of melanin content in the hair follicle.** Celine Meyrignac, Armelle Perrin, Sandrine Ratz, Valerie Lequoy, Karine Cucumel, Catherine Gondran, Claude Dal Farra and Nouha Domloge. Sophia Antipolis, France and Wayne, NJ. *Poster #437*
8. **A new approach to promote VEGF expression in hair follicle.** Sandrine Ratz, Armelle Perrin, Celine Meyrignac, Ludivine Mur, Catherine Gondran, Claude Dal Farra and Nouha Domloge. Sophia Antipolis, France and Wayne, NJ. *Poster #438*
9. **The Hairmax LaserComb enhances hair regrowth in post-chemotherapy alopecia.** Rosa Rodriguez, Tongyu C Wikramanayake, Lucia M Mauro, Lawrence A Schachner and Joaquin J Jimenez. Miami, FL. *Poster #443*
10. **A Japanese case of monilethrix caused by compound heterozygous mutations in the desmoglein 4 (DSG4) gene.** Muhammad Farooq, Masaaki Ito and Yutaka Shimomura. Niigata, Japan. *Poster #440*
11. **Intermediate hair follicles: A novel, androgen-responsive human model system.** Benjamin H Miranda, Desmond J Tobin, David T Sharpe and Valerie A Randall. Bradford, United Kingdom. *Poster #471*

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration

7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES)
Program

9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon &
Forum

12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting

4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum

6:00 pm - 9:30 pm
Desert Suite IV and VI

FRIDAY SESSIONS

ANCILLARY MEETINGS**FRIDAY, MAY 6, 2011****Meeting Registration**

7:30 am - 4:00 pm

Grand Canyon Foyer 6

SID Education for Students (SIDES) Program

9:00 am - 3:00 pm

Wildflower C

Women's Derm Society Luncheon & Forum

12:00 pm - 2:00 pm

Desert Suite III and IV

JID Editorial Meeting

4:00 pm - 6:00 pm

Pinnacle Peak 2

Galderma Japan Scientific Forum

6:00 pm - 9:30 pm

Desert Suite IV and VI

**NORTH AMERICAN HAIR RESEARCH SOCIETY SCIENTIFIC MEETING
(CONT'D)****6:45 pm - 7:15 pm****Featured Speaker****Hair follicle stem cells in Androgenetic Alopecia**

Luis Garza, MD/PhD

Assistant Professor

Johns Hopkins University, Baltimore, Maryland

7:15 pm - 8:30 pm**Oral Abstract Presentations**

1. **Genetic deletion of *Egfr* results in resistance to cyclophosphamide-induced alopecia.** Kyle J Bichsel, N Gogia, T Malouff, E Forney and Laura A Hansen. Omaha, NE. *Poster #442*
2. **Pharmacodynamic effects on anagen inhibition after oral administration of the Smoothened inhibitors LDE225 or GDC0449.** Frank S Kalthoff, Heinrich Aschauer, Elisabeth Foglar, Liesbeth Mudde-Boer, Nicole Schoefmann, Peter Stuchlik, Anton Stuetz and Barbara Wolff-Winiski. Vienna, Austria. *Poster #458*
3. **A mouse model for *in vivo* tracking of canonical wnt/beta-catenin signalling in skin.** Samantha S Hodgson and Kiarash Khosrotehrani. Brisbane, Australia. *Poster #450*
4. **Spermidine promotes human hair follicle growth and modulates human epithelial stem cell functions.** Yuval Ramot, Stephan Tiege, Tamas Biró, Mohd Hilmi Abu Bakar, Balasz Toth, Michael Philpott, Wesley Harrison, Koji Sugawara and Ralf Paus. Jerusalem, Israel; Lübeck, Germany; Debrecen, Hungary; Kelantan, Malaysia; London, United Kingdom and Manchester, United Kingdom. *Poster #431*
5. **Early loss of sebaceous gland in scarring alopecia.** Tariq Al-Zaid, Stefan Vanderweil, Zhiru Guo, Artur Zembowicz and Stephen Lyle. Houston, TX; Worcester, MA and Burlington, MA. *Poster #459*

8:30 pm - 9:30 pm**Business Meeting**

TRAINEE DINNER SESSION

NO CME CREDIT OFFERED

Friday, May 6, 2011
7:30 pm - 9:30 pm
Grand Canyon 3 - 4

TICKETED EVENT; PRE-REGISTRATION IS REQUIRED

Over the past several years, the SID has encouraged meetings between residents and post-doctoral fellows. To promote collegiality, the SID annually presents a Trainee Dinner—small group meetings in which senior and junior scientists and a group of four to six residents and post-doctoral fellows discuss issues over dinner. These sessions provide an opportunity to talk informally about subject matter of interest including research opportunities in dermatology, life in academia or how to combine clinical work with research.

ANCILLARY MEETINGS

FRIDAY, MAY 6, 2011

Meeting Registration
7:30 am - 4:00 pm
Grand Canyon Foyer 6

SID Education for Students (SIDES) Program

9:00 am - 3:00 pm
Wildflower C

Women's Derm Society Luncheon & Forum

12:00 pm - 2:00 pm
Desert Suite III and IV

JID Editorial Meeting

4:00 pm - 6:00 pm
Pinnacle Peak 2

Galderma Japan Scientific Forum

6:00 pm - 9:30 pm
Desert Suite IV and VI



NOTES

SATURDAY MEETING-AT-A-GLANCE

Saturday, May 7, 2011

SID Board of Directors Meeting Desert Suite I	7:00 am - 8:00 am
Registration Grand Canyon Foyer 6	7:30 am - 12:00 pm
American DermatoEpidemiology Network Business/Scientific Session Grand Sonoran A-B	8:00 am - 12:30 pm
Plenary Session III Grand Sonoran E-F	8:00 am - 9:00 am
William Montagna Lecture <i>Developing New Therapies for Epidermolysis Bullosa: The Hard Graft</i> John McGrath, MD Grand Sonoran E-F	9:00 am - 9:30 am
Julius Stone Lecture <i>The Interplay of IL-17- and IFNg-producing CD4 T Cells in Immune-mediated Inflammation</i> Casey Weaver, MD Grand Sonoran E-F	9:30 am - 10:00 am
Clinical Scholars Program Grand Sonoran G	10:00 am - 12:00 pm
Poster Session III/Technical Exhibits Open with Coffee Break Odd 283-565/Even 564-844 Grand Saguaro Ballroom	10:00 am - 12:00 pm
Concurrent Minisymposia 10. Auto Immunity and Inflammation (Grand Sonoran C-D) 11. Cell Adhesion/Matrix and Vascular Biology (Wildflower Salon A) 12. Human Clinical Research and Therapeutics (Grand Sonoran G) 13. Photobiology (Wildflower C)	12:30 pm - 4:00 pm
Phoenix Dermatologic Society/Arizona Dermatologic Society Grand Sonoran A-B	2:30 pm - 5:30 pm

Indicates CME Credit Offered

ANCILLARY MEETINGS

SATURDAY, MAY 7, 2011

SID Board of Directors Meeting

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 12:00 pm

Grand Canyon Foyer 6

**Phoenix Dermatologic Society /
Arizona Dermatologic Society**

2:30 pm - 5:30 pm

Grand Sonoran A-B

SATURDAY SESSIONS

ANCILLARY MEETINGS

SATURDAY, MAY 7, 2011

SID Board of Directors Meeting

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 12:00 pm

Grand Canyon Foyer 6

Phoenix Dermatologic Society /
Arizona Dermatologic Society

2:30 pm - 5:30 pm

Grand Sonoran A-B

AMERICAN DERMATOEPIDEMIOLOGY NETWORK
BUSINESS/SCIENTIFIC SESSION

NO CME CREDIT OFFERED

Presider: Michael Ming, MD/MSCE and Joel Gelfand, MD/MSCE

Saturday, May 7, 2011

8:00 am - 12:30 pm

Grand Sonoran A - B

OPEN TO ALL MEETING ATTENDEES

1. **Dermatologist preferences for first-line therapy of moderate-to-severe psoriasis in healthy adults.** J Wan, K Abuabara, A B Troxel, D B Shin, A S Van Voorhees, B F Bebo, G G Krueger, K Callis Duffin and J M Gelfand. Philadelphia, PA; Portland, Oregon and Salt Lake City, UT. *8:00 am, Poster #207*
2. **Psychiatric comorbidity in pediatric eczema.** Pouya Yaghmaie , Caroline W Koudelka and Eric L Simpson. Portland, OR. *8:12 am, Poster #246*
3. **Widespread functional impact of chronic pruritus in children.** Rachel E Sahn, Margaret L Spratt, Leslie P Lawley, Mary K Spraker and Suephy C Chen. Atlanta, GA. *8:24 am, Poster #252*
4. **Cutaneous and systemic lupus from dermatology and rheumatology clinics: Quality of life differences.** Kristen Foering, Soumya Rao, Renato Goreshi, Sharon Kolasinski, Joyce Okawa and Victoria P Werth. Philadelphia, PA. *8:36 am, Poster #242*
5. **Cohort findings in genome-wide association study era.** Jiali Han and Abrar Qureshi. Boston, MA. *8:48 am, Poster #238*
6. **Predictors of patient satisfaction in Mohs surgery: Analysis of pre-, intra- and post-operative factors in a large prospective cohort.** Maryam M Asgari, E Margaret Warton, Romain Neugebauer and Mary-Margaret Chren. Oakland, CA and San Francisco, CA. *9:00 am, Poster #258*
7. **Skin aging as a mirror of lung damage.** Andrea Vierkoetter, Tamara Schikowski, Dorothee Sugiri, Mary Matsui, Jean Krutmann and Ursula Kraemer. Düsseldorf, Germany; Basel, Switzerland and Melville, NY. *9:12 am, Poster #229*
8. **Increased dermatologist density associated with reduction in melanoma mortality.** Savina Aneja, Sanjay Aneja and Jeremy S Bordeaux. Cleveland, OH and New Haven, CT. *9:24 am, Poster #219*

Break

10. **Contribution of nodular subtype to overall melanoma mortality.** W R Shaikh, M Xiong and M A Weinstock. Providence, RI. *9:54 am, Poster #217*
11. **Spitz nevi — a pediatric dermatology perspective.** Brook E Tlougan, Seth J Orlow and Julie V Schaffer. New York, NY. *10:06 am, Poster #241*
12. **Disparities in skin cancer screening exams conducted in the primary care setting.** Kathryn J Martires, Greg J Minwell and Jeremy S Bordeaux. Cleveland, OH. *10:18 am, Poster #249*

ADEN Business Meeting

PLENARY SESSION III

1 CME CREDIT

Presider: Xiao-Jing Wang, MD/PhD and Philip Fleckman, MD

Saturday, May 7, 2011

8:00 am - 9:00 am

Grand Sonoran E - F

OPEN TO ALL MEETING ATTENDEES

1. Maintenance of the epidermal progenitor state requires the long non-coding RNA Linc8D. Cari Lee, Markus Kretz, Daniel Webster, Ross Flockhart, Kun Qu, Angela Mah, Cody Aros, Howard Chang, John Rinn and Paul Khavari. Palo Alto, CA. 8:00 am, Poster #813
2. Ets1 regulates the skin differentiation program by interfering with Notch activity. Shu Shien Chin, Priyadharsini Nagarajan, Dan Wang, Song Liu, Lee Ann Garrett-Sinha and Satrajit Sinha. Buffalo, NY. 8:12 am, Poster #316
3. Myeloid derived suppressor cells (MDSC) express DC-HIL, which is responsible for their potent T cell-inhibitory and melanoma growth-promoting effects. Jin-Sung Chung, Kyoichi Tamura, Rohit R Sharma, Ponciano D Cruz and Kiyoshi Ariizumi. Dallas, TX. 8:24 am, Poster #724
4. Canonical polarity protein PKC iota/lambda regulates Shh signaling during hair follicle and basal cell carcinoma growth. Scott X Atwood, Mischa Li and Anthony E Oro. Stanford, CA. 8:36 am, Poster #088
5. Bath-psoralen UVA and narrow-band UVB reduce circulating Th17 cells and induce circulating regulatory T cells in psoriasis. Takuya Furuhashi, Chiyo Saito, Kan Torii, Emi Nishida and Akimichi Morita. Nagoya, Japan. 8:48 am, Poster #678

ANCILLARY MEETINGS

SATURDAY, MAY 7, 2011

SID Board of Directors Meeting

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 12:00 pm

Grand Canyon Foyer 6

Phoenix Dermatologic Society /
Arizona Dermatologic Society

2:30 pm - 5:30 pm

Grand Sonoran A-B

SATURDAY SESSIONS

ANCILLARY MEETINGS

SATURDAY, MAY 7, 2011

SID Board of Directors Meeting

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 12:00 pm

Grand Canyon Foyer 6

Phoenix Dermatologic Society / Arizona Dermatologic Society

2:30 pm - 5:30 pm

Grand Sonoran A-B

WILLIAM MONTAGNA LECTURE

DEVELOPING NEW THERAPIES FOR EPIDERMOLYSIS BULLOSA: THE HARD GRAFT

.5 CME CREDITS

Saturday, May 7, 2011

9:00 am - 9:30 am

Grand Sonoran E - F

OPEN TO ALL MEETING ATTENDEES

LECTURER BIO



John McGrath, MD

Kings College London, Guys Hospital
London, United Kingdom

John McGrath is Professor of Molecular Dermatology and head of the Genetic Skin Disease Group at St. John's Institute of Dermatology. Dr. McGrath's research interests include discovering what causes inherited skin diseases, how these abnormalities disrupt skin structure and function, and what clinician-scientists can do to develop new clinical and therapeutic benefits for people with genetic skin diseases.

LECTURESHIP HISTORY

The William Montagna Lecture is given annually at the Society's Annual Meeting. This award is intended to honor and reward young active investigators. Primary emphasis is given to researchers in skin biology.



JULIUS STONE LECTURE

THE INTERPLAY OF IL-17- AND IFNg-PRODUCING CD4 CELLS IN IMMUNE-MEDIATED INFLAMMATION

.5 CME CREDITS

Saturday, May 7, 2011
9:30 am - 10:00 am
Grand Sonoran E - F

OPEN TO ALL MEETING ATTENDEES

LECTURER BIO



Casey Weaver, MD
University of Alabama, Birmingham
Birmingham, Alabama

Dr. Weaver is Professor of Pathology at the University of Alabama, Birmingham. His lab studies the mechanisms that control T cell development during an immune response, using transgenic mouse models and molecular biological approaches to define the signals that control the fate of the T cell and to understand how alternative T cell developmental pathways lead to distinct immune responses.

ANCILLARY MEETINGS

SATURDAY, MAY 7, 2011

SID Board of Directors Meeting
7:00 am - 8:00 am
Desert Suite I

Meeting Registration
7:30 am - 12:00 pm
Grand Canyon Foyer 6

Phoenix Dermatologic Society /
Arizona Dermatologic Society
2:30 pm - 5:30 pm
Grand Sonoran A-B

LECTURESHIP HISTORY

The Julius Stone Lectureship is intended to promote the advancement of knowledge in immunology as it relates to the skin and skin disease. The Lectureship is intended to honor Dr. Julius Stone, whose great commitment to the application of new principles of immunology to the benefit of patients with skin disorders is recognized by this award.

SATURDAY SESSIONS

ANCILLARY MEETINGS**SATURDAY, MAY 7, 2011**

SID Board of Directors Meeting
7:00 am - 8:00 am
Desert Suite I

Meeting Registration
7:30 am - 12:00 pm
Grand Canyon Foyer 6

**Phoenix Dermatologic Society /
Arizona Dermatologic Society**
2:30 pm - 5:30 pm
Grand Sonoran A-B

CLINICAL SCHOLARS PROGRAM**DEVELOPING NEW THERAPIES FOR EPIDERMOLYSIS BULLOSA:
THE HARD GRAFT****2 CME CREDITS**

Saturday, May 7, 2011
10:00 am - 12:00 pm
Grand Sonoran G

OPEN ONLY TO CLINICAL SCHOLARS & YOUNG INVESTIGATOR/TRAINEE TRACK PARTICIPANTS

Plenary Presentations

1. **Genomewide association study (GWAS) of infantile hemangiomas (IH) 10:00 am,
Poster #427**
*Presented by Ulrich Broeckel, MD, Associate Professor and Beth Drolet, MD, Professor of
Dermatology and Pediatrics, Medical College of Wisconsin, Milwaukee, Wisconsin*
2. **An investigator-initiated, phase II randomized, double-blind, placebo-controlled trial of
GDC-0449 for prevention of BCCs in basal cell nevus syndrome (BCNS) patients.
10:20 am, Poster #549**
*Presented by Ervin H. Epstein, MD, Scientist, Children's Hospital Oakland Research Institute
San Francisco, California*

Lectures**Genomewide Association Studies in Dermatologic Diseases**

Angela Christiano, PhD
Professor and Vice Chair for Research, Dermatology and Genetics
Development
Columbia University, New York, New York

**Mechanism-based Therapy using Hedgehog Pathway Inhibitors**

Anthony Oro, MD/PhD
Associate Professor, Department of Dermatology
Stanford University, Stanford, California

CONCURRENT MINISYMPOSIUM 10

AUTO-IMMUNITY AND INFLAMMATION

3.5 CME CREDITS

Presiders: Michelle Lowes, MD/PhD and Tom McCormick, PhD

Saturday, May 7, 2011

12:30 pm - 4:00 pm

Grand Sonoran C - D

OPEN TO ALL MEETING ATTENDEES

1. **Identification of a novel pro-inflammatory human skin-homing V γ 9V δ 2 T cell subset and its role in the pathogenesis of psoriasis.** Ute Laggner, Paola Di Meglio, Gayathri K Perea, Christian Hundhausen, Katie E Lacy, Niwa Ali, Catherine H Smith, AdrianC Hayday, Brian J Nickoloff and Frank O Nestle. London, United Kingdom and Maywood, IL. 12:30 pm, Poster #006
2. **Cytokine aberrations in a mouse model of psoriatic arthritis.** Mayuko Yamamoto and Shigetoshi Sano. Nankoku, Japan. 12:42 pm, Poster #011
3. **Human TLR7 and TLR8 expressing slan (6-sulfo LacNAc)dendritic cells as a novel proinflammatory cell type in Lupus erythematosus.** Anja Hänsel, Claudia Günther, Thomas Döbel, Wojciech Baran and Knut Schäkel. Heidelberg, Germany; Dresden, Germany and Wroclaw, Poland. 12:54 pm, Poster #052
4. **Genome-wide expression profiling of five mouse models identifies similarities and differences with human psoriasis.** William R Swindell, Andrew Johnston, Steve Carbalal, Gangwen Han, Christian Wohn, Jun Lu, Xianying Xing, Rajan P Nair, John J Voorhees, James T Elder, Xiao-Jing Wang, Shigetoshi Sano, Errol P Prens, John DiGiovanni, Mark R Pittelkow, Nicole L Ward and Johann E Gudjonsson. Boston, MA; Ann Arbor, MI; Austin, TX; Denver, CO; Rotterdam, Netherlands; Rochester, MN; Okocho, Japan and Cleveland, OH. 1:06 pm, Poster #013
5. **Periodontal disease and risk of psoriasis among US women.** Sarah Nakib, Jiali Han, Tricia Li and Abrar Qureshi. Minneapolis, MN and Boston, Massachusetts. 1:18 pm, Poster #032
6. **IL-17C is overexpressed in psoriasis skin and contributes to cytokine-driven inflammation.** Cynthia S Chen, Paul M Al-Attar, Wen Fu, Candace M Loyd, Marybeth Riblett, Xianying Xing, John J Voorhees, James T Elder, Nicole L Ward, Johann E Gudjonsson and Andrew Johnston. Ann Arbor, MI and Cleveland, OH. 1:30 pm, Poster #027
7. **Soluble adenylyl cyclase is necessary for IL-22-dependent keratinocyte proliferation.** Archana Vishwanath, Lonny Levin, Jochen Buck and Jonathan Zippin. New York, NY. 1:42 pm, Poster #081
8. **NF- κ B blockade reduces hair follicle NKG2D ligand expression and susceptibility to lymphocyte attack revealing a novel therapeutic approach for alopecia areata.** Matthew S Hayden, Teruki Dainichi, Pallavi Singh, Yutaka Shimomura, Raphael Clynes, Angela M Christiano and Sankar Ghosh. New York, NY. 1:54 pm, Poster #059
9. **TWEAKing the inflammatory cascade: The TWEAK/Fn14 pathway as a potential therapeutic target for cutaneous lupus.** Karin Blecher, Adam Friedman, Jing Wen, Yumin Xia, Jennifer Michaelson, Linda Burkly and Chaim Puterman. Bronx, NY and Cambridge, MA. 2:06 pm, Poster #003

ANCILLARY MEETINGS

SATURDAY, MAY 7, 2011

SID Board of Directors Meeting

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 12:00 pm

Grand Canyon Foyer 6

Phoenix Dermatologic Society /
Arizona Dermatologic Society

2:30 pm - 5:30 pm

Grand Sonoran A-B

SATURDAY SESSIONS

ANCILLARY MEETINGS

SATURDAY, MAY 7, 2011

SID Board of Directors Meeting

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 12:00 pm

Grand Canyon Foyer 6

**Phoenix Dermatologic Society /
Arizona Dermatologic Society**

2:30 pm - 5:30 pm

Grand Sonoran A-B

CONCURRENT MINISYMPPOSIUM 10 (CONT'D)

AUTO-IMMUNITY AND INFLAMMATION

10. **Dissecting the inflammatory skin lesions in NOMID and the resulting homeostatic tissue responses in the context of IL-1 blocking therapy.** Pamela Aubert, Mayte Suárez-Fariñas, Hiroshi Mitsui, Leanne M Johnson-Huang, Katherine Pierson, Joseph G Dolan, Inna Novitskaya, Israel Coats, James G Krueger, Jacob Estes, Edward Cowen, Nicole Plass, Chyi-Chia Lee, Hong-Wei Sun, Michelle A Lowes and Raphaela Goldbach-Mansky. Bethesda, MD; New York, NY and Frederick, MD. 2:18 pm, Poster #045
11. **Non-calcemic natural vitamin D analogue, 20(OH)D₃, protects mice from bleomycin induced scleroderma.** Arnold E Postlethwaite, Wei Li, Jianjun Chen, Duanne D Miller, Weikuan Gu, Yan Jiao and Andrzej Slominski. Memphis, TN. 2:30 pm, Poster #077
12. **Early tissue responses in psoriasis to the anti-TNF-α biologic etanercept suggest reduced IL-17R expression and signaling.** Andrew M Guzman, Andrew Johnston, Xiangying Xing, Lisa Maier, Frank Wang, Sewon Kang, Gary Fisher and Johann E Gudjonsson. Ann Arbor, MI and Baltimore, MD. 2:42 pm, Poster #026
13. **Lymphangiogenic process in the Keratin-14-IL-4-transgenic mouse model of atopic dermatitis parallels the evolution of skin inflammation.** Vivian Y Shi, Lei Bao, Huayi Zhang, JohnR Tian, Rui Zhu and LawrenceS Chan. Chicago, IL. 2:54 pm, Poster #021
14. **Erlotinib-stimulated epidermal hyperplasia is mediated by IL-1.** Nicole L Ward, Narasimharao Bhagavathula, C M Loyd, S Dawes, Andrew Johnston, James Varani and James T Elder. Ann Arbor, MI and Cleveland, OH. 3:06 pm, Poster #025
15. **Transcriptomic analysis of psoriatic skin by RNA-seq.** Ali Jabbari, Mayte Suarez-Farinias, Scott Dewell and James G Krueger. New York, NY. 3:18 pm, Poster #022

CONCURRENT MINISYMPOSIUM II

CELL ADHESION / MATRIX AND VASCULAR BIOLOGY

3.5 CME CREDITS

Presiders: Spiro Getsios, PhD and Jeffrey Davidson, PhD

Saturday, May 7, 2011

12:30 pm - 4:00 pm

Wildflower Salon A

OPEN TO ALL MEETING ATTENDEES

1. **Loss of type VII collagen in squamous cell carcinoma leads to increased invasion and TGF-beta signalling *in vivo*.** Vera Martins, Kate Moore, Mei Chen, John Marshall and Edel A O'Toole. London, United Kingdom and Los Angeles, CA. 12:30 pm, Poster #196
2. **Elucidation of the molecular mechanisms underlying inversa type of recessive dystrophic epidermolysis bullosa using site-directed mutagenesis.** Y Hou, J Cogan, E Cua, S Lee, D Woodley and M Chen. Los Angeles, CA. 12:42 pm, Poster #194
3. **Fibronectin is a negative regulator of keratinocyte migration.** Kevin J Hamill, Susan B Hopkinson, Paul Hoover, Viktor Todorovic, Kathleen J Green and Jonathan C Jones. Chicago, IL. 12:54 pm, Poster #199
4. **MtDNA changes alter murine fibroblasts migration and invasiveness by inducing the expression of the matrix metalloproteinase 9 (MMP-9), an effect mediated by NF- κ B.** Jaroslav Janda, Jana Jandova and James E Sligh. Tucson, AZ. 1:06 pm, Poster #203
5. **Expression of catalytically active Matrix Metalloproteinase-1 in dermal fibroblasts induces morphological and functional alterations that mimic aged human skin.** Wei Xia, Craig Hammerberg, Yong Li, John J Voorhees and Gary J Fisher. Ann Arbor, MI. 1:18 pm, Poster #197
6. **Elevated Cysteine-rich protein 61 (CYR61/CCN1) mediates down-regulation of collagen expression in senescent human dermal fibroblasts.** Taihao Quan, Zhaoping Qin, Tianyuan He, John J Voorhees and Gary J Fisher. Ann Arbor, MI. 1:30 pm, Poster #198
7. **The MAPKAP kinase MK2 regulates desmoglein 3 endocytosis by pemphigus vulgaris autoantibodies.** Xuming Mao and Aimee S Payne. Philadelphia, PA. 1:42 pm, Poster #202
8. **Desmosomal cadherins utilize distinct mechanism for assembly into desmosomes.** Oxana Nekrasova, E Amargo and K J Green. Chicago, IL. 1:54 pm, Poster #182
9. **Antagonizing the effects of pemphigus IgG by manipulating intracellular protein O-glycosylation.** Paula Berkowitz and David Rubenstein. Chapel Hill, NC. 2:06 pm, Poster #192
10. **The desmosomal protein plakophilin 2 is required for proper extracellular matrix attachment and keratinocyte differentiation.** Evangeline V Amargo, Jennifer L Koetsier, Jodi L Johnson, Viktor Todorovic, Kathleen J Green and Lisa M Godsel. Chicago, IL. 2:18 pm, Poster #200
11. **The DSPII splice variant is critical for desmosome-mediated HaCaT keratinocyte adhesion.** Rita M Cabral, Daniel Tattersall, Vishal Patel, Elizabeth Hatzimasoura, Dominic J Abrams, Andrew P South and David P Kelsell. London, United Kingdom and Dundee, United Kingdom. 2:30 pm, Poster #176

ANCILLARY MEETINGS

SATURDAY, MAY 7, 2011

SID Board of Directors Meeting

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 12:00 pm

Grand Canyon Foyer 6

Phoenix Dermatologic Society /
Arizona Dermatologic Society

2:30 pm - 5:30 pm

Grand Sonoran A-B

SATURDAY SESSIONS



ANCILLARY MEETINGS**SATURDAY, MAY 7, 2011**

SID Board of Directors Meeting
7:00 am - 8:00 am
Desert Suite I

Meeting Registration
7:30 am - 12:00 pm
Grand Canyon Foyer 6

**Phoenix Dermatologic Society /
Arizona Dermatologic Society**
2:30 pm - 5:30 pm
Grand Sonoran A-B

CONCURRENT MINISYMPPOSUM II (CONT'D)
CELL ADHESION / MATRIX AND VASCULAR BIOLOGY

12. **MMP2-null mice are less susceptible to pemphigus foliaceus induction.** Ning Li, Zhi Liu, Lisa Heinbach, Moonhee Park, Robert Senior and Luis A Diaz. Chapel Hill, NC and St. Louis, MO. 2:42 pm, *Poster #193*
13. **Ephrins promote the EphA2-EphA1 transition to regulate epidermal differentiation.** Samantha Y Lin, Kristin Gordon, Hanz Blatt, Nihal Kaplan, Robert M Lavker and Spiro Getsios. Chicago, IL. 2:54 pm, *Poster #188*
14. **Calcium-induced cell-cell adhesion and differentiation in human epidermal keratinocytes require Rho-GEF Trio and filamin A.** Chia-Ling Tu, Michael You and Daniel D Bikle . San Francisco, CA. 3:06 pm, *Poster #180*
15. **Ectodomain shedding of LYVE-1 in psoriasis: VEGF-A induces the biochemical cleavage in lymphatic vessels.** Satoshi Hirakawa, Hisayo Nishida-Fukuda, Ryoichi Araki, Xiuju Dai, Yasushi Hanakawa, Koji Sayama, Yuji Shirakata, Mikiko Tohyama, Michael Detmar, Koji Hashimoto, Shigeki Higashiyama and Yoshiki Tokura. Hamamatsu, Japan; Toon, Japan and Zurich, Switzerland. 3:18 pm, *Poster #181*

CONCURRENT MINISYMPOSIUM 12

HUMAN CLINICAL RESEARCH AND THERAPEUTICS

3.5 CME CREDITS

Presiders: Stuart Lessin, MD and Victoria Werth, MD

Saturday, May 7, 2011

12:30 pm - 4:00 pm

Grand Sonoran G

OPEN TO ALL MEETING ATTENDEES

1. **Blood involvement in stage IA mycosis fungoides by flow cytometry predicts or is associated with higher rate of progression.** Rakhshandra Talpur, Lotika Singh, Amishi Shah, Seema Daulat, Ping Liu and Madeleine Duvic. Houston, TX. 12:30 pm, Poster #526
2. **Pralatrexate selectively induces apoptosis and synergizes with bexarotene through up-regulation of p53/Bax/PUMA in cutaneous T-cell lymphoma cells.** Sophia Rangwala, Xiang Zhang, Chunlei Zhang and Madeleine Duvic. Houston, TX. 12:42 pm, Poster #479
3. **Antagonism of p40 cytokines in psoriasis patients may promote paradoxical cardiovascular risk.** Caitriona Ryan, Craig Leonardi, James Krueger, Alexa Kimball, Bruce Strober, Kenneth Gordon, Richard Langley, Daniel Kaplan and Alan Menter. Dallas, TX; Saint Louis, MO; New York, NY; Boston, MA; Chicago, IL; Halifax, Canada and Minneapolis, MN. 12:54 pm, Poster #493
4. **The histone deacetylase inhibitor, romidepsin, suppresses *in vivo* immune functions of cutaneous T-cell lymphoma patients.** Michael J Kelly-Sell, Bernice Benoit, Youn H Kim, Cameron Harrison, Katherine Sutherland, Louise C Showe, Maria Wysocka and Alain H Rook. Philadelphia, PA and Palo Alto, CA. 1:06 pm, Poster #520
5. **A role for PD-1 in suppressing T cell activity in human merkel cell carcinomas.** Mitra Dowlatshahi, Linda Wang, Jessica E Teague, Michael K Lichtman, Ahmed Gehad, Rei Watanabe, William J Crisler, Thomas S Kupper and Rachael A Clark. Boston, MA. 1:18 pm, Poster #543
6. **A pilot study of an oral phosphodiesterase inhibitor (apremilast) for atopic dermatitis.** Aman Samrao, Trista Berry and Eric Simpson. Portland, OR. 1:30 pm, Poster #492
7. **An internet-based survey and contest: A novel method for improving acne outcomes.** Brad A Yentzer, Ashley A Wood, Matthew J Sagransky, Jenna L O'Neill, Adele R Clark, Lisa L Williams and Steven R Feldman. Winston Salem, NC. 1:42 pm, Poster #501
8. **ANA and anti-dsDNA in patients under treatment with Infliximab — A potential predictor for non-response to infliximab.** Jochen Hoffmann, Martin Hartmann, Alexander H Enk and Eva N Hadischik. Heidelberg, Germany. 1:54 pm, Poster #502
9. **Efficient and reliable skin responses with unconventional low-dose total skin electron beam therapy in mycosis fungoides: A phase II study.** Cameron Harrison, Daniel Navi, Bharathi Lingala, Randy Armstrong, Wen-Kai Weng, Uma Sundram, Bouthaina Dabaja, Lotika Singh, Madeleine Duvic, Richard T Hoppe and Youn H Kim. Stanford, CA and Houston, TX. 2:06 pm, Poster #540
10. **Early rituximab therapy of autoimmune blistering disease is associated with better clinical response.** Luisa Lunardon, Kathleen J Tsai, Nicole Fett, John R Stanley, Donald E Tsai, Victoria P Werth and Aimee S Payne. Philadelphia, PA. 2:18 pm, Poster #545

ANCILLARY MEETINGS

SATURDAY, MAY 7, 2011

SID Board of Directors Meeting

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 12:00 pm

Grand Canyon Foyer 6

Phoenix Dermatologic Society /

Arizona Dermatologic Society

2:30 pm - 5:30 pm

Grand Sonoran A-B

SATURDAY SESSIONS

ANCILLARY MEETINGS**SATURDAY, MAY 7, 2011****SID Board of Directors Meeting**

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 12:00 pm

Grand Canyon Foyer 6

**Phoenix Dermatologic Society /
Arizona Dermatologic Society**

2:30 pm - 5:30 pm

Grand Sonoran A-B

CONCURRENT MINISYMPOSIUM 12 (CONT'D)**HUMAN CLINICAL RESEARCH AND THERAPEUTICS**

11. **Reversal of local immune evasion mechanisms and regression of human Merkel cell carcinoma by intralesional injection of interferon-beta.** Kelly Paulson, Andrew Tegeder, Cristoff Willmes, Jayasri Iyer, David Schrama, David Koelle, Michele Cleary, Shailender Bhatia, Jürgen Becker and Paul Nghiem. Seattle, WA; North Wales, PA and Graz, Austria. *2:30 pm, Poster #547*
12. **Response to antimalarials in cutaneous lupus erythematosus.** Aileen Y Chang, Evan W Piette, Kristen P Foering, Thomas R Tenhave, Joyce Okawa and Victoria P Werth. Philadelphia, PA. *2:42 pm, Poster #477*
13. **Curcumin intervention and plasma biomarkers for radiation dermatitis in breast cancer patients.** Julie L Ryan, Marilyn Ling, Jacqueline Williams, Gary R Morrow and Alice P Pentland. Rochester, NY. *2:54 pm, Poster #536*
14. **Psoriasis family history portends earlier age of onset, higher incidence of psoriatic arthritis, and increased likelihood of biologic treatment in psoriasis patients.** Neil Borkar, Douglas Kast, Ivan Grozdev, Diana Carlson, Lauren Cao, Rivka Feig, Prasad Pujari, Brian Schmotzer, Denise Babineau, Thomas McCormick, Kevin Cooper and Neil Korman. Cleveland, OH. *3:06 pm, Poster #548*
15. **T cells in the skin lesions of stage I mycosis fungoides show markedly suppressed cytokine production.** Rei Watanabe, Marianne Tawa, Natalie Adams, Andrew Dorosario, David C Fisher, Thomas S Kupper and Rachael A Clark. Boston, MA. *3:18 pm, Poster #534*

CONCURRENT MINISYMPOSIUM 13

PHOTOBIOLOGY

3.5 CME CREDITS

Presiders: Thomas Ruenger, MD/PhD and Alice Pentland, MD

Saturday, May 7, 2011

12:30 pm - 4:00 pm

Wildflower Salon C

OPEN TO ALL MEETING ATTENDEES

1. **Silymarin inhibits UV-induced immunosuppression through inactivation of CD4+ T cells and stimulation of CD8+ effector T cells.** Mudit Vaid, Tripti Singh and SantoshK Katiyar. Birmingham, AL. 12:30 pm, Poster #672
2. **Sunscreens may prevent UV-induced facial fat loss by blocking the production of IL-11.** Wen-Hwa Li, Apostolos Pappas, Li Zhang and Druie Cavender. Skillman, NJ. 12:42 pm, Poster #658
3. **The aryl hydrocarbon receptor (AhR) is a negative regulator of nucleotide excision repair (NER).** Thomas Haarmann-Stemmann, Katrin Frauenstein, Thierry Douki, Marc Majora, Julia Tigges, Susanne Grether-Beck, Charlotte Esser, Josef Abel, Ellen Fritzsche and Jean Krutmann. Düsseldorf, Germany; Grenoble, France and Aachen, Germany. 12:54 pm, Poster #679
4. **Nucleotide excision repair of UV radiation photoproducts requires protein kinase C delta.** Christopher Negro, Edward LaGory and Mitchell F Denning. Maywood, IL. 1:06 pm, Poster #668
5. **Novel oxidatively-modified glycerophosphocholines with platelet-activating factor activity mediate UVB photosensitivity in xeroderma pigmentosum A deficiency.** Jeffrey B Travers, Katherin A Harrison, Robert C Murphy and Raymond L Konger. Indianapolis, IN and Aurora, CO. 1:18 pm, Poster #688
6. **Ultraviolet B radiation augments melanoma tumor growth through its ability to generate platelet-activating factor agonists.** Ravi P Sahu, Sonia Da Silva, Christopher Tou loukian, Raymond L Konger and Jeffrey B Travers. Indianapolis, IN. 1:30 pm, Poster #687
7. **UVB suppresses PTEN expression by upregulating miR-141 in HaCaT cells.** Wei Li, Bingrong Zhou and Dan Luo. Nanjing, China. 1:42 pm, Poster #673
8. **Sex differences in UVB-induced cutaneous tumor development in Skh-1 mice following topical antioxidant/anti-inflammatory treatment.** Erin M Burns, Kathleen L Tober, Nicholas J Sullivan, Jonathan S Schick, Judith A Rigganbach, Gregory S Young, Gregory B Lesinski and Tatiana M Oberyszyn. Columbus, OH. 1:54 pm, Poster #692
9. **Solar ultraviolet irradiation induced decorin degradation renders type I collagen susceptible to cleavage by matrix metalloproteinase-1 in human skin.** Yong Li, Wei Xia, Ying Liu, Yuan Shao, John J Voorhees and Gary J Fisher. Ann Arbor, MI. 2:06 pm, Poster #691
10. **Proteomic identification of cathepsin B as a novel target of UVA photodamage upstream of autophagic-lysosomal dysregulation in human skin fibroblasts.** Sarah D Lamore, Shuxi Qiao and Georg T Wondrak. Tucson, AZ. 2:18 pm, Poster #705
11. **Molecular effects of fractional laser on photo-aged skin.** Paul C Jou, Autumn Potaracke, Minh Lam, Elma D Baron and Jose Garcia-Zuazaga. Cleveland, OH. 2:30 pm, Poster #670

ANCILLARY MEETINGS

SATURDAY, MAY 7, 2011

SID Board of Directors Meeting

7:00 am - 8:00 am

Desert Suite I

Meeting Registration

7:30 am - 12:00 pm

Grand Canyon Foyer 6

Phoenix Dermatologic Society /
Arizona Dermatologic Society

2:30 pm - 5:30 pm

Grand Sonoran A-B

SATURDAY SESSIONS



ANCILLARY MEETINGS

SATURDAY, MAY 7, 2011

SID Board of Directors Meeting
7:00 am - 8:00 am
Desert Suite I

Meeting Registration
7:30 am - 12:00 pm
Grand Canyon Foyer 6

Phoenix Dermatologic Society /
Arizona Dermatologic Society
2:30 pm - 5:30 pm
Grand Sonoran A-B

CONCURRENT MINISYMPPOSIUM 13 (CONT'D)

PHOTOBIOLOGY

12. Cysteine-rich Protein 61 (CCN1) mediates upregulation of IL-1 β by UV irradiation in human skin fibroblasts. Zhaoping Qin, John J Voorhees, Gary J Fisher and Taihao Quan. Ann Arbor, MI. 2:42 pm, Poster #693
13. UV modulation of subcutaneous fat metabolism. Eun Ju Kim, Yeon Kyung Kim, Ji Eun Kim, Sojeong Kim, Min-Kyoung Kim, Chi-Hyun Park and Jin Ho Chung. Seoul, South Korea. 2:54 pm, Poster #680
14. Modification of microRNA expression by baicalin in UVB irradiated mouse skin using a microRNA microarray. Dan Luo and Bingrong Zhou. Nanjing, China. 3:06 pm, Poster #674
15. Photoprotection against UVAR: Naturally occurring actives require a chemical structure that confers cell membrane lipid raft stabilizing properties. Mirko Bayer, Peter Proksch, Ingo Felsner, Heidi Brenden, Zippora Kohne, Rehab Walli, Tu Ngoc Duong, Jean Krutmann and Susanne Grether-Beck. Duesseldorf, Germany; Hilden, Germany and Hanoi, Viet Nam. 3:18 pm, Poster #682



NOTES

NOTES

Abstracts

- 
- A photograph showing several men in a hallway looking at research posters displayed on a wall. One man in a suit is pointing at a poster while others look on. The posters contain scientific text and figures.
- 93 Abstract Presentation Information
 - 94 Auto-immunity & Inflammation
 - 96 Carcinogenesis & Cancer Genetics
 - 99 Cell Adhesion / Matrix and Vascular Biology
 - 100 Epidemiology / Health Services Research
 - 102 Epidermal Structure & Function
 - 105 Genetic Disease, Gene Regulation & Gene Therapy
 - 107 Hair & Cutaneous Development
 - 108 Human Clinical Research & Therapeutics
 - 110 Immunology 1: Adaptive Immunity
 - 112 Immunology 2: Innate Immunity & Microbiology
 - 113 Photobiology
 - 115 Pigmentation & Melanoma
 - 117 Tissue Regeneration, Stem Cells & Wound Healing
 - 120 Keyword Index
 - 126 Author Index
 - 154 SID Governance

ABSTRACT PRESENTATION INFORMATION

Oral Presentations

Oral presentations and lectures will take place at the JW Marriott Desert Ridge Resort and Spa. Minisymposium and Plenary oral presentations are scheduled at the rate of five per hour. This allows ten minutes for presentation and two minutes for discussion. In order to coordinate sessions, the time limit will be strictly enforced, and you will be asked to terminate your presentation by the session chairperson.

LCD projectors will be available in each lecture hall. There will be resources to display only with IBM-compatible PowerPoint XP and Windows XP or earlier versions. 35mm projectors will not be available. Computer technicians will be able to download ZIP and CD files. All oral presentations must also be presented in poster format.

All presentations must be uploaded to a common storage device at least six (6) hours prior to your presentation. Uploads may be completed in the Speaker Ready Room (Tuesday - Friday in Grand Canyon 3; Saturday in Grand Sonoran J).

Poster Presentations

All posters will be displayed until Saturday, May 7 at 12:00 p.m. in the Grand Saguaro Ballroom. Posters will be viewed in three sessions as outlined below. Presenters should be at their posters for the entire discussion session. Posters must be displayed until 12:00 p.m. on Saturday, May 7. Posters may not be removed early. The SID is not responsible for posters left unclaimed as of 6:00 p.m. on Saturday, May 7. Unclaimed posters will not be returned.

Install All Posters

Wednesday, May 4, 2011 • 8:00 am - 4:00 pm

Poster Session I

Odd poster numbers 001-281 & Even poster numbers 282-562

Thursday, May 5, 2011 • 10:00 am - 12:00 pm

Poster Session II

Even Poster numbers 002-280 & Odd Poster numbers 563-845

Friday, May 6, 2011 • 11:15 am - 1:15 pm

Poster Session III

Odd Poster numbers 283-565 & Even Poster numbers 564-844

Saturday, May 7, 2011 • 10:00 am - 12:00 pm

Dismantle All Posters

Saturday, May 7, 2011 • 12:15 pm - 6:00 pm

Conflict of Interest

If there is a real or perceived conflict of interest pertaining to your work, an announcement must be made prior to your oral presentation or be displayed on your poster. For oral presentations, we suggest using a slide to indicate the conflict.

Speaker Ready Room

Tuesday through Thursday, Grand Canyon 3 will be available to all presenters. On Saturday, Grand Sonoran J will be available to presenters.

Wednesday, May 4, 2011	7:00 am – 8:00 pm
Thursday, May 5, 2011	7:00 am – 5:00 pm
Friday, May 6, 2011	7:00 am – 5:00 pm
Saturday, May 7, 2011	7:00 am – 3:00 pm

Keyword Index

The keyword index is located on pages 120-125 and appears in the April issue of the *Journal of Investigative Dermatology* (JID).

POSTER PRESENTATIONS / ABSTRACT TITLES

Auto-immunity and Inflammation

All orals [designated with an asterisk (*)] listed below are presented in the Auto-immunity and Inflammation Minisymposium on Saturday, May 7, 2011 from 12:30-4:00 p.m. in Grand Sonoran C-D, JW Marriott Desert Ridge. Orals designated by two asterisks (**) will be presented during a Plenary Session.

- 001 **CD109 function in human keratinocytes is linked to a psoriasis-like phenotype.** Ivan V Litvinov, Albane A Bizet, Yousef Binamer, David A Jones, Deis Sasseville and Anie Philip. Montreal, Canada and Boston, MA.
- 002 **Small S100 molecules from the psoriasis susceptibility locus (PSORS4) prime the skin for inflammation.** Ronald Wolf, Francesca Mascia, Christophe Cataisson, Alif Dharamsi, Zack Howard, Val Bliskovski, Jason Winston, Lionel Feigenbaum, Ulrike Lichti, Thomas Ruzicka, Triantafyllos Chavakis and Stuart H Yuspa. Bethesda, MD; Frederick, MD; Munich, Germany and Dresden, Germany.
- 003* **TWEAKing the inflammatory cascade: The TWEAK/Fn14 pathway as a potential therapeutic target for cutaneous lupus.** Karin Blecher, Adam Friedman, Jing Wen, Yumin Xia, Jennifer Michaelson, Linda Burkly and Chaim Putterman. Bronx, NY and Cambridge, MA.
- 004 **The effect of neuropeptides on the expression of nitric oxide synthase.** Rachna Sondhi, Yaping Ee, SusanC Geen, AlanR Shalita and Wei-Li Lee. Brooklyn, New York.
- 005 **Enforced ROR γ t expression in haematopoietic stem cells increases regulatory T cell number, which reduces immunoreactivity and attenuates hypersensitivity *in vivo*.** Yasuhiro Fujisawa, Yasuhiro Kawachi, Yousuke Ishitsuka and Fujio Otsuka. Tsukuba, Japan.
- 006* **Identification of a novel pro-inflammatory human skin-homing Vy9V δ 2 T cell subset and its role in the pathogenesis of psoriasis.** Ute Laggner, Paola Di Meglio, Gayathri K Perea, Christian Hundhausen, Katie E Lacy, Niwa Ali, Catherine H Smith, AdrianC Hayday, Brian J Nickoloff and Frank O Nestle. London, United Kingdom and Maywood, IL.
- 007 **IL-33 is produced by normal human keratinocytes with environmental and inflammatory stimuli: A novel "alarmin" in the skin.** Jitlada Meephansan, Mayumi Komine, Hideyoshi Tsuda, Shoichiro Yano, Shin-ichi Tominaga and Mamitaro Ohtsuki. Shimotsuke, Japan and Ohtawara, Japan.
- 008 **Human β -defensin-2 enhances IFN- γ and IL-10 production and suppresses IL-17 production in T cells: Its roles in psoriasis.** Naoko Kanda, Masahiro Kamata, Yayoi Tada, Takeko Ishikawa, Shinichi Sato and Shinichi Watanabe. Tokyo, Japan.
- 009 **Cutaneous expression of neutrophil elastase in relation to IgA autoantibodies to nonapeptides of gliadin and tissue transglutaminase in dermatitis herpetiformis.** Marian Dmochowski, Justyna Gornowicz, Agnieszka Seraszek, Elzbieta Kaczmarek and Monika Bowszczyk-Dmochowska. Poznan, Poland.
- 010 **Epidermal ablation of Dlx3 is linked to barrier disruption and a skin inflammation.** Joonsung Hwang, Ryosuke Kita, Hyouk-Soo Kwon, Eung Ho Choi, Seung Hun Lee, MarkC Udey and Marial Morasso. Bethesda, MD; Wonju, South Korea and Seoul, South Korea.
- 011* **Cytokine aberrations in a mouse model of psoriatic arthritis.** Mayuko Yamamoto and Shigetoshi Sano. Nankoku, Japan.
- 012 **Involvement of the CXCL10/CXCR3 axis in the mechanism responsible for cutaneous reverse passive Arthus reaction.** Shinji Noda, Yoshihide Asano, Yayoi Tada, Makoto Sugaya, Takafumi Kadono and Shinichi Sato. Tokyo, Japan.
- 013* **Genome-wide expression profiling of five mouse models identifies similarities and differences with human psoriasis.** William R Swindell, Andrew Johnston, Steve Carbalaj, Gangwen Han, Christian Wohn, Jun Lu, Xianying Xing, Rajan P Nair, John J Voorhees, James T Elder, Xiao-Jing Wang, Shigetoshi Sano, Errol P Prens, John DiGiovanni, Mark R Pittelkow, Nicole L Ward and Johann E Gudjonsson. Boston, MA; Ann Arbor, MI; Austin, TX; Denver, CO; Rotterdam, Netherlands; Rochester, MN; Okocho, Japan and Cleveland, OH.
- 014 **Identification of IL-4 regulated keratinocyte genes relevant in the pathogenesis of atopic dermatitis.** Lei Bao and Lawrence S Chan. Chicago, IL.
- 015 **Anti-inflammatory activity of water chestnut (*Trapa japonica* Flerov).** Jin Eun Kim, Su Min Lee, Myoung Jin Oh, Bora Kim, Hyuk Kim, Byung-Kook Choi and Joo Dong Lee. Incheon, South Korea and Yongin, South Korea.
- 016 **Dermal-type macrophages can be integrated into a collagen-fibroblast scaffold.** Nicolas Bechettoille, Hortense Vachon, Thomas Fontaine, Valérie André-Frei and ChristopherG Mueller. Lyon, France and Strasbourg, France.
- 017 **Clinical and laboratory markers of sclerotic-type chronic graft versus host disease.** KathrynJ Martires, Kristin Baird, Seth M Steinberg, Lana Grkovic, Kirsten Williams, Fran Hakim, Steven Z Pavletic and Edward W Cowen. Bethesda, MD.
- 018 **Role of IL-13 in the cytokine network of psoriasis.** MaryBeth Riblett, Xianying Xing, James Kochkodan, Andrew M Guzman, John J Voorhees, Andrew Johnston and Johann E Gudjonsson. Ann Arbor, MI.
- 019 **Heterogeneity in the inflammatory network in chronic plaque psoriasis.** WilliamR Swindell, Xianying Xing, Cynthia Chen, RajanP Nair, JohnJ Voorhees, JamesT Elder, Andrew Johnston and JohannE Gudjonsson. Boston, MA and Ann Arbor, MI.
- 020 **MHC class II restricted CD4+ T lymphocytes directed against melanocyte antigens: Tyrosinase, Tyrosinase Related Protein 2 and MART-1 in Vitiligo.** Archana Singh, Pankaj Sharma, Hemant K Kar, Manoj K Tembhre, Somesh Gupta, V K Sharma, Rajesh S Gokhale and Rajni Rani. New Delhi, India.
- 021* **Lymphangiogenic process in the Keratin-14-IL-4-transgenic mouse model of atopic dermatitis parallels the evolution of skin inflammation.** Vivian Y Shi, Lei Bao, Huayi Zhang, JohnR Tian, Rui Zhu and LawrenceS Chan. Chicago, IL.
- 022* **Transcriptomic analysis of psoriatic skin by RNA-seq.** Ali Jabbari, Mayte Suarez-Farinas, Scott Dewell and James G Krueger. New York, NY.
- 023 **Alopecia areata development may be associated with cardiac fibrosis.** Eddy H Wang, Katy Chong, David Granville, Jerry Shapiro and Kevin J McElwee. Vancouver, Canada.
- 024 **Comprehensive characterization of leukocyte subsets in the blood of psoriasis patients.** Gerlinde Obermoser, Caitriona Ryan, Jacques Banchereau, Virginia Pascual, Damien Chaussabel and Alan Menter. Dallas, TX and Innsbruck, Austria.
- 025* **Erlotinib-stimulated epidermal hyperplasia is mediated by IL-1.** Nicole L Ward, Narasimharao Bhagavathula, C M Loyd, S Dawes, Andrew Johnston, James Varani and James T Elder. Ann Arbor, MI and Cleveland, OH.
- 026* **Early tissue responses in psoriasis to the anti-TNF- α biologic etanercept suggest reduced IL-17R expression and signaling.** Andrew M Guzman, Andrew Johnston, Xiangying Xing, Lisa Maier, Frank Wang, Sewon Kang, Gary Fisher and Johann E Gudjonsson. Ann Arbor, MI and Baltimore, MD.
- 027* **IL-17C is overexpressed in psoriasis skin and contributes to cytokine-driven inflammation.** Cynthia S Chen, Paul M Al-Attar, Wen Fu, Candace M Loyd, Marybeth Riblett, Xianying Xing, John J Voorhees, James T Elder, Nicole L Ward, Johann E Gudjonsson and Andrew Johnston. Ann Arbor, MI and Cleveland, OH.
- 028 **Oxazolone induced atopic dermatitis murine model may be useful to screen TSLP inhibitors.** Na Young Yoon, Minyoung Jung, Donghye Kim, Hae-Jin Lee and Eung Ho Choi. Wonju, South Korea and Yanggu, South Korea.

- 029 Primary ceramide deficiency in keratinocytes leads to gene alterations linked to dermatitis.** Kimiko Nakajima, Mika Terao, Hiroaki Azukizawa, Ichiro Katayama, Junji Takeda and Shigetoshi Sano. Kochi, Japan and Osaka, Japan.
- 030 Effect of norepinephrine (NE) on lipopolysaccharide (LPS) induction of cytokine/chemokine expression by murine bone marrow (BM)-derived dendritic cells (DCs).** Lori L Stohl, Michela Manni, Wahnong Ding and Richard D Granstein. New York, NY.
- 031 The intersection between tissue macrophages and host lipid metabolism in psoriasis.** Nima M Gharavi, David Wharton, Mohamad Navab, Sangderk Lee, Judith A Berliner, Alan M Fogelman and Robert L Modlin. Los Angeles, CA.
- 032* Periodontal disease and risk of psoriasis among US women.** Sarah Nakib, Jiali Han, Tricia Li and Abrar Qureshi. Minneapolis, MN and Boston, Massachusetts.
- 033 Complement activation in dermatomyositis and polymyositis: Complementing or challenging cell-mediated pathogenesis?** Maria J Molnar, Patrick Dupuy and Milan Basta. Budapest, Hungary; Toulouse, France and Potomac, MD.
- 034 TRAF3IP2 couples IL-17 to the epidermal defense response.** Sylviane Lambert, Stefan W Stoll and James T Elder. Ann Arbor, MI.
- 035 Mast cell chymase plays a critical role in bullous pemphigoid in mice.** Lan Lin, Eric Bankaitis, Ning Li, Magnus Abrink, Gunnar Pejler, Luis Diaz, Zena Werb and Zhi Liu. Chapel Hill, NC; Uppsala, Sweden and San Francisco, CA.
- 036 A mouse model of the cytokine storm: inhibiting IFN- γ or TNF- α blocks a lethal response.** Emily Nelson, Fumi Miyagawa, Howard A Young, Della Reynolds, Jay Linton, Jan Gutermuth and Stephen Katz. Bethesda, MD.
- 037 The role of Syndecan 1 and Syndecan 4 in the severity of murine contact hypersensitivity.** Johannes Bühligen, Frank Echtermeyer, Martin Götte, Marco Averbeck and Jan C Simon. Leipzig, Germany and Münster, Germany.
- 038 Up-regulation of cathepsin S by IL-23 may contribute to itching in psoriasis.** Youping Sun, Sarina B Elmariah, Vemuri B Reddy and Ethan A Lerner. Charlestown, MA.
- 039** Type IV collagen binding-site within type VII collagen is a pathogenic epitope for EBA autoantibodies.** X. Wang, R. Gupta, A. Garlapati, J. Cogan, D. Woodley and M. Chen. Los Angeles, CA.
- 040 The mechanism by which cathepsin S triggers receptor activation to cause itch.** Vemuri B Reddy, Sarina B Elmariah, Youping Sun and Ethan A Lerner. Charlestown, MA.
- 041 A novel mouse model to study immune regulatory pathways in the skin.** Michael Rosenblum, Iris Gratz, Jonathan Paw and Abul Abbas. San Francisco, CA.
- 042 Self-reported environmental triggers associated with onset of alopecia areata.** Kerri Fernandes, Angela M Christiano, Maria Hordinsky, Vera Price, David Norris, Joyce Osei, Chris Amos and Madeleine Duvic. Houston, TX; New York, NY; Minneapolis, MN; San Francisco, CA and Denver, CO.
- 043 Eosinophils express the high affinity IgE receptor (Fc ϵ RI) in bullous pemphigoid.** Alexandra S Frydman, Kelly A Messingham and Janet A Fairley. Iowa City, IA and New York, NY.
- 044 CD11c+ CD45RO+ cells colocalize with Extra Domain A fibronectin, not S100A8/A9 in human psoriasis.** Myriam E Rodriguez, Thomas S McCormick, Andrew B Young and Kevin D Cooper. Cleveland, OH.
- 045* Dissecting the inflammatory skin lesions in NOMID and the resulting homeostatic tissue responses in the context of IL-1 blocking therapy.** Pamela Aubert, Mayte Suárez-Fariñas, Hiroshi Mitsui, Leanne M Johnson-Huang, Katherine Pierson, Joseph G Dolan, Inna Novitskaya, Israel Coats, James G Krueger, Jacob Estes, Edward Cowen, Nicole Plass, Chyi-Chia Lee, Hong-Wei Sun, Michelle A Lowes and Raphaela Goldbach-Mansky. Bethesda, MD; New York, NY and Frederick, MD.
- 046 Collagen XVII (BP180) functions in regulating the keratinocyte pro-inflammatory response.** Steven L Eliason, Francoise Van den Bergh, Brian T Burmeister and George J Giudice. Iowa City, IA and Milwaukee, WI.
- 047 IgG autoantibodies to human desmocollins 1-3 in paraneoplastic pemphigus without anti-desmoglein autoantibodies.** Shunpei Fukuda, Norito Ishii, Teye Kwesi, Ryosuke Sogame, Takahiro Hamada, Fumitake Ono, Takako Ishikawa, Sachiko Sakaguchi, Teruki Dainichi, Tadashi Karashima, Daisuke Tsuruta, Takekuni Nakama and Takashi Hashimoto. Kurume, Japan.
- 048 Changes in keratinocyte elasticity measured by atomic force microscopy are correlates of autoimmune pathology in Pemphigus vulgaris.** Kristina Seiffert-Sinha, Ruiguo Yang, Carmen K Fung, Aimee S Payne, Ning Xi and Animesh A Sinha. East Lansing, MI and Philadelphia, PA.
- 049 Live imaging and assessment of vascular permeability using two-photon microscopy.** Gyohei Egawa, Yoshiaki Miyachi and Kenji Kabashima. Kyoto, Japan.
- 050 Development of peptide microarrays to investigate autoantibody epitope specificity in Pemphigus vulgaris.** Julian Hazelton, Milan Patel, Gary Furstenberg, Sameer Tyagi, Brian B Haab, William H Robinson, Kristina Seiffert-Sinha and Animesh A Sinha. East Lansing, MI; Grand Rapids, MI and Palo Alto, MI.
- 051 Anti-inflammatory activity of NPS-1577, PAR-2 specific antagonist, on oxazolone-induced chronic dermatitis animal model.** Se Kyoo Jeong, Dae-Yon Lee, Hyun Jung Kim, Jeong Eun Jeon, Jong Hwan Bae, Hyung Sub Gwak, Joung Yun Yun, Hyang Sook Lee, Sang Eun Lee and Seung Hun Lee. Daejeon, South Korea and Seoul, South Korea.
- 052* Human TLR7 and TLR8 expressing slan (6-sulfo LacNAc)dendritic cells as a novel proinflammatory cell type in Lupus erythematosus.** Anja Hänsel, Claudia Günther, Thomas Döbel, Wojciech Baran and Knut Schäkel. Heidelberg, Germany; Dresden, Germany and Wroclaw, Poland.
- 053 FcgammaRIV is crucial for neutrophil effector function in experimental epidermolysis bullosa acquista.** Michael Kasperkiewicz, Sabina Wende, Falk Nimmerjahn, Misa Hirose, Hiroaki Iwata, Kathrin Kalies, Enno Schmidt, Jürgen Westermann, Jörg Köhl, Detlef Zillikens and Ralf Ludwig. Lübeck, Germany and Erlangen, Germany.
- 054 Pentyl-Rhamnoside userfullness in inflammatory response associated with atopic dermatitis pathology.** Marie-Françoise Ariès, Jérôme Besse and Nathalie Castex-Rizzi. Toulouse, France.
- 055 Immature slan (6-sulfo LacNAc) dendritic cells display a unique capacity of Fc gamma RIII-mediated immune complex binding which is controlled by ADAM10 and ADAM17.** Thomas Döbel, Anja Hänsel and Knut Schäkel. Heidelberg, Germany.
- 056 Low serum BAFF response and increased IgD_B cell recovery predict clinical flares in bullous pemphigoid(BP)patients treated with rituximab.** Kim Edhegård, Arash Ronagh, Robert D Streilein, Deborah Hannah, Marc Levesque and Russell P Hall. Durham, NC and Pittsburgh, PA.
- 057 Preclinical anti-inflammatory activity and safety assessment of SIG990, a novel topical small molecule for the treatment of rosacea.** Eduardo Perez, Michael V Voronkov, Jose R Fernandez, Xuyan Feng, Karl Rouzard, Maxwell Stock, Joel S Gordon, Jeffry B Stock and Braham Shroot. Monmouth Junction, NJ and Princeton, NJ.
- 058 Differences in epitopes of non-pathogenic autoantibodies to desmoglein1 in pemphigus foliaceus in comparison with those in pemphigus vulgaris and rheumatoid arthritis.** Yumi Aoyama, Koji Kamiya, Osamu Yamasaki, Yoshinori Shirafuji, Toshihisa Hamada, Shin Morizane, Kazuyasu Fujii, Akiharu Kubo and Keiji Iwatsuki. Okayama, Japan and Tokyo, Japan.
- 059* NF- κ B blockade reduces hair follicle NKG2D ligand expression and susceptibility to lymphocyte attack revealing a novel therapeutic approach for alopecia areata.** Matthew S Hayden, Teruki Dainichi, Pallavi Singh, Yutaka Shimomura, Raphael Clynes, Angela M Christiano and Sankar Ghosh. New York, NY.
- 060 Murine alopecia areata immunopathogenesis is dominated by NKG2D positive CD8 T cells and NKG2D blockade protects hair follicles from cytolytic attack.** Luzhou Xing, Pallavi Singh, Claire Higgins, Sivan Harel, Angela M Christiano and Raphael Clynes. New York, NY.

- 061** **Interim analysis of the prevalence of the metabolic syndrome and cardiovascular risk factors in children with moderate to severe psoriasis compared with an age matched population of children with warts or acne vulgaris.** Shiu-chung Au, Eva Volf, Todd Kerensky, Nicole Dumont, Danielle Levine, Jeffrey Kuvin, Ari Goldminz, Ashley Sekhon, Kevin Hefferman, Eshan Patvardhan, Daniel Loo and Alice B Gottlieb. Boston, MA.
- 062** **Pemphigus vulgaris (PV) antibodies target PERP and several other keratinocyte membrane and mitochondrial proteins.** M Kalantari-Dehaghi, G J Anhalt, M J Camilleri, K M Leiferman, S Marchenko, M R Pittelkow, J J Zone and S A Grando. Irvine, CA; Baltimore, MD; Rochester, MN and Salt Lake City, UT.
- 063** **Myeloid cells, and not T cells, are the main source of TNF- α in plaque-type psoriasis.** Patrick M Brunner, Frieder Koszik, Madeleine Kalb, Baerbel Reininger, Irene Klein and Georg Stingl. Vienna, Austria.
- 064** **Autoimmune component of Grover's disease.** C Phillips, V Gindi, S Marchenko, A Chernyavsky, V Galitovskiy, D Paslin and S A Grando. Irvine, CA and San Francisco, CA.
- 065** **Blockade of the IL-17R with AMG 827 leads to rapid reversal of gene expression and histopathologic abnormalities in psoriatic skin, including substantial pathway-specific effects within one week.** Chris B Russell, Keith Kerkof, Jeannette Bigler, Martin Timour, Andrew A Welcher, Edgar Bautista, Inna Cueto, Artemis Khatcherian, James G Krueger, Hugh Rand and David A Martin. Seattle, WA and New York, NY.
- 066** **Withdrawn.**
- 067** **6-Sulfo-LacNAc (Slan) dendritic cells in psoriasis lesions.** Katherine C Pierson, Leanne M Johnson-Huang, Tim Lentini, Judilyn Fuentes-Duculan, Inna Novitskaya, James G Krueger and Michelle A Lowes. New York, NY.
- 068** **Cytokine-specific gene expression signatures identify high signaling by IL-17, TNF and IFN in lesional psoriatic skin and frequent underlying IL-17 signaling in non-lesional psoriatic skin.** Hugh Rand, Keith Kerkof, Jeannette Bigler, Martin Timour, Andrew Welcher, Yu Zhang, Jennifer Towne, David A Martin and Chris B Russell. Seattle, WA.
- 069** **Mechanistic studies on novel anti-inflammatory molecule used in the treatment of facial redness.** Sujatha Sonti, Rahul Mehta and Robert Holtz. Carlsbad, CA and Lakewood, CO.
- 070** **IgA and IgE anti-basement membrane antibodies together cause greater inflammation than either alone in a SCID mouse passive transfer model of Linear IgA Bullous Dermatosis (LABD).** Laurence J Meyer, Ted B Taylor, Linda A Schmidt, Christopher M Hull and John J Zone. Salt Lake City, UT.
- 071** **Prevention of post-inflammatory hyperpigmentation with a novel anti-inflammatory combination product.** Elizabeth Ho, Rahul Mehta and Sujatha Sonti. Carlsbad, CA.
- 072** **Perils of polypharmacy: Combination of statin and rosiglitazone generates paradoxical hyper-inflammation and tissue destruction.** Bryan W Doreian, Julie Rosenjack, Kevin D Cooper and Kurt Q Lu. Cleveland, OH.
- 073** **Absence of myeloid derived suppressor cells and activation of tumor blood vessels may underlie regression of keratoacanthomas.** William J Crisler, Ahmed Gehad, Chrysalyne D Schmults, Michael K Lichtman, Jessica E Teague, Rei Watanabe, Mitra Dowlatshahi, Thomas S Kupper and Rachael A Clark. Boston, MA.
- 074** **Comparing the effects of 9-cis UAB30, a novel rexinoid, and bexarotene on the rates of proliferation and apoptosis in human cutaneous T-cell lymphoma cell lines.** Zoe Verney, Venkatram Attigada, Craig Elmets, Donald Muccio, Clinton Grubbs and Pi-Ling Chang. Birmingham, AL.
- 075** **The PPAR γ paradox: Cellular mechanism regulating hyper-inflammatory macrophage generation.** Julie Rosenjack, Bryan W Doreian, Martha Cathcart, RoyL Silverstein, Kevin D Cooper and Kurt Q Lu. Cleveland, OH.
- 076** **Histone deacetylase activity is required for skin Langerhans cell homeostasis and function.** Rui-Qun Qi, Min Liu, Xing-Hua Gao, Hong-Duo Chen, Li Zhou and Qing-Sheng Mi. Detroit, MI and Shenyang, China.
- 077*** **Non-calcemic natural vitamin D analogue, 20(OH)D₃, protects mice from bleomycin induced scleroderma.** Arnold E Postlethwaite, Wei Li, Jianjun Chen, Duanne D Miller, Weikuan Gu, Yan Jiao and Andrzej Slominski. Memphis, TN.
- 078** **Automated detection and tracking of inflammatory acne lesions through digital imaging.** Gabriela O Cula, Paulo R Bargo and Nikiforos Kollias. Skillman, NJ.
- 079** **Sterol intermediates of cholesterol biosynthesis trigger an innate immune response in hair follicle cells and in cicatricial alopecia.** Taneeta Ganguly, Sreejith P Panicker, Mary C Consolo, Ali A Lattif, Kord Honda and Pratima Karnik. Cleveland, OH.
- 080** **The antidesmosomal autoantibody profile in fogo selvagem supports epitope spreading in disease pathogenesis.** Gustavo Flores, Donna A Culton, Bahjat Qaqish, Mike Maldonado, Phillip Prisayanh, Kirk James, Valeria Aoki, Gunter Hans, Evandro Rivitti and Luis A Diaz. Chapel Hill, NC; Sao Paulo, Brazil and Campo Grande, Brazil.
- 081*** **Soluble adenyllyl cyclase is necessary for IL-22-dependent keratinocyte proliferation.** Archana Vishwanath, Lonny Levin, Jochen Buck and Jonathan Zippin. New York, NY.
- 082** **Involvement of the EGFR in pemphigus vulgaris — an *in vitro* internalization study.** Mirjam M Nordling-David, Marina Frušić-Zlotkin, Beno Michel and Yoram Milner. Jerusalem, Israel and Cleveland, OH.
- 083** **Spontaneous resolution of a unilesional primary cutaneous CD8+ CD30+ lymphoproliferative disorder.** Sean W Carlson, Cynthia M Magro, Pierluigi Porcu and Henry K Wong. Columbus, OH and New York, NY.

Carcinogenesis and Cancer Genetics

All orals [designated with an asterisk (*)] listed below are presented in the Carcinogenesis and Cancer Genetics Minisymposium on Friday, May 6, 2011 from 2:00-5:30 p.m. in Grand Canyon 11-12. Orals designated by two asterisks (**) will be presented during a Plenary Session.

- 084** **Milk phospholipid's protective effects against UV damage in skin equivalent models.** Zyra Achay, Carl Dargitz, Michael Bingham, Elena Keeling and Lily Laiho. San Luis Obispo, CA.
- 085** **The role of KLF4 in UVB-induced murine skin tumor development and its correlation with cyclin D1, p53, and p21Waf1/Cip1 in epithelial tumors of the human skin.** Kwang Ho Kim, Sung Hwan Youn and Heung Yeol Kim. Anyang, South Korea.
- 086*** **The deacetylase SIRT1 regulates global genome nucleotide excision repair.** Mei Ming, Christopher R Shea, Xiumei Guo, Xiaoling Li, Keyoumars Soltani, Weinong Han and Yu-Ying He. Chicago, IL and Research Triangle Park, NC.
- 087** **EglN/PHD proteins and their role in control of hypoxia pathway in epidermal keratinocytes.** L Weir, D. Robertson, I M Leigh and A A Panteleyev. Dundee, United Kingdom.
- 088**** **Canonical polarity protein PKC iota/lambda regulates Shh signaling during hair follicle and basal cell carcinoma growth.** Scott X Atwood, Mischa Li and Anthony E Oro. Stanford, CA.
- 089** **Cell cycle mediates global DNA methylation in normal human keratinocytes.** John Wille and Jong Y Park. Chesterfield, NJ and Tampa, FL.
- 090*** **Differentially-expressed genes identified from patients with Langerhans cell histiocytosis.** Joanne L Selway, Paul M Seldon, Parvathy Harikumar, Kenneth Langlands and Anthony C Chu. Buckingham, United Kingdom and London, United Kingdom.
- 091*** **Voriconazole treatment plus UVB irradiation causes malignant transformation of human HaCaT keratinocytes.** Ricardo L Berrios, Abel Martin-Garrido, Michael Y Bonner, Brian P Pollack and Jack L Arbiser. Atlanta, GA and Decatur, GA.
- 092*** **Tumor derived nitric oxide suppresses the expression of CXCL10 and leads to the poor outcome of Stage III melanoma.** Keiji Tanese, Elizabeth Grimm and Suhendan Ekmekcioğlu. Houston, TX and Tokyo, Japan.
- 093*** **Reprogramming genes for induced pluripotent stem cells (iPSCs) reversed changes associated with epithelial-to-mesenchymal transition of skin cancer cells.** Mikiro Takaishi, Maki Yokogawa, Junji Takeda and Shigetoshi Sano. Nankoku, Japan and Saitama, Japan.

- 094* **Cross talk of melanoma cells and peritumoral fibroblasts influences melanoma proliferation: Regulation of hyaluronan synthesis in fibroblasts.** Ulf Anderegg, Anja Willenberg, Anja Saalbach and Jan C Simon. Leipzig, Germany.
- 095 **Definition of an "invasion signature gene set" at the leading edge of cutaneous squamous cell carcinoma (SCC) generated by laser capture microdissection (LCM).** Hiroshi Mitsui, Mayte Suárez-Fariñas, Kejal R Shah, Milène Kennedy, Erika Billick, Israel Coats, John A Carucci and James G Krueger. New York, NY.
- 096 **Role of PKC δ in maintenance of cancer stem cells.** Young Lee, Kyung-Cheol Sohn, Dae-Kyoung Choi, Myung Im, Young-Joon Seo and Jeung-Hoon Lee. Daejeon, South Korea.
- 097 **Initiation with DMBA metabolite bypasses requirement for Langerhans cell in two-stage chemical carcinogenesis.** Badrí Modi, Julia Lewis, Renata Filler, Peter Fu, Lining Cai, Adrian Hayday and Michael Girardi. New Haven, CT; Jefferson, AR; Monmouth, NJ and London, United Kingdom.
- 098* **HGF transactivates keratinocyte EGFR signaling, potentiates the tumorigenic phenotype of oncogenic ras-transduced keratinocytes *in vitro* and enhances skin carcinogenesis *in vivo*.** Fan Liu, Christophe Cataisson, Raza Zaidi, Glenn Merlino and Stuart H Yuspa. Bethesda, MD and Chevy Chase, MD.
- 099 **Topical tacrolimus treatment does not facilitate UV-induced carcinogenesis in a mouse model.** Takeo Shiga, Maki Yokogawa, Masahito Tarutani and Shigetoshi Sano. Nankoku, Japan.
- 100 **Hyperstimulation of mitogen signal pathways is responsible for dysregulated Laminin-332 expression in premalignant keratinocytes and squamous cell carcinoma.** Martin Degen, Patricia Barron, Hans Widlund and James G Rheinwald. Boston, MA.
- 101 **MicroRNA profiles in cutaneous squamous cell carcinomas: A personalized medicine approach.** Katherine A Gordon, Olivera Stojadinovic, Sonal Choudhary, Elizabeth Lebrun, Shari Jackson, Keyvan Nouri and Marjana Tomic-Canic. Miami, FL.
- 102 **Immunohistochemical demonstration of Z-DNA in the epidermal cells of human melanoma tissue.** Kayvan Beheshti, Claude E Gagna and W Clark Lambert. Old Westbury, NY and Newark, NJ.
- 103 **Lysate from cultured fetal fibroblast for skin rejuvenation: Composition and *in vitro* activities.** Jürgen Eberle, Frank Dreher and Eggert Stockfleth. San Francisco, CA and Berlin, Germany.
- 104 **ADAMTS-12: A biomarker for nonmelanoma skin cancer disease progression.** Lisan S Peng and Suzanne Regan. Tucson, AZ.
- 105 **The role of transcription factor RBP-J-mediated signaling in basal cell carcinoma growth.** Mei Yu, David Zloty, Robert H Bell, Anne Haegert, Nicholas Carr, Jerry Shapiro, Bryce Cowan, Larry Warshawski and Kevin J McElwee. Vancouver, Canada.
- 106 **A genetic appraisal of the frequency of functional RET G691S polymorphism in the pure versus the mixed variants of desmoplastic melanoma.** Shi Yang, Andrew Emley, April Deng, Mai P Hoang and Meera Mahalingam. Boston, MA and Worcester, MA.
- 107 **CXCR3/ligand signaling is important for the development of non-melanoma skin cancer keratinocytes.** Blanche K Lo, Nicole Tai, Li-Hao Chen, Youwen Zhou, David Zloty, Bryce Cowan, Jerry Shapiro and Kevin J McElwee. Vancouver, Canada.
- 108 **Expression of epidermal growth factor receptor (EGFR) and detection of mutant EGFR (EGFRvIII) in human cutaneous squamous cell carcinoma.** M. DeMara, N. Duncan, S. Wong, M. Neuburg, Z. Lazarova and E B Olasz. Milwaukee, WI.
- 109 **Induction of chemokine receptor CXCR4 expression by transforming growth factor- β 1 in human basal cell carcinoma cells.** Shiou-Hwa Jee, Chia-Yu Chu, Shih-Ting Cha, Yeh-Fang Hu, Hsien-Ching Chiu and Min-Liang Kuo. Taipei, Taiwan.
- 110 **Inhibition of vascular endothelial growth factor receptor 3 ligands inhibits tumor development in a model of multistep skin carcinogenesis.** Annamari K Alitalo, David Aebscher, Nicole Schneider, Reto Huggenberger and Michael Detmar. Zurich, Switzerland.
- 111 **Glycolipid O-acetylation drives human squamous cell carcinoma proliferation and survival via EGFR/Ras-independent activation of PKC α and Akt signaling.** Xiao-qí Wang, Amrita Aurora, Hristo Iordanov, Nandita Gatla, Daniel Bach, Evelyn Angulo and Amy S Paller. Chicago, IL.
- 112 **In-situ expression of fas apoptotic pathway proteins in archival samples of cutaneous t-cell lymphoma (ctcl), cutaneous anaplastic large cell lymphoma (alcl) and lymphomatoid papulosis (lyp).** Nathalie Stutz, Ryan D Johnson and Gary S Wood. Madison, WI.
- 113 **Akt inhibits autophagy through Beclin 1 phosphorylation and formation of a Beclin 1/keratin intermediate filament complex.** Richard C Wang, Yongjie Wei and Beth Levine. Dallas, TX.
- 114* **Relation between DNA damage accumulation, reactive oxygen species, and metabolism alteration during carcinogenesis.** Hamid R Rezvani, Arianna Kim, Hubert D Verneuil, Alain Taieb, David Bickers and Frederic Mazurier. Bordeaux, France and New York, NY.
- 115 **The developmental factor IRF6 exhibits tumor suppressor activity in squamous cell carcinomas.** Giulia Spallone, Elisabetta Botti, Francesca Moretti, Barbara Marinari, Valentina Pinetti, Sergio Chimenti, Maurizio Fanciulli, Giovanni Blandino, Luisa Guerrini and Antonio Costanzo. Roma, Italy and Milano, Italy.
- 116 **Senescence in human basal cell carcinoma.** Muhammad S Pirzado, M M Rahman, Jane Elliott, R Cerio, G W Neill and M P Philpott. London, United Kingdom.
- 117 **Aberrant regulation of keratinocyte migration by intracellular protein O-glycosylation in the A431 squamous cell carcinoma cell line.** Meryem Bektaş and David Rubenstein. Chapel Hill, NC.
- 118 **An animal explant model for the study of human cutaneous squamous cell carcinoma (SCC).** Daniel A Belkin, Jie Chen, Jonathan L Mo, Dix P Poppas, James G Krueger, Diane Felsen and John A Carucci. New York, NY.
- 119 **Immunosuppressive surface protein CD200 is up-regulated in the dermal microenvironment of cutaneous squamous cell carcinoma (SCC).** Daniel A Belkin, Hiroshi Mitsui, Mayte Suárez-Fariñas, Claire Q Wang, Kejal R Shah, Israel Coats, James G Krueger and John A Carucci. New York, NY.
- 120 **Catalase potentiates a sex discrepancy in myeloid-derived suppressor cell expansion in a mouse model of ultraviolet light-induced skin cancer.** Nicholas J Sullivan, Kathleen L Tober, Erin Burns, Jonathan Schick, Judith Rigganbach, Matthew Bill, Gregory Young, Tatiana M Oberyszyn and Gregory B Lesinski. Columbus, OH.
- 121 **Platelet derived growth factor (PDGF) directly binds to integrins and this interaction plays a role in PDGF signaling.** Parastoo Davari, Tiffany J Dickerson, Yoko K Takada and Yoshikazu Takada. Sacramento, CA.
- 122 **Regulation of FAS expression in cutaneous T-Cell lymphoma.** Jianqiang Wu and Gary S Wood. Madison, WI.
- 123 **The p38 mitogen-activated protein kinase isoforms p38 β and p38 δ are essential *in vivo* regulators of mouse skin carcinogenesis.** Aaron C Koppel, Congxing Lin, Carole Burns, Erin Gribben, Joanna Anders, Christophe Cataisson, Stuart H Yuspa, Grace E Kissling, Miroslav Blumenberg, J Simon C Arthur and Tatiana Efimova. St. Louis, MO; Bethesda, MD; Research Triangle Park, NC; New York, NY and Dundee, United Kingdom.
- 124* **An inflammatory response in the Δ Np63 transgenic mice reveals a pro-tumorigenic role for Δ Np63.** Rose-Anne Romano and Satrajit Sinha. Buffalo, NY.
- 125 **Intact p53 functionality in murine basal cell carcinomas in ionizing radiation-treated Ptch1 $+/+$ mice.** Grace Y Wang, Lynn Wang, Joy Wang, Eileen Libove and Ervin H Epstein. Oakland, CA.
- 126* **Fusion of the melanoma gene, p14arf on 9p, to a translocation hotspot in a gap in 22q in a patient with melanoma, deafness and DNA repair deficiency, is a negative regulator of p14arf and TBX1.** Xiao-Hui Tan, Sarah L Anzick, Sikandar G Khan, Takahiro Ueda, Gary Stone, John J DiGiovanna, Deborah Tamura, Daniel Wattendorf, Carmen Brewer, Chris Zalewski, Robert Walker, Andrew Griffith, John Butman, Paul Meltzer, Paul Bergstresser and Kenneth H Kraemer. Bethesda, MA; Tokyo, Japan; Bethesda, MD; Washington, DC and Dallas, TX.
- 127 **Expression of p53, smooth muscle actin and c-kit in dermatofibrosarcoma protuberans and evaluation of correlation with clinical features.** Minji Kim, Kwang Hyun Cho, Jong Hee Lee, Mee Soo Chang and Soyun Cho. Seoul, South Korea.

- 128 **The squamous cell carcinoma transcriptome defined by high-throughput sequencing (RNA-seq).** Liming Luan and Thomas Andl. Nashville, TN.
- 129 **High throughput RNA sequencing of Sezary syndrome and cutaneous squamous cell carcinoma.** Cari Lee, Kun Qu, Daniel Webster, Markus Kretz, Angela Mah, Alex Ungewickell, Randy Armstrong, Wen-Kai Weng, Youn Kim, Howard Chang and Paul Khavari. Palo Alto, CA.
- 130 **Chemokine receptor CXCR4 is a novel marker for the progression of skin cancer.** Seiko Toyozawa, Yuki Yamamoto, Chikako Kaminaka, Tomoo Kishi, Yasushi Nakamura and Fukumi Furukawa. Wakayama, Japan.
- 131 **MicroRNA-21 is an important downstream component of BMP signaling in skin epithelial cells.** Mohammed I Ahmed , Andrei N Mardaryev , Andrey A Sharov and Natalia V Botchkareva. Bradford, United Kingdom and Boston, MA.
- 132* **Interferon- γ /STAT1-signaling determines whether T cells promote or arrest carcinogenesis.** Sonja Fischer, Thomas Wieder, Heidi Braumüller, Ellen Brenner, Wolfgang Kempf and Martin Röcken. Tuebingen, Germany.
- 133 **Shh and Akt1 signaling pathways converge through mammalian target of rapamycin (mTOR) signaling to drive the growth of BCCs.** Jungho Back, Yucui Zhu, Xiuwei Tang, Mohammad Athar, Arianna L Kim and David R Bickers. New York, NY and Birmingham, AL.
- 134 **Modeling the consequences of EGFR ablation therapy in squamous cancer by gene expression profiling of oncogenically transformed mouse keratinocytes.** Lisa N Wright, Yosef Riss, Andrew Ryscavage and Stuart H Yuspa. Bethesda, MD.
- 135 **Mode of T cell administration determines homing sites of tumor-associated-antigen (TAA)-specific Th1 cells to the tumor site and treatment success.** Christoph M Griessinger, Andreas Schmid, Daniel Bukala, Kerstin Fuchs, Heidi Braumüller, Susanne Kaesler, Tilo Biedermann, Bernd J Pichler, Martin Röcken and Manfred Kneilling. Tuebingen, Germany.
- 136 **Identification of mediators of immune evasion in a modular mouse model of squamous cell carcinoma.** David W Dwyer, Marco L Leung, Trellis B Thompson and Kenneth Y Tsai. Houston, TX.
- 137 **Sirt1 histone deacetylase (HDAC) is increased in cutaneous t-cell lymphoma (CTCL) and its inhibition induces apoptosis.** Minakshi Nihal, Nihal Ahmad and Gary S Wood. Madison, WI.
- 138 **The desmosomal cadherin desmoglein 1 regulates differentiation of head and neck squamous cell carcinoma cells.** B V Desai, V Todorovic, J Chen, D M Sweeney, C A Franzen, D B Solt, J E Koblinski, J C Pelling and K J Green. Chicago, IL.
- 139 **Inhibition of PI3K/AKT/mTOR pathway in human melanoma cells with induction of autophagy and decreased tumor growth both *in vitro* and *in vivo* by a dietary flavonoid fisetin.** Deeba N Syed, Vaqar M Adhami, Jean Christopher Chamcheu and Hasan Mukhtar. Madison, WI.
- 140* **Srcasm induces regression of pre-existing squamous cell carcinomas in K14-Fyn Y528F mice.** Xiaoping Yang, Hiroyuko Nishida, Liang Zhao, Christine Marshall, Tzvete Dentchev and John Seykora. Philadelphia, PA.
- 141* **IL-17 receptor A deficient mice are resistant to chemical carcinogen induced cutaneous tumors.** Donggou He, Hui Li, Nabiha Yusuf, Craig A Elmets, Mohammad Athar, Santosh Katiyar, Jun Li, John Mountz and Hui Xu. Birmingham, AL.
- 142 **Bioinformatics characterization of Z-DNA in the genes of human epidermis with melanoma.** Kayvan Beheshti, Claude E Gagna, Nick Agostino, Nina A Bhagat, Richard Leston, Aiesha Hicks, Reeba Joy, Samuel Franck Hde Tene and W Clark Lambert. Old Westbury, NY; Newark, NJ and Teaneck, NJ.
- 143* **Oncogene addiction to Merkel cell polyomavirus large T antigen in Merkel cell carcinoma.** Monique E Verhaegen, Christopher K Bichakjian, Melissa Voutsalath, Jack Weick, Paul Baciu, Elsa Quintana, Tracy D Stromer, Joanna Pero, Kevin T Nash, Angelo E Ayar, Timothy M Johnson and Andrzej A Dlugosz. Ann Arbor, MI.
- 144 **Whole genome (exome) sequencing of xeroderma pigmentosum patients reveals a finite and distinct pattern of mutations in pathophysiological relevant genes.** Peter Bauer, York Kamenisch, Claudia Bauer, Martin Röcken, Olaf Riess and Mark Berneburg. Tuebingen, Germany.
- 145 **The anti-motility signaling mechanism by transforming growth factor- β (TGF β) in human dermal fibroblasts during wound healing.** A Han, B Bandyopadhyay, J Fan, M Chen, D Woodley and W Li. Los Angeles, CA.
- 146 **MAGE proteins direct KAP-1 mediated gene suppression and mediate KRAB zinc finger transcription factor (KZFTF) binding and ubiquitination.** Tony Z Xiao, Neehar Bhatia, Raul Urrutia, Gwen A Lomberk, Andrew Simpson and Jack Longley. Madison, WI; Rochester, MN and New York, NY.
- 147 **Analysis of gene copy number variation and expression in cutaneous T-cell lymphoma cell lines.** William Lin, Badri Modi, Julia Lewis, Renata Filler and Michael Girardi. New Haven, CT.
- 148 **Human basal cell carcinoma demonstrate both outer and inner root sheath differentiation.** Antisar Beneketh, Ilario Siciliano , Paul E Bowden, Chantal Colmont and Girish K Patel. Cardiff, United Kingdom.
- 149* **Engineered dendritic cell (DC)- or DNA-based vaccines raise immune responses to a carcinogen-induced point mutation of the H-ras oncogene that protects against tumor development.** Kyle Rudemiller, Tahseen Nasti, George Twitty, Hee Kyung Kim, Angel Rivera, Justin Roth, Aton Holzer, Yuko Tsruta, Nabiha Yusuf, Mohammad Athar , Craig Elmets and Laura Timares. Birmingham, AL.
- 150 **SerpinA1: A novel biomarker for progression of cutaneous squamous cell carcinoma.** Mehdi Farshchian, Atte Kivilahti, Risto Ala-aho, Pilvi Riihilä, Markku Kallajoki, Reidar Grénman, Juha Peltonen, Taina Pihlajaniemi, Ritva Heljasvaa and Veli-Matti Kähäri. Turku, Finland and Oulu, Finland.
- 151 **Real-time cell cycle imaging: Melanomas are composed of differentially cycling tumor cells in a subcompartment-specific distribution.** Nikolas K Haass, Andrea Anfosso, Ichiko Kinjyo, Osami Kanagawa and Wolfgang Weninger. Sydney, Australia and Yokohama City, Japan.
- 152 **Rapamycin augments the chemopreventive effects of sulindac and suppresses UVB-induced cutaneous photocarcinogenesis in Ptch^{+/−} hairless mice.** Sandeep C Chaudhary, Deepali Kurundkar, Tripti Singh, Zhiping Weng, Craig A Elmets, Levy Kopelovich and Mohammad Athar. Birmingham, AL and Bethesda, MD.
- 153 **Merkel cell polyomavirus large T antigen impairs DNA repair and cell cycle arrest following DNA damage.** Stephanie K Demetriou, Erin M Sullivan, Tiffany K Dong and Dennis H OH. San Francisco, CA.
- 154 **Oncogenic activity of dysregulated ΔNp63 α in squamous carcinogenesis.** Linan Ha, Kathryn E King, Roshini M Ponnamperuma, Steven Jay, Stacey Ricci and Wendy C Weinberg. Bethesda, MD and Frederick, MD.
- 155 **Endothelin-3 and bFGF jointly induce the proliferation of normal human melanocytes in defined media and increase synthesis of chemokines that are linked to melanoma progression.** Claire Q Wang, Hiroshi Mitsui, Mayte Suarez-Farinias, Nicholas Gulati, Juana Gonzalez, Erika Billick and James G Krueger. New York, NY.
- 156 **Liver kinase B1 in the pathogenesis of UVB-induced murine basal cell carcinoma.** Yevgeniya A Byekova, Jennifer L Herrmann, Jianmin Xu, Craig A Elmets and Mohammad Athar. Birmingham, AL.
- 157 **Amphiregulin precursor controls cell-cycle regulatory gene expression in human keratinocytes.** Stefan W Stoll, Laure Ritté, Sylviane Lambert, Madhu Prasad, Johann E Gudjonsson, Bingshan Li, Yuan Wei, Gonçalo Abecasis, Philip E Stuart, Rajan P Nair and James T Elder. Ann Arbor, MI.
- 158 **Inhibitor specificity of MAPK, JAK3/STAT and mTOR signaling pathways in Kit^{VS60G} and Kit^{DS16V} mutations found in mastocytosis.** I Ja Chan and Michael D Tharp. Chicago, IL.
- 159 **Investigating the immunomodulatory properties of cutaneous squamous cell carcinoma stem cells.** Bradley J Kubick and Dennis R Roop. Aurora, CO.
- 160 **Novel glucocorticoid receptor modulator compound A inhibits skin inflammation and hyperplasia.** Anna Klopot, Gleb Baida and Irina Budunova. Chicago, IL.
- 161 **Interplay between the epidermal differentiation transcription factor Grhl3/Get1 and microRNA miR-21.** Ambica Bhandari, Diana Dizon, William Gordon, Amelia Soto Hopkin and Bogi Andersen. Irvine, CA.

- 162 Genotoxicity testing of topically applied skin care and dermatology products using the normal human cell based skin model EpiDerm™.** Yulia Kaluzhny, Patrick Hayden, Viktor Karetsky, Jane DeLuca, Seyoum Ayehunie and Mitchell Klausner. Ashland, MA.
- 163 Biophotometric analysis reveals that self-perpetuating focal areas of hyperemia invariably precede cutaneous neoplasia and are suppressed by topical celecoxib treatment.** Raymond L Konger, Ravi P Sahu, Zhengbin Xu and Young L Kim. Indianapolis, IN and West Lafayette, IN.
- 164 Combined inhibition of sonic hedgehog (shh) and nuclear factor κB (NFκB) signaling pathways in the prevention of basal cell carcinomas (BCCs).** Aadithya Arumugam, Zhiping Weng, Levy Kopelovich and Mohammad Athar. Birmingham, AL and Bethesda, MD.
- 165 Digital transcriptome subtraction for pathogen sequence detection and gene expression profiling in CTCL.** Ezra D Mirvish, Huichen Feng, Rebecca G Pomerantz, Louis D Falo, Yuan Chang, Patrick S Moore and Larisa J Geskin. Pittsburgh, PA.
- 166 Quantitative immunohistochemistry of cutaneous metastatic breast carcinoma.** Matthew Elgart, Catherine Welsh and Evangelos V Badiavas. Miami, FL.
- 167 Somatic alterations in mtDNA trigger changes in CCL20 expression promoting tumorigenic phenotypes.** Jana Jandova, Jaroslav Janda and James E Sligh. Tucson, AZ.
- 168 Disease stage-related decreases in distinct superantigen-related T cell receptor-V β s in cutaneous T-cell lymphoma.** Rebecca G Pomerantz, Ezra D Mirvish, Timothy J Patton, Louis D Falo and Larisa J Geskin. Pittsburgh, PA.
- 169 Basal cell carcinoma tumor subtype is defined by its cell of origin.** Marina Grachchouk, Joanna Pero, Alexandre N Ermilov, Lowell E Michael, Dawn Wilbert, Scott Lim and Andrzej A Dlugosz. Ann Arbor, MI.
- 170 Blockade of mTOR-dependent phosphorylation of Sirtuin 1 prevents escape from premature senescence.** Arianna L Kim, Jungho Back, Yucui Zhu and David R Bickers. New York, NY.
- 171 MtDNA mutations alter intracellular ROS levels in fibroblasts resulting in cellular hyperproliferation.** Jana Jandova, Jaroslav Janda and James E Sligh. Tucson, AZ.
- 172 Disruption of lipid rafts induces EGFR signaling in hair follicle cells and in cicatricial alopecia.** Ali A Lattif, Sreejith P Panicker, Taneeta Ganguly, Mary C Consolo and Pratima Karnik. Cleveland, OH.
- 173 Phosphatidylinositol 3-kinase enhancer is required for the proliferative action of epidermal growth factor in squamous cell carcinoma cells.** Zhongjian Xie, Yi Jiang, Er-Yuan Liao, Ying Chen and Sally Pennypacker. San Francisco, CA; Changsha, China and Beijing, China.
- 174 MAGE-C2 promotes tumor growth, DNA damage repair, and phosphorylation of KAP-1.** Neehar Bhatia, Saravanan Thiagarajan, Tony Z Xiao, Mark R Albertini and Jack B Longley. Madison, WI.
- 175 Disease-specific spectrum of mutations in TGFBR1 causing multiple self-healing squamous epithelioma (Ferguson-Smith disease).** David Goudie, Mariella D'Alessandro, Barry Merriman, Hane Lee, Ildiko Szeverenyi, Stuart Avery, Brian O'Connor, Stanley Nelson, Stephanie Coats, Arlene Stewart, Lesley Christie, Gabriella Pichert, Jean Friedel, Ian Hayes, Nigel Burrows, Sean Whittaker, Anne-Marie Gerdes, Sigurd Broesby-Olsen, Malcolm A Ferguson-Smith, Chandra Verma, Declan P Lunny, Bruno Reversade and Birgitte Lane. Dundee, United Kingdom; Los Angeles, CA; Singapore, Singapore; London, United Kingdom; Chalon-sur-Saône, France; Auckland, New Zealand; Cambridge, United Kingdom; Copenhagen, Denmark and Odense, Denmark.

Cell Adhesion/Matrix and Vascular Biology

All orals [designated with an asterisk (*)] listed below are presented in the Cell Adhesion/Matrix and Vascular Biology Minisymposium on Saturday, May 7, 2011 from 12:30-4:00 p.m. in Wildflower A, JW Marriott Desert Ridge. Orals designated by two asterisks (***) will be presented during a Plenary Session.

- 176* The DSPII splice variant is critical for desmosome-mediated HaCaT keratinocyte adhesion.** Rita M Cabral, Daniel Tattersall, Vishal Patel, Elizabeth Hatzimasoura, Dominic J Abrams, Andrew P South and David P Kelsell. London, United Kingdom and Dundee, United Kingdom.
- 177 Regulation of PDGF receptor β signaling in pericytes by MFG-E8.** Sei-Ichi Motegi, Susan Garfield and Mark C Udey. Bethesda, MD.
- 178 Matrix metalloproteinase-8 is involved in dermal nerve growth: Implications for possible application to pruritus from *in vitro* models.** Mitsutoshi Tominaga and Kenji Takamori. Urayasu, Japan.
- 179 Establishment of the Matrigel plug assay in domestic pig skin to investigate intra-dermal angiogenesis.** Josef G Meingassner, Manuela Pillinger, Hermann Fahrmgruber, Elisabeth Kowalsky and Anton Stuetz. Vienna, Austria.
- 180* Calcium-induced cell-cell adhesion and differentiation in human epidermal keratinocytes require Rho-GEF Trio and filamin A.** Chia-Ling Tu, Michael You and Daniel D Bikle. San Francisco, CA.
- 181* Ectodomain shedding of LYVE-1 in psoriasis: VEGF-A induces the biochemical cleavage in lymphatic vessels.** Satoshi Hirakawa, Hisayo Nishida-Fukuda, Ryoichi Araki, Xiuju Dai, Yasushi Hanakawa, Koji Sayama, Yuji Shirakata, Mikiko Tohyama, Michael Detmar, Koji Hashimoto, Shigeki Higashiyama and Yoshiki Tokura. Hamamatsu, Japan; Toon, Japan and Zurich, Switzerland.
- 182* Desmosomal cadherins utilize distinct mechanism for assembly into desmosomes.** Oxana Nekrasova, E Amargo and K J Green. Chicago, IL.
- 183 Characterizing the collagenolytic activity of rHuCathepsin L and rHuMMP1 for the development of potential treatments of fibrotic skin conditions.** Rudolph D Paladini, Ge Wei, Anirban Kundu, Qiping Zhao, Panneer Selvam, H Michael Shepard, Gregory I Frost and Gilbert A Keller. San Diego, CA.
- 184 Bacterial challenge on percutaneous implants.** Ge Alice Zhao, Robert Underwood, Marcia Usui, Marshall Andrew, John Olerud and Philip Fleckman. Seattle, WA.
- 185 Implication of dermatopontin and decorin in dermal fibers organization and preservation from UV stress.** Ludivine Mur, Chrystelle Plaza, Gopinathan Menon, Jean Marie Botto, Claude Dal Farra and Nouha Domlogé. Sophia Antipolis, France and Wayne, NJ.
- 186 Differential effects of glucocorticoid treatment on inflammatory changes of cutaneous lymphatic and blood vessels.** Reto Huggenberger, Karina Messmer, Shoib S Siddiqui, Martin M Schulz and Michael Detmar. Zurich, Switzerland.
- 187 Vascularization of human acellular dermis on chick chorioallantoic membrane.** P Blasi, M Andreassi, L Barberini, A Schoubben, P Alberti, M Ricci, C Anselmi, C Cirotto, C Rossi and L Andreassi. Perugia, Italy and Siena, Italy.
- 188* Ephrins promote the EphA2-EphA1 transition to regulate epidermal differentiation.** Samantha Y Lin, Kristin Gordon, Hanz Blatt, Nihal Kaplan, Robert M Lavker and Spiro Getsios. Chicago, IL.
- 189 Possible role of a multi-domain adaptor protein, ArgBP2, in the tight junction maintenance of epithelial cells.** Kana Murase, Hidenori Ito, Kaori Sudo, Ikuko Iwamoto, Rika Morishita, Hiroyuki Kanoh, Mariko Seishima and Koh-ichi Nagata. Gifu, Japan and Kasugai, Japan.
- 190 Action of skincare active ingredients on actin and matrix contraction in dermal and epidermal structures *ex vivo*.** Elian Lat, Françoise Arnold, Chloe Merle, Laurent Peno-Mazzarino, Philippe Gasser and Michel Mercier. Longjumeau, France; Issy les Moulineaux, France and South Plainfield, NJ.
- 191 Novel properties of a well-known molecule: Urea stimulates collagen production by human dermal fibroblasts.** Susanne Grether-Beck, Felsner Ingo, Heidi Brenden, Alessandra Marini, Thomas Jaenicke, Carles Trullas, Peter M Elias, Marina Rodriguez-Martin and Jean Krutmann. Duesseldorf, Germany; Barcelona, Spain and San Francisco, CA.

- 192* **Antagonizing the effects of pemphigus IgG by manipulating intracellular protein O-glycosylation.** Paula Berkowitz and David Rubenstein. Chapel Hill, NC.
- 193* **MMP2-null mice are less susceptible to pemphigus foliaceus induction.** Ning Li, Zhi Liu, Lisa Heinbach, Moonhee Park, Robert Senior and Luis A Diaz. Chapel Hill, NC and St. Louis, MO.
- 194* **Elucidation of the molecular mechanisms underlying inversa type of recessive dystrophic epidermolysis bullosa using site-directed mutagenesis.** Y Hou, J Cogan, E Cua, S Lee, D Woodley and M Chen. Los Angeles, CA.
- 195** **The role of desmocollin 3 in skin tumor development and progression.** Jiangli Chen, Charlene O'Shea, James E Fitzpatrick, Marankel Koster and Peter J Koch. Aurora, CO.
- 196* **Loss of type VII collagen in squamous cell carcinoma leads to increased invasion and TGF-beta signalling *in vivo*.** Vera Martins, Kate Moore, Mei Chen, John Marshall and Edel A O'Toole. London, United Kingdom and Los Angeles, CA.
- 197* **Expression of catalytically active Matrix Metalloproteinase-1 in dermal fibroblasts induces morphological and functional alterations that mimic aged human skin.** Wei Xia, Craig Hammerberg, Yong Li, John J Voorhees and Gary J Fisher. Ann Arbor, MI.
- 198* **Elevated Cysteine-rich protein 61 (CYR61/CCN1) mediates down-regulation of collagen expression in senescent human dermal fibroblasts.** Taihao Quan, Zhaoping Qin, Tianyuan He, John J Voorhees and Gary J Fisher. Ann Arbor, MI.
- 199* **Fibronectin is a negative regulator of keratinocyte migration.** Kevin J Hamill, Susan B Hopkinson, Paul Hoover, Viktor Todorovic, Kathleen J Green and Jonathan C Jones. Chicago, IL.
- 200* **The desmosomal protein plakophilin 2 is required for proper extracellular matrix attachment and keratinocyte differentiation.** Evangeline V Amargo, Jennifer L Koetsier, Jodi L Johnson, Viktor Todorovic, Kathleen J Green and Lisa M Godsel. Chicago, IL.
- 201 **Increasing insulin resistance correlates with progressive skin damage in murine models of obesity and diabetes.** Amgad Al-Habian, Mohamed S Zaibi, Claire J Stocker, Malgosia A Kepczynska, Edward T Wargent, Michael A Cawthorne and Kenneth Langlands. Buckingham, United Kingdom.
- 202* **The MAPKAP kinase MK2 regulates desmoglein 3 endocytosis by pemphigus vulgaris autoantibodies.** Xuming Mao and Aimee S Payne. Philadelphia, PA.
- 203* **MtDNA changes alter murine fibroblasts migration and invasiveness by inducing the expression of the matrix metalloproteinase 9 (MMP-9), an effect mediated by NF- κ B.** Jaroslav Janda, Jana Jandova and James E Sligh. Tucson, AZ.
- Epidemiology and Health Services Research**
- All orals [designated with an asterisk (*)] listed below are presented in the Epidemiology and Health Services Research Minisymposium on Friday, May 6, 2011 from 2:00-5:30 p.m. in Grand Canyon 9-10, JW Marriott Desert Ridge. Orals designated by two asterisks (**) will be presented during a Plenary Session.
- 204* **Hemoglobin a1c predicts healing rate in diabetic wounds.** Andrea L Christman, Elizabeth Selvin, Gerald S Lazarus and Luis A Garza. Baltimore, MD.
- 205** **Oral prednisone use and risk of keratinocyte carcinoma: The VA topical tretinoin chemoprevention trial.** Akerke T Baibergenova and Martin A Weinstock. Toronto, Canada; Providence, RI and Providence, RI.
- 206* **Patients with psoriasis are at an increased risk of diabetes - a population based study.** Nicole M Seminara, Rahat S Azfar, Daniel B Shin, Andrea B Troxel, David J Margolis and Joel M Gelfand. Philadelphia, PA.
- 207 **Dermatologist preferences for first-line therapy of moderate-to-severe psoriasis in healthy adults.** J Wan, K Abuabara, A B Troxel, D B Shin, A S Van Voorhees, B F Bebo, G G Krueger, K Callis Duffin and J M Gelfand. Philadelphia, PA; Portland, Oregon and Salt Lake City, UT.
- 208* **Calcium plus vitamin D supplementation and the risk of nonmelanoma and melanoma skin cancer.** Teresa Fu, Jean Y Tang, Erin LeBlanc, JoAnn E Manson, David Feldman, Joe Larson, Eleni Linos, Mara Z Vitolins, Nathalie C Zeitouni and Marcia L Stefanick. Redwood City, CA; Portland, OR; Boston, MA; Seattle, WA; Buffalo, NY and Winston-Salem, NC.
- 209* **Menopausal hormones and skin cancer risk in postmenopausal women: The women's health initiative hormone therapy trials.** Katrina M Spaunhurst, Jean Y Tang, Elizabeth Keiser, Matthew L Anderson, Rowan T Chlebowski, Joseph C Larson, Judith Ockene, Fridtjof Thomas, Jean Wactawski-Wende, Nathalie Zeitouni and Marcia L Stefanick. Stanford, CA; Los Angeles, CA; Worcester, MA; Houston, TX; Seattle, WA; Buffalo, NY and Memphis, TN.
- 210* **Validation of the AJCC staging system for cutaneous squamous cell carcinoma and a proposed refinement to improve prognostic discrimination.** Anokhi Jambusaria, Peter Kanetsky, Wei-Ting Hwang, Joel Gelfand, Faith Whalen, Rosalie Elenitsas, George Xu and Chrysalyne Schmults. Philadelphia, PA; Jamaica Plain, MA and Danville, PA.
- 211* **Psoriasis is associated with an increased prevalence of metabolic syndrome that varies directly with objectively measured severity.** Sinead Langan, Nicole Seminara, Daniel Shin, Andrea Troxel, Stephen Kimmel, Nehal Mehta, David Margolis and Joel Gelfand. Philadelphia, PA.
- 212* **Patient-centered online model for follow-up management of psoriasis: A randomized controlled trial.** Cindy J Chambers, Kory Parsi, Clayton Schupp and April W Armstrong. Sacramento, CA.
- 213 **Early UV exposure and risk of multiple non-melanoma skin cancers in U.S. men and women.** Erin X Wei, Jiali Han, Tricia Li and Abrar A Qureshi. Boston, MA.
- 214 **Chickenpox in childhood suppresses atopy and production of immunoglobulin E.** Jonathan I Silverberg, Edward Kleiman, Nanette B Silverberg, Helen G Durkin, Rauno Joks and Tamar Smith-Norowitz. New York, NY and Brooklyn, NY.
- 215 **The severity of pediatric psoriasis correlates with risk of obesity: An international multi-center controlled assessment.** Anne Mahoney, Latanya Benjamin, Candrice Heath, Shields Callahan, Caroline Robinson, Alan Menter, Kelly M Cordoro, Giampiero Girolomoni, Wynnis Tom, Siew Eng Choon, Sapna Patel, Mary Kwasny, Alfred Rademaker and Amy S Paller. Chicago, IL; Dallas, TX; Johor Bahru, Malaysia; San Francisco, CA; Verona, Italy and San Diego, CA.
- 216* **A prospective study of physical activity and risk of incident psoriasis in women.** Hillary C Frankel, Jiali Han, Tricia Li and Abrar A Qureshi. Boston, MA.
- 217 **Contribution of nodular subtype to overall melanoma mortality.** W R Shaikh, M Xiong and M A Weinstock. Providence, RI.
- 218 **Negative psychological impact of striae gravidarum.** K Korgavkar, Y Helfrich, H Chubb, J J Voorhees, G J Fisher and F Wang. Ann Arbor, MI.
- 219 **Increased dermatologist density associated with reduction in melanoma mortality.** Savina Aneja, Sanjay Aneja and Jeremy S Bordeaux. Cleveland, OH and New Haven, CT.
- 220 **Psoriasis and risk of hypertension in US women.** April W Armstrong, Jiali Han, Tricia Li, John P Forman and Abrar A Qureshi. Sacramento, CA and Boston, Massachusetts.
- 221 **An age estimation study using spatial frequency analysis on digital images of Japanese women's faces.** Akihiro Tada, Sakura Inoue Torii, Mariko Hayashi, Miho Ohata and Kazuhiro Yamazaki. Yokohama, Japan and Kobe, Japan.
- 222 **Not so positive: Optimism and public self-consciousness were not associated with the placebo response in a rosacea trial.** Marisa Kardos, Geurim Kim, Anne Lynn S Chang and Alexa B Kimball. Boston, MA and Redwood City, CA.
- 223* **Pathway analysis for genome-wide association study of basal cell carcinoma.** Mingfeng Zhang, Liming Liang, Abrar A Qureshi and Jiali Han. Boston, MA.
- 224* **An analysis of the characteristics of initial and second primary melanomas using data from the Surveillance, Epidemiology, and End Results (SEER) Program.** Michael E Ming and Daniel B Shin. Philadelphia, PA.



- 225 Treating patients with psychocutaneous disease in the outpatient dermatology setting. The results of a survey.** Sarah N Gee, Lisa Zakhary, Daniela Kroshinsky and Alexandra B Kimball. Boston, MA.
- 226 Indoor tanning is associated with increased utilization of skin cancer screening by patients otherwise at low risk for skin cancer.** Aaron Secret, Ryan Andrulonis, Timothy Patton, Lisa Grandinetti and Laura K Ferris. Pittsburgh, PA.
- 227 Smoking in psoriasis patients may lessen risk of psoriatic arthritis development and delay age of onset.** Daniel Zaghi, Tina R Nandi, Brian Sauer, Greg Stoddard, Bingjian Feng, Jessica Walsh, Bob Wong, Jamie Woodcock, Gerald G Krueger and Kristina C Duffin. Salt Lake City, UT and Cleveland, OH.
- 228* Familial risk of psoriasis and lymphoma in the Utah Population Database.** Kristina C Duffin, Carole Schaefer, Kerry Rowe, Gerald G Krueger, Geraldine Mineau and David E Goldgar. Salt Lake City, UT.
- 229 Skin aging as a mirror of lung damage.** Andrea Vierkoetter, Tamara Schikowski, Dorothee Sugiri, Mary Matsui, Jean Krutmann and Ursula Kraemer. Düsseldorf, Germany; Basel, Switzerland and Melville, NY.
- 230 Characteristics of hair-graying in a dark-haired population.** Seong Jin Jo, Seung Hwan Paik, Jong Hee Lee, Soyun Cho, Kyu Han Kim and Oh Sang Kwon. Seoul, South Korea.
- 231 Epidemiologic study on the prevalence, disease severity and risk factors of atopic dermatitis in 19-year-old Korean males.** In Ho Kwon, Kyu Han Kim, Shin Woo Kim, Chong Hyun Won, Sung Jun Seo, Chun Wook Park and Jin Wou Kim. Chuncheon, South Korea; Seoul, South Korea; Ulsan, South Korea.
- 232 High correlation between the SPASI and PASI supports the use of the SPASI as a simple alternative to the PASI.** Jessie Walsh, Jamie Woodcock, Greg Stoddard, Gerald Krueger, Daniel O Clegg and Kristina C Duffin. Salt Lake City, UT.
- 233 Internet social networking sites and the future of dermatology journals: Promises and perils.** Ashley A Hay, Laura S Huff and Robert P Dellavalle. Loma Linda, CA; Denver, CO and Aurora, CO.
- 234 Differences in itch characteristics among psoriasis and atopic dermatitis patients: Results of a web-based questionnaire.** Jenna L O'Neill, Yiong Huak Chan, Stephen R Rapp and Gil Yosipovitch. Winston Salem, NC and Singapore, Singapore.
- 235 Confidence and skill in managing skin disorders in African-Americans.** Kesha Buster, Liuyan Yang and Craig Elmets. Birmingham, AL.
- 236 Statin use is not protective for incident psoriasis.** Haley B Naik, Jiali Han, Tricia Li and Abrar A Qureshi. Boston, MA.
- 237 Patterns of use of non-UV alternatives to indoor tanning among female college students.** Veronica A Russo, Monica M Van Acker, Jillon S Vander Wal, Quenby L Erickson and Animesh A Sinha. East Lansing, MI and Saint Louis, MO.
- 238 Cohort findings in genome-wide association study era.** Jiali Han and Abrar Qureshi. Boston, MA.
- 239* Risk of squamous and basal cell carcinomas in patients with inflammatory bowel disorders exposed to thiopurines: The CESAME national cohort study.** Kiarash Khosrotehrani, Laurent Perrin-Birolet, Fabrice Carrat, Anne-Marie Bouvier, Jean-Baptiste Chevaux, F Carbonnel, JF Colombel, JL Dupas, P Godeberge, JP Hugot, M Lemann, S Nahon, JM Sabate, G Tucat and Laurent Beaugerie. Brisbane, Australia; Nancy, France; Paris, France and Dijon, France.
- 240 Severity of sun damage in full-face ultraviolet photographs of 12 year-old children relates to phenotypic skin cancer risk factors.** Ryan G Gamble, Jenny Aalborg, Nancy L Asdigian, Victoria Gonzalez, Laura S Huff, Neil F Box, Lori A Crane and Robert P Dellavalle. Aurora, CO and Denver, CO.
- 241 Spitz nevi — a pediatric dermatology perspective.** Brook E Tlougan, Seth J Orlow and Julie V Schaffer. New York, NY.
- 242 Cutaneous and systemic lupus from dermatology and rheumatology clinics: Quality of life differences.** Kristen Foering, Soumya Rao, Renato Goreshi, Sharon Kolasinski, Joyce Okawa and Victoria P Werth. Philadelphia, PA.
- 243 Psoriasis and risk of type 2 diabetes among women and men in the United States.** Wenqing Li, Jiali Han, Frank Hu, Gary Curhan and Abrar Qureshi. Boston, MA.
- 244 Obesity, waist circumference, weight change, and the risk of psoriatic arthritis in US women.** Sandeep Kumar, Jiali Han and Abrar Qureshi. Boston, MA.
- 245 Association between atopic dermatitis and serum vitamin D in children.** Yolanda Gilaberte, Rosalia Sanmartin, Roberto Aljarde, Jose Puzo, Eduardo Ubalde and Carlos Pardos. Huesca, Spain.
- 246 Psychiatric comorbidity in pediatric eczema.** Pouya Yaghmaie , Caroline W Koudelka and Eric L Simpson. Portland, OR.
- 247 Sun protection counseling of non-white ethnoracial groups: The physician's perspective.** Crystal Pourciau, Melody Eide, Meredith Mahan and Henry Lim. Detroit, MI.
- 248* DNA in the mail.** DJ Margolis, A Apter, N Mitra, I McLean and T Rebbeck. Philadelphia, PA and Dundee, United Kingdom.
- 249 Disparities in skin cancer screening exams conducted in the primary care setting.** Kathryn J Martires, Greg J Minwell and Jeremy S Bordeaux. Cleveland, OH.
- 250 Celiac disease associated antibodies are present in 9% of alopecia areata sera.** L Petukhova, C Arguelles-Grande, B Lebwohl, M Duvic, M Hordinsky, D Norris, V Price, R Clynes, P H Green and A M Christiano. New York, NY; Houston, TX; Minneapolis, MN; Denver, CO and San Francisco, CA.
- 251 Quantifying and characterizing adverse events in dermatologic surgery.** Jenna O'Neill, Daniel J Pearce, Yun Sun Lee, James A Solomon, Philip Williford, Douglas N Robins and Steven R Feldman. Winston-Salem, NC; Lake Nona, FL and Jacksonville, FL.
- 252 Widespread functional impact of chronic pruritus in children.** Rachel E Sahn, Margaret L Spratt, Leslie P Lawley, Mary K Spraker and Suephy C Chen. Atlanta, GA.
- 253 High prevalence of psoriatic arthritis (PsA) with a significant impact on quality of life (QOL) in psoriasis (PsO) patients evaluated at a multidisciplinary center for complex psoriatic disease.** Atul A Deodhar, Brian Truong, Aman Samrao, Ben L Ehst, Theresa Devere, Joel M Gelfand and Andrew Blauvelt. Portland, OR and Philadelphia, PA.
- 254 Sun safety video contest: Promoting skin cancer prevention through online media.** Annelise L Dawson, Ashley A Hay, Laura S Huff, Ryan G Gamble, William Howe, Ilima Kane and Robert P Dellavalle. Aurora, CO; Loma Linda, CA and Golden, CO.
- 255 Physician survey of dermatology quality reporting initiatives in Colorado.** Bryan T Alvarez, Cory A Dunnick and Robert P Dellavalle. Aurora, CO and Denver, CO.
- 256* Treatment for nonmelanoma skin cancer among patients with limited life expectancies.** M Chren, E Linos, R Parvataneni, J Torres, S Stuart, W J Boscardin and C S Landefeld. San Francisco, CA and Stanford, CA.
- 257* Atopic dermatitis prevalence and co-morbidities in the Growing Up Today Study II.** Hillary C Frankel, Lindsay Frazier, Carlos A Camargo, Jiali Han, Tricia Li and Abrar A Qureshi. Boston, MA.
- 258 Predictors of patient satisfaction in Mohs surgery: Analysis of pre-, intra- and post-operative factors in a large prospective cohort.** Maryam M Asgari, E Margaret Warton, Romain Neugebauer and Mary-Margaret Chren. Oakland, CA and San Francisco, CA.
- 259 OCA2 and MC1R interact with UV exposure to determine nevus counts and freckle scores in children.** Neil Box, Victoria Gonzalez, Nancy Asdigian, Jenny Aalborg, Tamara Terzian, Anna Baron, Regan Stiegmann, Enrique Torchia, Robert Dellavalle, Stefan Mokrohisky, Joseph Morelli and Lori Crane. Aurora, CO.



Epidermal Structure and Function

All orals [designated with an asterisk (*)] listed below are presented in the Epidermal Structure and Function Minisymposium on Thursday, May 5, 2011 from 2:00-5:30 p.m. in Grand Canyon 3-4, JW Marriott Desert Ridge. Orals designated by two asterisks (**) will be presented during a Plenary Session.

- 260 **Endothelin-converting enzyme-1 modulates endothelin-1-induced pruritus by inhibiting endothelin receptor recycling and prolonging ERK1/2 signaling in murine sensory neurons.** Makiko Kido, Jörg Buddenotte, Cordula Kempkes, Stephan Seeliger, Ferda Cevikbas, Masutaka Furue and Martin Steinhoff. Münster, Germany; Fukuoka, Japan; San Francisco, CA and Göttingen, Germany.
- 261 **The role of adenomatous polyposis coli (APC) in epidermal development and hair follicle morphogenesis.** Kathleen Cook, Xiaoyang Wu, Nicole Stokes and Elaine Fuchs. New York, NY and Chevy Chase, MD.
- 262* **ARNT-dependent expression of amphiregulin and consequent activation of EGFR/Erk pathway is essential for normal epidermal differentiation.** Douglas Robertson, Lynda Weir, Irene M Leigh and Andrey A Panteleyev. Dundee, United Kingdom.
- 263 **Differential regulation of HIF- α splice variants by hypoxia in epidermal keratinocytes.** L Weir, D Robertson, I M Leigh, J K Vass and A A Panteleyev. Dundee, United Kingdom.
- 264 **Expression human β -defensins 2,3 of epidermis by heat damage.** Jungsuk Lee, Hyosun Jeong, Junghee Lee, Hongshin Kim, Suyel Lee, Taesik Sohn, Cheonjae Yoon and Insik Kim. Daejeon, South Korea.
- 265 **The Presence of N⁶-(Carboxymethyl) lysine in the human epidermis.** Keigo Kawabata, Harumi Yoshikawa, Keishi Saruwatari, Yumiko Akazawa, Takafumi Inoue, Tetsuya Kuze, Tetsuya Sayo, Noriko Uchida and Yoshinori Sugiyama. Odawara, Japan.
- 266* **Increased endogenous retinoic acid by the absence of Cyp26b1 impairs peridermal development and skin barrier formation during development.** Junko Okano, Ulrike Lichti, Maria Aronova, Guofeng Zhang, Stuart H Yuspa, Yasuo Sakai and Maria I Morasso. Bethesda, MD and Osaka, Japan.
- 267 **Callus formation is associated with hyperproliferation, incomplete differentiation of keratinocytes, and increased expression of adhesion molecules.** Hye In Choi, Su Hee Kim, Gue In Choi, Kyung Cheol Sohn, Young Lee, Chang Deok Kim, Tae Jin Yoon, Jeung Hoon Lee and Young Ho Lee. Daejeon, South Korea and Jinju, South Korea.
- 268 **A purified feverfew extract increases skin's antioxidant and cellular detoxification defenses by activating the Nrf2 — antioxidant response element (ARE) pathway.** Simarna Kaur, Karien Rodriguez, Frank Liebel and Michael D Southall. Skillman, NJ.
- 269* **Impaired stratum corneum barrier and enhanced percutaneous immune responses in filaggrin knockout mice.** Hiroshi Kawasaki, Keisuke Nagao, Akiharu Kubo, Tsuyoshi Hata, Hideaki Mizuno, Takeo Yamada and Masayuki Amagai. Tokyo, Japan and Wako, Japan.
- 270 **The p75 neurotrophin receptor acts as a "switch on-off" protein in keratinocyte differentiation.** Elisabetta Palazzo, Francesca Truzzi, Alessandra Marconi, Roberta Lotti, Katiuscia Dallaglio, Tiziana Petrachi and Carlo Pincelli. Modena, Italy.
- 271 **IL17 modulates barrier gene expression in human keratinocytes: A new role in psoriasis?** Anna De Benedetto, Brian Jones, Mary Behrendt, I-Hsin Kuo, Takeshi Yoshida, Andrei Ivanov, Merle Elsoo and Lisa A Beck. Rochester, NY and Malvern, PA.
- 272* **Psoriasis-like skin lesion induced by Raf-MAPK signaling requires Stat3 activation.** Masahito Tarutani, Ken Miyoshi, Mikiro Takaishi and Shigetoshi Sano. Nankoku, Japan.
- 273 **IFNy inhibits TNF α -induced CTACK/CCL27 production from keratinocytes through EGF receptor signaling pathway in a differentiation dependent manner and CTACK/CCL27 production in the centrals of psoriatic lesion.** Masaru Karakawa, Mayumi Komine, Hidetoshi Tsuda, Kunihiko Tamaki, Shinichi Sato and Mamitaro Ohtsuki. Shimotsuke, Japan and Tokyo, Japan.
- 274 **Is the functional skin adaptation complete and competent in infancy?** Joachim W Fluhr, Razvigor Darlenski, Jean-Pierre Hachem, Philippe Msika, Clarence de Belilovsky, Caroline Baudouin and Enzo Berardesca. Berlin, Germany; Sofia, Bulgaria; Brussels, Belgium; Epernon, France; Paris, France and Rome, Italy.
- 275 **Aryl hydrocarbon receptor dependent c-kit expression is required for dendritic epidermal T cell homeostasis in murine skin.** Stephanie Kadow, Britta Wingerath, Bettina Jux, Stefanie Chmill, Jean Krutmann, Heike Weighardt and Charlotte Esser. Düsseldorf, Germany.
- 276 **Sunflower oleodistillate: A topical PPAR-alpha (peroxisome proliferator-activated receptors) agonist developed for atopic dermatitis.** Clarence de Belilovsky, Caroline Baudouin, Stéphanie Brédif, Bernard Chadoutaud and Philippe Msika. Paris, France; Epernon, France and Toulouse, France.
- 277 **Human epidermal tight junctions are functional and allow penetration of activated Langerhans cell dendrites.** Kazue Yoshida, Akiharu Kubo, Mariko Yokouchi, Ken Ishii, Hiroshi Kawasaki, Tamotsu Ebihara, Manabu Ohyama, Keisuke Nagao and Masayuki Amagai. Tokyo, Japan and Chiba, Japan.
- 278 **STRA6 modulates retinol uptake and cell proliferation in epidermal keratinocytes.** Claudia Skazik, Ruth Heise, Yvonne Marquardt, Katharina Czaja, Hans F Merk, David R Bickers and Jens M Baron. Aachen, Germany and New York, NY.
- 279* **Role of centrosomal proteins and cortical microtubules in epidermal barrier formation.** Kaelyn Sumigray and Terry Lechner. Durham, NC.
- 280 **Filaggrin-induced stratum corneum pH modulation following external and internal stressors.** Truus Roelandt, Christina Giddelo, Tom Hillary, Caroline Baudouin, Philippe Msika, Diane Roseeuw, Joachim Fluhr and Jean-Pierre Hachem. Brussels, Belgium; Epernon, France and Berlin, Germany.
- 281 **LEDGF plays a crucial role in pathogenesis of psoriasis vulgaris via activation of the p38MAPK/MK2/IL-6/STAT3 pathway.** Takuya Takeichi, Kazumitsu Sugiura, Yoshinao Muro, Yasushi Ogawa and Masashi Akiyama. Nagoya, Japan.
- 282 **Integration of Langerhans-like cells into a three-dimensional full-thickness skin model.** Veselina Laubach, Nadja Zöller, Maila Rossberg, Kerstin Görg, Stefan Kippenberger, Jürgen Bereiter-Hahn, Roland Kaufmann and August Berndt. Frankfurt/Main, Germany.
- 283 **A dietary anthocyanidin delphinidin promotes epidermal differentiation and activation of caspase-14 in human epidermal keratinocytes and reconstituted skin.** Farrukh Afag, Deeba N Syed, Naghma Khan and Hasan Mukhtar. Birmingham, AL and Madison, WI.
- 284 **Age-related NADH oxidase catalyzed oxidation and cross-linking of skin proteins.** Christiaan Meadows, Dale G Kern, Zoe D Draels, Helen E Knaggs, Dorothy M Morré and D J Morré. Provo, UT; West Lafayette, IN and High Point, NC.
- 285 **Impact of Gantrez S97 BF on ex vivo skin barrier quality.** Magali Bonnans, Gregory Bressier, Nicolas Esselin, Anthony Lushen, Hani Fares, Noelle Garcia, Claude Dal Farra and Nouha Domloge. Sophia Antipolis, France and Wayne, NJ.
- 286 **siRNA-induced survivin deficiency promotes mitotic catastrophe events in human keratinocyte stem cells.** Florian Labarrade, Jean Marie Botto, Claude Dal Farra and Nouha Domloge. Sophia Antipolis, France and Wayne, NJ.
- 287 **CoQ10-Binding Protein and PDSS1 play an essential role in epidermal anti-oxidant defences.** Laurine Bergeron, Ludivine Mur, Alexia Lebleu, Catherine Serre, Chrystelle Plaza, Aurelie Fuet, Jean Marie Botto, Claude Dal Farra and Nouha Domloge. Sophia Antipolis, France and Wayne, NJ.
- 288 **Cathelicidin and β -defensin 1 antimicrobial peptides expression in keratinocytes and in human skin.** Ludivine Mur, Chrystelle Plaza, Gopinathan Menon, Jean Marie Botto, Claude Dal Farra and Nouha Domloge. Sophia Antipolis, France and Wayne, NJ.
- 289 **Expression of the major epidermal antimicrobial peptide, cathelicidin, is regulated by sphingosine-1-phosphate signaling in response to ER stress in keratinocyte.** Kyungho Park, Peter M Elias, Theodora Mauro, Walter M Holleran and Yoshikazu Uchida. San Francisco, CA.

- 290 **ER stress stimulates keratinocyte cathelicidin expression via a novel NF- κ B C/EBP α dependent pathway.** Kyungho Park, Peter M Elias, Yuko Oda, Theodora Mauro, Walter M Holleran and Yoshikazu Uchida. San Francisco, CA.
- 291 **Cold-induced expression of epidermal differentiation markers.** Qing Zhou, Nathan Kan, Adrine Karapetyan, Menna Araya, Venus Blas, Danielle R Coles and Elizabeth L Rugg. Irvine, CA.
- 292 **Enhancing CoQ10 in the skin for anti aging effect. In vivo study.** Yolene Guerif-Ferreira, Gilles Oberto, Cedric Pouzet, Arlette Berghi, Corrine Coquet-Morel, Karine Cucumel, Claude Dal Farra and Nouha Domloge. Sophia antipolis, France and Wayne, NJ.
- 293 **Normal epidermal barrier function and recovery is controlled by nicotinic acetylcholine receptor activation.** Steven Droho, Brenda J Curtis and Katherine A Radek. Maywood, IL.
- 294 **Comparison between keratinocytes monolayer culture and keratinocytes/fibroblasts co-culture, after exposure to chemicals treatment.** Imane Garcia, Marianne Arcioni, Cedric Pouzet, Marie Brulas, Eric Bauza and Nouha Domloge. Sophia antipolis, France.
- 295 **Lipid metabolism in the epidermis is regulated by dsRNA.** Andrew W Borkowski, Yoshikazu Uchida, Kyungho Park and Richard L Gallo. San Diego, CA and San Francisco, CA.
- 296 **FOXO3a transcription factor is implicated in fibroblast and skin senescence.** Alexia Lebleu, Aurelie Fuet, Gopinathan Menon, Jean Marie Botto, Claude Dal Farra and Nouha Domloge. Sophia Antipolis, France and Wayne, NJ.
- 297 **Basal epidermal niche components are important in the preservation of keratinocyte stem cells and epidermis self-renewal.** Jean Marie Botto, Florian Labarrade, Yolene Guerif-Ferreira, Ludivine Mur, Gilles Oberto, Arlette Berghi, Karine Cucumel, Claude Dal Farra and Nouha Domloge. Sophia Antipolis, France and Wayne, NJ.
- 298 **Tight junctions, what's your function? Changes in tight junction properties during epidermal development.** Yongjiao Zhai, Anna Celli, Jenny Jiang, Debra Crumrine, Peter Elias, Ken Feingold and Theodora Mauro. San Francisco, CA.
- 299 **Epidermal and dermal innervation density in keloids.** Ben Maddison, Ethian Tey, Ellen Hui Wang, Yozo Ishiju, A McMichael, M Marks, P Wilford, Daren Maruziva, Dudley Ferdinand, Jo Dicks and Gil Yosipovitch. Sharnbrook, United Kingdom; Singapore, Singapore and Winston Salem, NC.
- 300* **Mechanisms of epidermal barrier impairment in FLG-deficient human epidermis.** Robert Gruber, Peter M Elias, Debra Crumrine, Tzu-Kai Lin, Johanna M Brandner, Jean-Pierre Hachem, Richard B Presland, Philip Fleckman, Aileen Sandilands, Irwin McLean, Michael Mildner, Erwin Tschachler and Matthias Schmuth. Innsbruck, Austria; San Francisco, CA; Hamburg, Germany; Brussels, Belgium; Seattle, WA; Dundee, United Kingdom and Vienna, Austria.
- 301 **Defining gene expression in normal human epidermal keratinocytes and melanocytes.** Erika Billick, Milène Kennedy Crispin, Mayte Suárez-Fariñas, Hiroshi Mitsui, Hideki Fujita and James Krueger. New York, NY.
- 302 **Skin barrier homeostasis is impaired in type 2 diabetes mellitus animal models such as db/db and ob/ob mice.** Jae-Hong Kim, Hwa-Young Park, Minyoung Jung and Eung Ho Choi. Wonju, South Korea and Yanggu, South Korea.
- 303* **Loss of epidermal hypoxia-inducible factor-1alpha accelerates epidermal aging and affects reepithelialization in human and mouse.** Nsrein Ali, Hamid R Rezvani, Alain Taieb, Hubert de Verneuil and Frederic R Mazurier. Bordeaux, France.
- 304 **Proteomics analysis of changes in the epidermal proteome after inactivation of an essential regulator of autophagy.** Martin Stichenwirth, Heidi Rossiter and Erwin Tschachler. Vienna, Austria and Neuilly, France.
- 305 **Role of the Arylhydrocarbon Receptor (AhR) in extrinsic aging of human skin.** Julia Tigges, Ulrike Huebenthal, Hans F Merk, Jean Krutmann and Ellen Fritzsche. Duesseldorf, Germany and Aachen, Germany.
- 306 **Notch protein expression changes in human skin during ageing, keratinocyte differentiation and UVB-exposure.** Alessandra Marconi, Elisabetta Palazzo, Katiuscia Dallaglio, Francesca Truzzi, Roberta Lotti, Tiziana Petrachi and Carlo Pincelli. Modena, Italy.
- 307 **The *in vitro* sebum suppressive benefits of tridecylcarboxyethylate.** John Bajor, Bijan Harirchian, Surajit Mukherjee and Carol Bosko. Trumbull, CT.
- 308 **Characterization of phase I and II enzymes in human skin, skin equivalents and cultured keratinocytes: Human skin is a conjugating and detoxifying rather than activating metabolic organ.** Christine Goetz, Karsten Ruwiedel, Roland Pfeiffer, Julia Tigges, Ulrike Hüenthal, Marc Majora, Robert Edwards, Pierre Aeby, Carsten Goebel, Camilla Pease, Hans Merk, Jean Krutmann and Ellen Fritzsche. Duesseldorf, Germany; London, United Kingdom; Marly, Switzerland; Bedford, United Kingdom and Aachen, Germany.
- 309 **Abnormalities in ultrastructure of epidermal lamellar bodies and corneocyte lipid envelope in Refsum's disease.** Gopinathan K Menon, Evelyn Orso, Gerd Schmitz, Debra Crumrine and Peter M Elias. Wayne, NJ; Regensburg, Germany and San Francisco, CA.
- 310* **Formation and function of the corneocyte lipid envelope.** Yuxiang Zheng, David Beier, Alan Brash, Peter Elias and Debra Crumrine. Nashville, TN; Boston, MA and San Francisco, CA.
- 311 **Expression of epidermal CAMP changes in parallel with permeability barrier status.** Marina Rodriguez-Martin, Gemma Martin-Ezquerre, Mao-Qiang Man, Melanie Hupe, Jong-Kyung Youm, Donald Mackenzie, Soyun Cho, Carles Trullas, Walter Holleran, Katherine Radek and Peter Elias. La Laguna, Spain; Barcelona, Spain; San Francisco, CA; Seoul, South Korea and Maywood, IL.
- 312 **Impaired keratinocyte homeostasis in obesity and metabolic disease.** Kristen R Taylor, Anne E Costanzo and Julie M Jameson. La Jolla, CA.
- 313 **The role of mitochondrial sirtuins in keratinocyte biology.** Alexandra S Bause, Mary Matsui and Marcia C Haigis. Boston, MA and Melville, NY.
- 314 **Activation of transient receptor potential vanilloid channel TRPV6 accelerates keratinocyte differentiation.** V'yacheslav Lehen'kyi, Matthieu Vandenberghe, Françoise Belaubre, Séverine Julié, Nathalie Castex Rizzi, Roman Skryma and Natalia Prevarskaia. Villeneuve d'Ascq, France and Toulouse, France.
- 315 **Pathogenesis(pathway)-based therapy and genetic basis for lateralization in CHILD syndrome.** Amy Paller, Marina Rodriguez-Martin, Maurice van Steensel, Jennifer Sorrell, Candrice Heath, Debra Crumrine, Michel van Geel and Peter Elias. Chicago, IL; La Laguna, Spain; Maastricht, Netherlands and San Francisco, CA.
- 316** **Ets1 regulates the skin differentiation program by interfering with Notch activity.** Shu Shien Chin, Priyadharsini Nagarajan, Dan Wang, Song Liu, Lee Ann Garrett-Sinha and Satrajit Sinha. Buffalo, NY.
- 317 **A bi-mineral complex induces activation of the antioxidant response element via production of H₂O₂.** Karien J Rodriguez, Ying Sun and Michael D Southall. Skillman, NJ.
- 318 **Not all camellias are created equal: The effect of *Camellia japonica* extracts on barrier function and protection from environmental insult.** Pinaki Bhatt, Alexandra D'Arcangelis, Alicia Marie Leo, Yannick Maestro and Christelle Lasserre. Piscataway, NJ and Mougins, France.
- 319 **Epidermal melanocytes regulate epidermal barrier function and antimicrobial peptide expression.** Mao-Qiang Man, Tzu-Kai Lin, John Sundberg, Melanie Hupe, Kathleen Silva, Anna Celli, Theodora Mauro, Kenneth Feingold and Peter Elias. San Francisco, CA; Bar Harbor, ME and San Francisco, CA.
- 320 **Paradoxical benefits of psychological stress on barrier function and cutaneous inflammation in mouse models of inflammatory dermatoses.** Juan Luis Sanchez-Mateos, Tzu-Kai Lin, Mao-Qiang Man, Melanie Hupe, Jong-Kyung Youm, Kenneth Feingold and Peter Elias. San Francisco, California and San Francisco, California.
- 321 **Basis for desquamation of corneocytes in normal humans.** Tzu-Kai Lin, Debra Crumrine, Richard Sun, Robert Rice and Peter Elias. San Francisco, CA and Davis, CA.
- 322 **miR705 is involved in skin and hair follicle morphogenesis.** Carolina Cela, Masoud Tavazoie, Katie Fantauzzo, Colin A B Jahoda and Angela M Christiano. New York, NY and Durham, United Kingdom.
- 323* **Ovol2 converges with p63 to regulate epidermal morphogenesis.** Briana Lee and Xing Dai. Irvine, CA.

- 324 Regulatory roles of clock gene (BMAL1) in the skin.** Kenichi Ito, Tonoji Hamada, Yukie Kobayashi, Shigeki Shimba and Arunasiri Iddamalgoda. Motosu, Japan and Chiba, Japan.
- 325* Involvement of multiple pathways in keratinocyte DNA degradation.** Mami Yamamoto, Teruhiko Makino, Akira Motoyama, Ryoji Tsuboi and Toshihiko Hibino. Yokohama, Japan; Tokyo, Japan and Toyama, Japan.
- 326 Characterization of diffusion and duration of action of a new botulinum toxin type A formulation.** Hongran Stone, Zhao Zhu, Thai Thach and Curtis L Ruegg. Newark, CA.
- 327 Effects of 11 β -hydroxysteroid dehydrogenase type 1 on lipogenesis in SZ95 sebocytes.** Ji Min Kim, Sang Eun Lee, Se Kyoo Jeong, Christos C Zouboulis and Seung Hun Lee. Seoul, South Korea; Daejeon, South Korea and Dessau, Germany.
- 328* Aryl hydrocarbon receptor modulates keratinocyte differentiation by SIRT1 expression.** Gaku Tsuji, Masakazu Takahara, Hiroshi Uchi, Satoshi Takeuchi, Fumiko Yasukawa, Yoichi Moroi and Masutaka Furue. Fukuoka, Japan.
- 329 Expression of protease-activated receptor-2 in SZ95 sebocytes and its role in sebaceous lipid synthesis and inflammation.** Sang Eun Lee, Se Kyoo Jeong, Jung Eun Jun, Ji Min Kim, Christos C Zouboulis and Seung-Hun Lee. Seoul, South Korea; Daejeon, South Korea and Dessau, Germany.
- 330 Pathogenetic roles of Wnt ligand and Notch signaling in psoriasis.** Jeong Eun Kim, Sungeun Chang, Seung Hyun Bang, Chong Hyun Won, Mi Woo Lee and Jee Ho Choi. Seoul, South Korea.
- 331 The role of a novel PPAR γ agonist (GMG-43AC) in the control of sebogenesis: prospective for an innovating treatment of acne.** M Ottaviani, A Mastrofrancesco, D Kovacs, M Ludovici, C C Zouboulis, G Giuliani, E Camera and M Picardo. Rome, Italy; Dessau, Germany and Milan, Italy.
- 332 iASPP/p63 auto-regulatory feedback loop is essential for epithelial integrity and autophagy.** Anissa Chikh and Daniele Bergamaschi. London, United Kingdom.
- 333 Aldo-keto Reductase 1C3 (AKR1C3) is expressed in differentiated human epidermis and is required for calcium-induced keratin 10 expression.** Alon Mantel, Amanda Mendini, JoAnne VanBuskirk and Alice P Pentland. Rochester, NY.
- 334 Dynamics of three-dimensional organization of the nucleus during terminal differentiation of the epidermal keratinocytes.** Michal Gdula, Krzysztof Poterlowicz, Andrei Mardaryev, Andrey Sharov, Michael Fessing and Vladimir Botchkarev. Bradford, United Kingdom and Boston, MA.
- 335 A plant extract boosts lysyl oxidase expression in keratinocytes and improves terminal differentiation in a skin equivalent model.** Valérie Cenizo, Gabrielle Le Provost, Valérie André-Frei and Pascal Sommer. Lyon, France.
- 336 mRNA profiling of circumscribed palmoplantar hypokeratosis and the identification of ITGBL1 associated with the palmoplantar type-keratinization.** Masahito Yasuda, Daisuke Utsumi, Yoshiki Miyachi, Hiroshi Uezato, Osamu Ishikawa, Dennis R Roop and Kenzo Takahashi. Aurora, CO; Maebashi, Japan; Kyoto, Japan and Naha, Japan.
- 337 Association of the chromosome 11q13.5 polymorphism with atopic eczema in Austrian patients.** Elli K Greisenegger, Friedrich Zimprich, Alexander Zimprich, Andreas Gleiss and Tamara Kopp. Vienna, Austria.
- 338 Enhancement of the desmoplakin-keratin association promotes keratinocyte intercellular hyperadhesion.** Ryan P Hobbs and Kathleen J Green. Chicago, IL.
- 339* Insulin/IGF-1 signaling controls epidermal morphogenesis by regulating asymmetric divisions.** Heike Stachelscheid, Christian Guenschmann, Annika Schmitz, Jens C Bruening and Carsten M Niessen. Cologne, Germany.
- 340 The disintegrin/metalloproteinase ADAM10 controls epidermal Notch signaling and skin homeostasis.** Silvio Weber, Michaela T Niessen, Johannes Prox, Renate Lüllmann-Rauch, Ralf Schwanbeck, Carl P Blobel, Ellen Jorissen, Bart de Strooper, Carien M Niessen and Paul Saftig. Kiel, Germany; Cologne, Germany; New York, NY and Leuven, Belgium.
- 341 A multifactorial gene expression approach to understanding skin aging.** Helen E Knaggs, Dale G Kern, Mark Bartlett, Steve M Wood, Angela Mastaloudis, Scott B Ferguson and Anna Langerveld. Provo, UT and Portage, MI.
- 342 Localization of the novel hair shaft protein VSIG8 in the hair follicle, nail unit, and oral cavity.** Robert H Rice, Marjorie A Phillips and John P Sundberg. Davis, CA and Bar Harbor, ME.
- 343* Abca12-mediated lipid transport and Snap29-dependent trafficking of lamellar granules are critical for epidermal morphogenesis.** Qiaoli Li, Michael Frank, Masashi Akiyama, Hiroshi Shimizu, Eli Sprecher and Jouni Uitto. Philadelphia, PA; Sapporo, Japan; Nagoya, Japan and Tel Aviv, Israel.
- 344 Histone deacetylases inhibitor Trichostatin A regulates microRNA gene expressions in human keratinocytes.** Le Qu, Rui-Qun Qi, Chun-Di He, Xing-Hua Gao, Hong-Duo Chen, Qing-Sheng Mi and Li Zhou. Detroit, MI and Shenyang, China.
- 345 Tandem repeated irritation in aged skin induces distinct barrier perturbation and cytokine expression patterns *in vivo*.** Irena Angelova-Fischer, Verena Becker, Walter Wigger-Alberti, Tobias W Fischer, Sanja Kezic and Detlef Zillikens. Lübeck, Germany; Hamburg, Germany and Amsterdam, Netherlands.
- 346 *In vivo* assessment of skin barrier after mechanical removal of stratum corneum shows evidence of a dual repair mechanism.** Paulo R Bargo, Steven Walston, Melissa Chu, Inseok Seo, Eduardo Ruvalcaba and Nikiforos Kollias. Skillman, NJ and Los Angeles, CA.
- 347 Evidence of the active transport of water into human skin: A potential contributor to wound healing.** Vasile Ionita Manzatu, Michael Ingrassia, Jack Lombardi and Thomas Mammone. Melville, NY.
- 348 Effects of ozone in normal human epidermal keratinocytes.** James McCarthy, Edward Pelle, Krupa Brahmbhatt, Daniel Yarosh and Nadine Pernodet. Melville, NY.
- 349 Microarray analysis of a marine extract as a potential inhibitor of cigarette smoke-induced skin aging.** R.S Carver, Kegui Tian, N Sinha and J Litchauer. Stony Brook, NY.
- 350 Ichthyosis prematurity syndrome: Lipid metabolic abnormalities lead to an epidermal barrier defect and predispose to atopy.** Denis Khnykin, Debra Crumrine, Yoshikazu Uchida, Meei-Hua Lin, Jeffrey Miner, Frode Jahnsen and Peter Elias. Oslo, Norway; San Francisco, CA and St. Louis, MO.
- 351 Understanding transcriptional regulation of the epidermal differentiation complex (EDC) locus by sequence motif discovery.** Danielle Albea and Cristina de Guzman Strong. St. Louis, MO.
- 352 EGFR is activated in pemphigus vulgaris and contributes to anti-desmoglein 3 antibody-mediated loss of cohesion in cultured mouse keratinocytes.** Beyza Sayar, Camille Luyet, Katja Schulze, Maja M Suter, Eliane J Mueller and Arnaud Galichet. Bern, Switzerland.
- 353 Induced of permeation pathway and nanoparticles penetration by ultrasound contrast agent with ultrasound in hairless mouse skin.** Ki Ju Choi, Dong Hee Park, Sang Eun Lee, Hee Seok Kweon, Jong Bum Seo, Bong Han Lee and Seung Hun Lee. Daejeon, South Korea; Wonju, South Korea and Seoul, South Korea.
- 354 Suction blister technique to evaluate skin fragility in children with recessive dystrophic epidermolysis bullosa (RDEB) treated with immunomodulatory chemotherapy and allogeneic stem-cell transplantation.** Ana Junqueira Bertin, Jakub Tolar, Mark Osborn, Rina Farah, Maria K Hordinsky and John E Wagner. Minneapolis, MN.
- 355 Raman profiles of the stratum corneum and filaggrin genotypes of French individuals with or without a history of mild to moderate atopic dermatitis.** Veronika Miltz, Julie Latreille, Sophie Gardinier, Leopold Eckhart, Christiane Guinot and Erwin Tschauder. Vienna, Austria; Neuilly sur Seine, France and Tours, France.
- 356 Human keratinocytes display a restricted unfolded protein response by ER stressors.** Daniel Franco and Christopher Reardon. Phoenix, AZ and Tempe, AZ.
- 357 p38 δ signaling - multiple regulatory interactions drive differentiation in keratinocytes.** Santosh R Kanade and Richard L Eckert. Baltimore, MD.
- 358 Protein arginine methyltransferase 5 (PRMT5) is a novel negative regulator of keratinocyte differentiation.** Santosh R Kanade and Richard L Eckert. Baltimore, MD.
- 359 The effects of artemisia abrotanum (Southernwood) on multiple levels of the skin.** Meghan Russell, Mike Anthonavage and Samantha Tucker-Samaras. Skillman, NJ.

- 360* **PKCδ suppresses keratinocyte proliferation by increasing p21^{Cip1} level via a KLF4-dependent mechanism.** Yap C Chew, Gautam Adhikary and Richard L Eckert. Baltimore, MD.
- 361 **The TIG3 tumor suppressor interacts at the centrosome to alter microtubule function to halt keratinocyte cell proliferation.** Haibing Jiang, Tiffany Scharadin and Richard L Eckert. Baltimore, MD.
- 362* **Combined biological and computational approaches to understand the role of Get1/Grl13 in epidermal differentiation.** Rachel P Herndon, Ambica Bhandari, Diana Dizon, Robert Chadwick, Jacob Biesinger, Xiaohui Xie and Bogi Andersen. Irvine, CA.
- 363 **Mammalian aquaporin-3 and phospholipase D2 interact in Sf9 cells.** Haixia Qin and Wendy B Bollag. Augusta, GA.
- 375* **Copy number variation within the filaggrin gene contributes to risk of atopic dermatitis.** Sara J Brown, Karin Kroboth, Aileen Sandilands, Linda E Campbell, Elizabeth Pohler, Alan D Irvine, Heather J Cordell and W H Irwin McLean. Dundee, United Kingdom; Dublin, Ireland and Newcastle, United Kingdom.
- 376 **Genetic associations of psoriasis in a Pakistani population.** Pakeeza A Shaiq, Philip E Stuart, Ghazala K Raja, John J Voorhees, James T Elder, Raheel Qamar and Rajan P Nair. Ann Arbor, MI; Rawalpindi, Pakistan and Islamabad, Pakistan.
- 377 **Increased DNA repair in xeroderma pigmentosum group C cells by induction of readthrough of stop codons.** Christiane Kuschal, John J DiGiovanna, Sikandar G Khan and Kenneth H Kraemer. Bethesda, MD.
- 378 **XPD mutations in trichothiodystrophy fibroblasts inhibit TFIIH-dependent transactivation mediated by the vitamin D receptor.** Xiaolong Zhou, Sikandar G Khan, Deborah Tamura, Emmanuel Compe, Jean-Marc Egly, Takahiro Ueda, Jennifer Boyle, John J DiGiovanna and Kenneth H Kraemer. Bethesda, MD and Strasbourg, France.
- 379* **Modulating keratinocyte intracellular Ca²⁺ via the sphingolipid pathway constitutes a novel therapeutic target for Darier's Disease.** Anna Celli, Donald Mackenzie, Yongjiao Zhai, Chia Ling Tu, Daniel Bikle, Walter Holleran, Yoshikazu Uchida and Theodora Mauro. San Francisco, CA.
- 380 **A novel desmoglein 1 mutation in a Japanese patient with striate palmoplantar keratoderma.** Ryosuke Sogame, Takahiro Hamada, Norito Ishii, Sachiko Sakaguchi, Ayumi Suzuki, Teruki Dainichi, Tadashi Karashima, Takekuni Nakama, Daisuke Tsuruta and Takashi Hashimoto. Kurume, Japan.
- 381 **MiR-302b regulates replicative senescence of human dermal fibroblasts by post-transcriptional regulation of cyclin D1 expression.** Chia-Yu Chu, Shih-Ting Cha, Meng-Chen Hsieh, Hsien-Ching Chiu and Tsen-Fang Tsai. Taipei, Taiwan.
- 382 **Ichthyosis with confetti shows widespread somatic reversion via mitotic recombination at two distinct loci.** Keith A Choate, Yin Lu, Jing Zhou, Murim Choi, Amy Paller, Peter Elias, Anita Farhi, Carol Nelson-Williams, Debra Crumrine, Mary Williams, Amy Nopper, Alanna Bree, Leonard Milstone and Richard Lifton. New Haven, CT; Chicago, IL; San Francisco, CA; Kansas City, MO and Houston, TX.
- 383 **Polyvalent siRNA-gold nanoparticles effectively traverse human epidermis and cause no demonstrable toxicity in keratinocytes or mouse skin.** David L Chen, Dan Zheng, David Giljohann, Hristo Iordanov, Charlene Wilke, Xiao-Qi Wang, Chad A Mirkin and Amy S Paller. Chicago, IL and Evanston, IL.
- 384 **An association between IL-9 and IL-9 receptor gene polymorphisms and atopic dermatitis in a Korean population.** Eugene Kim, Jung-Hyun Namkung, Geon Tae Park, Hee Seung Yang and Jun-Mo Yang. Seoul, South Korea; Cleveland, OH and Providence, RI.
- 385 **Combination of free-flow electrophoresis and interactomics to analyze the dysregulated proteins of fibroblasts from atopic dermatitis patients.** Yong-Doo Park and Jun-Mo Yang. Ningbo, China; Jiaxing, China and Seoul, South Korea.
- 386 **Association of IL-4 -590 T/C and IL-4 receptor Q551R gene polymorphisms in patients with acne vulgaris.** Ahmad Al Robaei, Abdullaateef A Al Zolibani and Ahmad Settin. Buraydah, Saudi Arabia.
- 387* **Non-aminoglycosides can restore type VII collagen function by overcoming premature stop mutations: Implications for DEB therapy.** J Cogan, Y Hou, X Wang, L Du, R Gatti, A South, D Woodley and M Chen. Los Angeles, CA and Dundee, United Kingdom.
- 388 **Effective preservation and skin delivery of biologically active cargo including live viruses by dissolvable microneedle arrays (MNAs).** Geza Erdos, Cara Donahue, Jiying Zhang, B Ozdoganlar, A Gambotto and Louis D Falo. Pittsburgh, PA.
- 389 **Knockdown of endogenous CD44 in human skin models using self-delivery siRNA administered by dissolvable microneedle arrays.** Maria F Lara, Emilio F Gonzalez-Gonzalez, Robyn P Hickerson, Tycho J Speaker, Stella Chang, Manuel A Flores, Christopher H Contag, Devin Leake and Roger L Kaspar. Stanford, CA; Santa Cruz, CA and Lafayette, CO.
- 390 **Interaction between psoriasis susceptibility loci ERAP1 and HLA-Cw6.** Trilokraj Tejasvi, Phil E Stuart, Rajan P Nair, John J Voorhees and James T Elder. Ann Arbor, MI.

Genetic Disease, Gene Regulation and Gene Therapy

All orals [designated with an asterisk (*)] listed below are presented in the Genetic Disease, Gene Regulation and Gene Therapy Minisymposium on Thursday, May 5, 2011 from 2:00-5:30 p.m. in Grand Canyon 11-12, JW Marriott Desert Ridge. Orals designated by two asterisks (**) will be presented during a Plenary Session.

- 364 **The effect of aging, UV exposure, and oxidative stress on the expression of sirtuin genes in human skin cells.** Ying Chen, John Lyga and Russell Wyborski. Suffern, NY.
- 365* **A splice site mutation in a skin-specific isoform of SMARCAD1 causes hereditary adermatoglyphia.** Janna Nousbeck, Bettina Burger, Dana Fuchs-Telem, Mor Pavlovsky, Shlomit Fenig, Ofer Sarig, Peter Itin and Eli Sprecher. Tel Aviv, Israel and Basel, Switzerland.
- 366 **Environmental influences on a model of atopic dermatitis.** Caoimhe M Fahy, W H McLean, Alan D Irvine and Padraig G Fallon. Dublin, Ireland and Dundee, United Kingdom.
- 367 **An exceptional mutational event leading to Chanarin-Dorfman syndrome in a large consanguineous family.** Dana Fuchs-Telem, Liat Samuelov-Kinori, Ofer Sarig and Eli Sprecher. Tel Aviv, Israel.
- 368* **A mutation in LIPN, encoding epidermal Lipase N, causes a late onset form of autosomal recessive congenital ichthyosis.** Shirli Israeli, Ziad Khamaysi, Dana Fuchs-Telem, Janna Nousbeck, Reuven Bergman, Ofer Sarig and Eli Sprecher. Tel Aviv, Israel and Haifa, Israel.
- 369 **A novel mutation in MBTPS2 causes ichthyosis follicularis, alopecia and photophobia syndrome in a Chinese family.** Yingguo Ding, Jianyou Wang, Jianjun Qiao, Xiaohong Mao and Suiqing Cai. Hang Zhou, China.
- 370 **Discovery of novel ingredients which stimulate the expression of sirtuins in human skin and skin cells.** John Lyga, Siming Chen, Qian Zheng, Patricia Abad, Russell Wyborski and Dmitri Ptchelintsev. Suffern, NY.
- 371 **Dystrophic epidermolysis bullosa compound heterozygote presents with immunofluorescence findings evocative of transient bullous dermolysis of the newborn.** Heather Irinal Cohn, K Tran, C W Chow, E Palmer, A Turner and D Murrell. Sydney, Australia; Philadelphia, PA and Melbourne, Australia.
- 372* **Keratinocyte cell fate decisions are regulated by a novel microRNA-31/factor-inhibiting hypoxia-inducible factor 1 (FIH-1)/Notch relationship.** Han Peng, Spiro Getsios and Robert M Lavker. Chicago, IL.
- 373* **Long noncoding RNA programs active chromatin domain to coordinate homeotic gene expression.** Kevin C Wang, Yul W Yang, Bo Liu, Amartya Sanyal, Ryan Corces-Zimmerman, Yong Chen, Bryan R Lajoie, Angelina Protacio, Ryan A Flynn, Rajinish A Gupta, Joanna Wysocka, Ming Lei, Job Dekker, Jill A Helms and Howard Y Chang. Stanford, CA; Worcester, MA and Ann Arbor, MI.
- 374 **First case of recessive epidermolysis bullosa simplex due to KRT5 loss of function mutations leading to splice defects and pseudoexon inclusion.** Nathalie Pironon, Matthias Titeux, Sandra Turczynski, Elodi Tron, Sylvie Fraitag, Stéphanie Leclerc-Mercier, Catherine Prost, Christine Bodemer and Alain Hovnanian. Paris, France.

- 391 **Correction of recessive dystrophic epidermolysis bullosa by homologous recombination.** Li-Chen Wu, Chiao-Wang Sun, Craig A Elmets and Tim M Townes. Birmingham, AL.
- 392 **Interferon regulatory factor 6 is necessary but not sufficient for keratinocyte differentiation.** Leah C Biggs, Lindsey Rhea, Brian C Schutte and Martine Dunnwald. Iowa City, IA and East Lansing, MI.
- 393 **Bone mineral acquisition is meager in children with epidermolysis bullosa.** Teresa Fu, Kyla Kent, Laura K Bachrach and Anna L Bruckner. Stanford, CA.
- 394 **Biomarkers of skin ageing using genome wide transcriptomics.** Daniel Glass, Leopold Parts, David Knowles, Alexandra C Nica, James Nisbet, Amy Barrett, Magdalena Sekowska, Mary Travers, Simon Potter, Elin Grundberg, Kerrin Small, Åsa Hedman, Jordana Tzenova Bell, Gabriela Surdulescu, Frank O Nestle, Paola di Meglio, Richard Durbin, Kourosh Ahmadi, John Winn, Veronique Bataille, Panos Deloukas, Markl McCarthy, Timothy D Spector and Emmanuel T Dermitzakis. London, United Kingdom; Hinxton, United Kingdom; Cambridge, United Kingdom; Geneva, Switzerland and Oxford, United Kingdom.
- 395 **A transcriptional network for keratinocyte differentiation.** Amelia Soto Hopkin, Qiang Liu, Alexander Ihler and Bogi Andersen. Irvine, CA.
- 396** **Epidermal tissue differentiation and lipid barrier function requires the long non-coding RNA Linc19A.** Markus Kretz, Daniel Webster, Zurab Siprashvili, Ashley Zehnder, Cari Lee, Ross Flockhart, Jennifer Chow, Grace Kim, John Rinn, Howard Chang and Paul Khavari. Palo Alto, CA.
- 397* **Developing small molecule drugs to rescue nonsense mutations in disease-causing genes.** Toshifumi Nomura, Ulrike Gartner, Stuart McElroy, Leah Torrie, Celine Pourreyron, Andrew P South, Gavin Wood, Andrew Woodland, Julie Frearson, Paul Wyatt and Irwin McLean. Dundee, United Kingdom.
- 398 **Evidence of endoplasmic reticulum stress response upregulation in Darier keratinocytes which impairs E-cadherin trafficking, and reduces adherens junctions assembly.** Magali Savignac, Anissa Edir, Marina Simon and Alain Hovnanian. Toulouse, France and Paris, France.
- 399 **Gene-environment interaction in extrinsic skin aging: The effect of traffic related pollution is modified by CYP1B1 gene polymorphism.** Andrea Vierkötter, Tamara Schikowski, Dorothee Sugiri, Mary Matsui, Jean Krutmann and Ursula Krämer. Düsseldorf, Germany; Basel, Switzerland and Melville, NY.
- 400 **Next-generation sequencing identifies a homozygous deletion mutation in an ADAM gene underlying autosomal recessive inflammatory skin and bowel disease.** D P Kelsell, D C Blaydon, P Biancheri, W Di, V Plagnol, R M Cabral, T T MacDonald and J I Harper. London, United Kingdom and Cambridge, United Kingdom.
- 401 **Identification of the underlying cause of autosomal recessive exfoliative ichthyosis reveals a role for a protease inhibitor in cell-cell adhesion.** D C Blaydon, D Nitou, R M Cabral, P Bland, A Zvulunov, H C Hennies and D P Kelsell. London, United Kingdom; Beer Sheva, Israel and Münster, Germany.
- 402* **Homozygosity of dominant missense mutations in keratin 17 leads to alopecia in addition to severe pachyonychia congenita.** Neil J Wilson, C D Hansen, Monica L Cardenas Perez, Anders Vahlquist, Mary E Schwartz and Frances J Smith. Dundee, United Kingdom; Salt Lake City, UT; Cali, Colombia and Uppsala, Sweden.
- 403 **Induction of microRNA Mir-29 by UV irradiation down-regulates type I procollagen in fibroblasts in human skin.** Tianyuan He, Taihao Quan, Zhaoping Qin, John J Voorhees and Gary J Fisher. Ann Arbor, MI.
- 404 **Identification of two novel deletions in KRT10 of one patient with ichthyosis en confettis.** Bettina Burger, Iris Spoerri and Peter H Itin. Basel, Switzerland.
- 405 **SSAT overexpression *in vivo* induces downregulation of Hairless and a phenotype similar to the Hr mutation.** Courtney T Luke, Leena Alhonen and Angela M Christiano. New York, NY and Kuopio, Finland.
- 406 **Dissecting the role of SHARPIN in idiopathic hypereosinophilic syndromes.** Christopher S Potter, Zhe Wang, Kathleen Silva, Victoria Kennedy, Leonard Schultz, Harm HogenEsch and John P Sundberg. Bar Harbor, ME and West Lafayette, IN.
- 407 **Lesion-specific expression changes in a patient with Proteus syndrome: Potential implications for the PI3K/AKT pathway.** Kelly J Duffy, Michael Kelly and Beth Drolet. Milwaukee, WI.
- 408 **Targeting keratin 6a gene sequences using small oligonucleotides and PNAs.** L Milstone, H Zambrano, A Majumdar, R Alam, H Li, A Thazhathveetil, P Glazer and M Seidman. New Haven, CT and Baltimore, MD.
- 409** **Hairless is a H3K9 histone demethylase.** Liang Liu, Hyunmi Kim, Alex Casta, Courtney Luke, Yuki Kobayashi, Lawrence S Shapiro and Angela M Christiano. New York, NY.
- 410 **Novel corneodesmosin null mutation and entire gene deletion in two families with inflammatory peeling skin syndrome.** L Furio, M Honma, C Deraison, A Robin, E Tron, B Sans, E Gardini-Fournié, S Igawa, M Murakami, C Prost, A Ishida-Yamamoto and A Hovnanian. Paris, France; Toulouse, France; Castres, France and Asahikawa, Japan.
- 411* **Copy number variation (CNV) on ch4q26-27 is associated with Cantu syndrome, with hypertrichosis and cardiomegaly.** Mazen Kurban, Chong Kim, Katherine Fantauzzo and Angela M Christiano. New York, New York and São Paulo, Brazil.
- 412 **The role of Piasy in an imiquimod-induced psoriasis-like mouse model.** Emily E Swanzey, Yun Wang, James Lagowski, Kevin Phillips, Yuangang Liu and Molly Kulesz-Martin. Portland, OR.
- 413 **Feline lanceolate hair-like disease: Clinical, histological and ultrastructural features.** Ana Rostaher, Christopher S Potter, Jiang Chen, Sonya Bettany, Kathleen A Silva, Lisa Specht, Ralf S Mueller and John P Sundberg. Munich, Germany; Bar Harbor, ME; Aurora, CO and Deisenhofen, Germany.
- 414 **Visualization of functional nucleic acid delivery to mouse and human epidermis.** Emilio González-González, Yeu Chun Kim, Tycho J Speacker, Robyn P Hickerson, Ryan Spitler, James Birchall, Maria Fernanda Lara, Rong-hua Hu, Yanhua Liang, Nancy Kirkiles-Smith, Mark R Prausnitz, Leonard M Milstone, Christopher H Contag and Roger L Kaspar. Stanford, CA; Atlanta, GA; Santa Cruz, CA; Cardiff, United Kingdom and New Haven, CT.
- 415* **Zebrafish model of lipoid proteinosis.** Qiaoli Li, Adele Donahue, Samantha Smith, John A McGrath, Noritaka Oyama and Jouni Utto. Philadelphia, PA; London, United Kingdom and Fukushima, Japan.
- 416 **ΔNp63α directly regulates grainyhead-like 3 expression during epidermal development to form a functional barrier.** Jianning Tao, Lei Zhang, Heather A Pangburn, Irene F Choi, Yu Deng, Aik-Choon Tan, Qinghong Zhang, Bogi Andersen and Dennis R Roop. Houston, TX; Aurora, CO and Irvine, CA.
- 417 **Buschke-Ollendorff syndrome associated with hypertrophic scar formation: A novel splice-site mutation in the LEMD3 gene.** Ayumi Korekawa, Hajime Nakano, Eijiro Akasaka, Daiki Rokunohe, Noriko Takiyoshi, Yoshihiko Mitsuhashi and Daisuke Sawamura. Hirosaki, Japan and Tokyo, Japan.
- 418* **Hereditary leukonychia/ porcelain nails results from mutations in PLCD1 gene.** Maija Kiuru, Mazen Kurban, Munenari Itoh, Lynn Petukhova, Yutaka Shimomura, Muhammad Wajid, Robert H Rice and Angela M Christiano. New York, NY and Davis, CA.
- 419 **Mining for hair follicle genes at the interface of GWAS and linkage in alopecia areata.** L Petukhova and A M Christiano. New York, NY.
- 420 **Exploring the therapeutic potential of induced pluripotent stem cells for the treatment of epidermolytic hyperkeratosis and epidermolysis bullosa simplex.** Ganna Bilousova, Jiang Chen and Dennis R Roop. Aurora, CO.
- 421* **Gene targeting induced by triplex-forming oligonucleotides in skin.** Yanhua Liang, Faye A Rogers, Peter M Glazer and Leonard M Milstone. New Haven, CT.
- 422 **A genetic risk score combining ten psoriasis risk loci improves disease prediction.** Haoyan Chen, Annie Poon, Celestine Yeung, Cynthia Helms, Jennifer Pons, Anne Bowcock, Pui-Yan Kwok and Wilson Liao. San Francisco, CA and Saint Louis, MO.
- 423 **Trim32 role in the imiquimod-induced psoriasis-like phenotype in mice, through TLR7/8 receptor signaling to NF-κB.** Yun Wang, James Lagowski, Emily Swanzey, Kevin Phillips, Yuangang Liu and Molly Kulesz-Martin. Portland, OR.

- 424 **Evaluation of siRNA delivery using an inducible reporter model.** Robyn P Hickerson, Yuan Cao, Emilio Gonzalez-Gonzalez, Maria Fernanda Lara, Leonard M Milstone, Christopher H Contag and Roger L Kaspar. Santa Cruz, CA; Stanford, CA and New Haven, CT.
- 425* **Suppressing AP1 factor signaling in suprabasal epidermis causes nuclear loricrin accumulation and a progressive symmetric erythrokeratoderma-like phenotype.** Ellen A Rorke, Gautam Adhikary and Richard L Eckert. Baltimore, MD.
- 426 **Mutations in *TGM1* in Ecuadorians with autosomal recessive congenital ichthyosis.** H Zambrano, M Montalvan, A Farhi, Y Lu, C Yang, J Cabezas, R Lifton, L Milstone and K A Choate. New Haven, CT and Guayaquil, Ecuador.
- 427* **Genomewide association study (GWAS) of infantile hemangiomas (IH).** B Drolet, D Siegel, K Duffy, Y Chiu, R Lorier, A Stoddard and U Broeckel. Milwaukee, WI.
- 428 **Copy number variation analysis in PHACE syndrome.** Dawn Siegel, David Gibbs, Ilona Frieden, Beth Drolet and Ulrich Broeckel. Milwaukee, WI; Portland, OR and San Francisco, CA.
- 429 **A review of the clinical phenotype in 254 patients with genetically-confirmed pachyonychia congenita.** M J Eliaison, S A Leachman, B Feng, M E Schwartz and C D Hansen. Salt Lake City, UT.
- 440 **A Japanese case of monilethrix caused by compound heterozygous mutations in the desmoglein 4 (*DSG4*) gene.** Muhammad Farooq, Masaaki Ito and Yutaka Shimomura. Niigata, Japan.
- 441 **Combination of human epidermal-dermal equivalents and primary human sebocyte cultures for evaluating topical sebum inhibitors.** Wen-Hwa Li, Apostolos Pappas, Magdalena Eisinger and Li Zhang. Skillman, NJ.
- 442 **Genetic deletion of *Egfr* results in resistance to cyclophosphamide-induced alopecia.** Kyle J Bichsel, N Gogia, T Malouff, E Forney and Laura A Hansen. Omaha, NE.
- 443 **The Hairmax LaserComb enhances hair reRegrowth in post-chemotherapy alopecia.** Rosa Rodriguez, Tongyu C Wikramanayake, Lucia M Mauro, Lawrence A Schachner and Joaquin J Jimenez. Miami, FL.
- 444** ***Intu* controls hair follicle formation through regulating primary cilia formation in epidermal keratinocytes.** Daisy Dai, Li Li, Huiqing Zeng, Aimin Liu and Jiang Chen. Aurora, CO and University Park, PA.
- 445 **Development of a melanotic inbred strain of the Long Evans rat: A model for hair pigmentation.** Joaquin J Jimenez, Julia Escandon, Tongyu C Wikramanayake, Lucia M Mauro and Lawrence A Schachner. Miami, FL.
- 446* **Role of vitamin D receptor in hair follicle cycling through local expression.** Arnaud Teichert, Hashem Elalieh and Daniel Bikle. San Francisco, CA.
- 447 **Eclipta prostrata extract inhibits adipogenesis in primary human subcutaneous adipocytes.** Cheng Hwang, Manpreet Randhawa, John Lyga and Uma Santhanam. Suffern, NY.
- 448* **Discovery of stable RNAs in the human hair shaft by RNA-seq: Implications for serial testing in personalized medicine.** Gloria K Lefkowitz, Christopher A Cowing-Zitron, Anandaroop Mukhopadhyay and Benjamin D Yu. La Jolla, CA.
- 449* **Hdac1 and Hdac2 act redundantly to control p63 and p53 functions in epidermal progenitor cells.** Matthew LeBoeuf, Anne Terrell, Suhom Trivedi, Xinyi Zhao, Satrajit Sinha, Jonathan Epstein, Eric Olson, Edward Morrisey and Sarah E Millar. Philadelphia, PA; Buffalo, NY and Dallas, TX.
- 450 **A mouse model for *in vivo* tracking of canonical wnt/beta-catenin signalling in skin.** Samantha S Hodgson and Kiarash Khosrotehrani. Brisbane, Australia.
- 451* **Regulation of hair growth by microRNA miR-31: Implications of its target gene STK40.** Thomas Andl and Liming Luan. Nashville, TN.
- 452* **Efficiency and efficacy of hair regeneration: Effect of dermal papilla cells on hair inductivity and quality.** Chih-Chieh Chan, Wei-Ting Lin, Jung-Yi Chan, Tsung-Hua Tsai and Sung-Jan Lin. Taipei, Taiwan and New Taipei, Taiwan.
- 453 **The presence of antigen-specific CTLs to melanin-associated protein, MAGE3, in the patients with alopecia areata.** Taisuke Ito, Hideo Hashizume, Masahiro Takigawa and Yoshiki Tokura. Hamamatsu, Japan.
- 454 **Protection from free radical formation on the scalp.** Frank Liebel, Glenn Nystrand and Paulo Bargo. Skillman, NJ.
- 455* **Trps1 and its target gene Sox9 regulate epithelial proliferation in the developing hair follicle and are associated with hypertrichosis.** Katherine A Fantauzzo and Angela M Christiano. New York, NY.
- 456 **Lhx2 is a part of the hair follicle-specific signaling/transcription network and regulates expression of stem cell-associated genes during skin development and regeneration.** Andrei Mardaryev, Krzysztof Poterlowicz, Tatyana Sharova, Michael Fessing, Andrey Sharov and Vladimir Botchkarev. Bradford, United Kingdom and Boston, MA.
- 457* **Epidermal DN-Mastermind-like 1 induces skin carcinomas, hair defects, and genital abnormalities.** Xiaoping Yang, Liang Zhao, Hiroyuki Nishida, Tzvete Dentchev, Warren Pear, Sarah Millar and John Seykora. Philadelphia, PA.
- 458 **Pharmacodynamic effects on anagen inhibition after oral administration of the Smoothened inhibitors LDE225 or GDC0449.** Frank S Kalthoff, Heinrich Aschauer, Elisabeth Foglar, Liesbeth Mudde-Boer, Nicole Schoefmann, Peter Stuchlik, Anton Stuetz and Barbara Wolff-Winiski. Vienna, Austria.
- 459 **Early loss of sebaceous gland in scarring alopecia.** Tariq Al-Zaid, Stefan Vanderweil, Zhiru Guo, Artur Zembowicz and Stephen Lyle. Houston, TX; Worcester, MA and Burlington, MA.

Hair and Cutaneous Development

All orals [designated with an asterisk (*)] listed below are presented in the Hair and Cutaneous Development Minisymposium on Thursday, May 5, 2011 from 2:00-5:30 p.m. in Wildflower A, JW Marriott Desert Ridge. Orals designated by two asterisks (**) will be presented during a Plenary Session.

- 430 **Wound healing milieu protects against chemotherapy induced alopecia.** Julia Escandon, Olivera Stojadinovic, Lucia M Mauro, Tongyu Cao Wikramanayake, Marjana Tomic-Canic and Joaquin J Jimenez. Miami, FL.
- 431 **Spermidine promotes human hair follicle growth and modulates human epithelial stem cell functions.** Yuval Ramot, Stephan Tiede, Tamas Biró, Mohd Hilmi Abu Bakar, Balazs Toth, Michael Philpott, Wesley Harrison, Koji Sugawara and Ralf Paus. Jerusalem, Israel; Lübeck, Germany; Debrecen, Hungary; Kelantan, Malaysia; London, United Kingdom and Manchester, United Kingdom.
- 432 **The murine areola: Postnatal model of specialized epidermal growth.** Carlos D Offutt, Sachiko Koyama and John Foley. Bloomington, IN and Indianapolis, IN.
- 433 **Reliability and validity of a photographic method for measuring facial hair density in men.** J Wan, A Musiek, K Abuabara, S K Kurd, J M Steinemann, C C Vittorio and J M Gelfand. Philadelphia, PA.
- 434 **New strategy to modulate alopecia using a combination of 2 specific and unique ingredients.** Estelle Loing, Michel Hocquaux and Isabelle Lacasse. Quebec, Canada and Ramonville St. Agne, France.
- 435* **Hair shaft defects in the rough coat (rc) mice.** Mariya Miteva, Angel G Leiva, Joaquin J Jimenez, Katalin Csiszar and Tongyu C Wikramanayake. Miami, FL and Honolulu, HI.
- 436 **A novel rat model for chemotherapy-induced alopecia.** Tongyu C Wikramanayake, Sadegh Amini, Jessica Simon, Lucia M Mauro, George Elgart, Lawrence A Schachner and Joaquin J Jimenez. Miami, FL.
- 437 **Protection of melanin content in the hair follicle.** Celine Meyrignac, Armelle Perrin, Sandrine Ratz, Valerie Lequoy, Karine Cucumel, Catherine Gondran, Claude Dal Farra and Nouha Domloge. Sophia Antipolis, France and Wayne, NJ.
- 438 **A new approach to promote VEGF expression in hair follicle.** Sandrine Ratz, Armelle Perrin, Celine Meyrignac, Ludivine Mur, Catherine Gondran, Claude Dal Farra and Nouha Domloge. Sophia Antipolis, France and Wayne, NJ.
- 439 **Mesenchymal aging impairs hair follicle epithelial-mesenchymal interaction.** Yi-Ching Huang, Kai-Hsin Huang, Chih-Chieh Chan, Jin-Bon Hong, Ren-Yeu Tsai, June-Tai Wu and Sung-Jan Lin. Taipei, Taiwan and Douliu, Taiwan.
- 450 **A mouse model for *in vivo* tracking of canonical wnt/beta-catenin signalling in skin.** Samantha S Hodgson and Kiarash Khosrotehrani. Brisbane, Australia.
- 451* **Regulation of hair growth by microRNA miR-31: Implications of its target gene STK40.** Thomas Andl and Liming Luan. Nashville, TN.
- 452* **Efficiency and efficacy of hair regeneration: Effect of dermal papilla cells on hair inductivity and quality.** Chih-Chieh Chan, Wei-Ting Lin, Jung-Yi Chan, Tsung-Hua Tsai and Sung-Jan Lin. Taipei, Taiwan and New Taipei, Taiwan.
- 453 **The presence of antigen-specific CTLs to melanin-associated protein, MAGE3, in the patients with alopecia areata.** Taisuke Ito, Hideo Hashizume, Masahiro Takigawa and Yoshiki Tokura. Hamamatsu, Japan.
- 454 **Protection from free radical formation on the scalp.** Frank Liebel, Glenn Nystrand and Paulo Bargo. Skillman, NJ.
- 455* **Trps1 and its target gene Sox9 regulate epithelial proliferation in the developing hair follicle and are associated with hypertrichosis.** Katherine A Fantauzzo and Angela M Christiano. New York, NY.
- 456 **Lhx2 is a part of the hair follicle-specific signaling/transcription network and regulates expression of stem cell-associated genes during skin development and regeneration.** Andrei Mardaryev, Krzysztof Poterlowicz, Tatyana Sharova, Michael Fessing, Andrey Sharov and Vladimir Botchkarev. Bradford, United Kingdom and Boston, MA.
- 457* **Epidermal DN-Mastermind-like 1 induces skin carcinomas, hair defects, and genital abnormalities.** Xiaoping Yang, Liang Zhao, Hiroyuki Nishida, Tzvete Dentchev, Warren Pear, Sarah Millar and John Seykora. Philadelphia, PA.
- 458 **Pharmacodynamic effects on anagen inhibition after oral administration of the Smoothened inhibitors LDE225 or GDC0449.** Frank S Kalthoff, Heinrich Aschauer, Elisabeth Foglar, Liesbeth Mudde-Boer, Nicole Schoefmann, Peter Stuchlik, Anton Stuetz and Barbara Wolff-Winiski. Vienna, Austria.
- 459 **Early loss of sebaceous gland in scarring alopecia.** Tariq Al-Zaid, Stefan Vanderweil, Zhiru Guo, Artur Zembowicz and Stephen Lyle. Houston, TX; Worcester, MA and Burlington, MA.

- 460* **Constitutive expression of Aryl hydrocarbon receptor in keratinocytes causes scarring alopecia.** Sreejith P Panicker, Taneeta Ganguly, Ali A Lattif, Mary C Consolo, Masayuki Yamamoto, Kord Honda and Pratima Karnik. Cleveland, OH and Tsukuba, Japan.
- 461* **Positive and negative effects of RAS on Shh transcription are both mediated through ETV4.** Anandaroop Mukhopadhyay, Suguna R Krishnaswami, Christopher C Zitron, Shantanu Kumar and Benjamin D Yu. San Diego, CA.
- 462* **Regulation of hair morphology by the dermal papilla.** Woo Chi, David Enshell-Seijffers and Bruce A Morgan. Boston, MA.
- 463* **The role of p63 in hair follicle stem cell activation.** Velmurugan Balaiya, Merlin Ariefdjohn, Peter J Koch and Marankel Koster. Aurora, CO.
- 464 **Vitamin D levels in alopecia areata (AA).** Anna Levin, Ana Junqueira Bertin, Irving Katz, HongFei Guo, Qi Wang and Maria K Hordinsky. Kansas City, MO and Minneapolis, MN.
- 465 **Altered lymphatic architecture in the scalp skin from patients with extensive alopecia areata (AA).** Sima Kavand, Jaime Nugent, Maria Hordinsky, Kalpana Gupta and Marna Ericson. Minneapolis, MN.
- 466* **Role of aurora kinase-A in skin development.** Enrique C Torchia, Lei Zhang, Aaron J Huebner, Subrata Sen and Dennis R Roop. Aurora, CO and Houston, TX.
- 467 **Female nonscarring alopecia (FNA) and nutritional deficiencies.** Ana Junqueira Bertin, Anna Levin, Nestor Bertin Suguitani, Rina Farah, HongFei Guo, Qi Wang and Maria K Hordinsky. Minneapolis, MN and Kansas City, MO.
- 468 **In situ labeling of DNA may be used to predict probability of success of forensic genotyping of hair.** Leopold Eckhart, Sandra Szabo, Karin Jaeger, Jennifer Scherz, Heinz Fischer, Walther Parson and Erwin Tschachler. Vienna, Austria and Innsbruck, Austria.
- 469 **Bimatoprost, a prostamide F2 α analogue used for glaucoma, stimulates scalp hair follicle growth via follicular receptors; Is this a new approach for alopecia?** Karzan G Khidhir, Nilofer P Farjo, Bessam K Farjo, David F Woodward, Steven M Picksley and Valerie A Randall. Bradford, United Kingdom; Manchester, United Kingdom and Irvine, CA.
- 470 **Dermal papilla cells promote trichogenesis in engineered skin substitutes.** Penkanok Sriwiriyanon, Elizabeth A Maier, Kaari A Lynch, Dorothy M Supp and Steven T Boyce. Cincinnati, OH.
- 471 **Intermediate hair follicles: A novel, androgen-responsive human model system.** Benjamin H Miranda, Desmond J Tobin, David T Sharpe and Valerie A Randall. Bradford, United Kingdom.
- 472* **Coordinated activation of Wnt signaling in epithelial and melanocyte stem cells in a shared niche initiates pigmented hair follicle regeneration.** Piul Rabbani, Makoto Takeo, Wei Chin Chou, Peggy Myung, Mark Taketo, Lynda Chin, Marcus Bosenberg and Mayumi Ito. New York, NY; Kyoto, Japan; Boston, MA; New Haven, CT and Cleveland, OH.
- 473 **The circadian transcriptome in skin is hair growth cycle dependent.** Mikhail Geyfman, Qiang Liu, Alexander Ihler, Padhraic Smyth and Bogi Andersen. Irvine, CA.
- 474* **Epigenetic modulation of skin morphogenesis via global histone acetylation.** Michael W Hughes, Ting-Xin Jiang, Sung-Jan Lin, Randy Widelitz and Cheng-Ming Chuong. Los Angeles, CA.
- 476 **Digital image speckle correlation (DISC) analysis for quantifying the effect and duration of cosmetic treatment with botulinum toxin(BT) type A.** Divya Bhatnagar, Miriam Rafailovich, Nicole Conkling, Brett T Phillips, Sami U Khan, Duc T Bui and Alexander B Dagum. Stony Brook, NY.
- 477* **Response to antimalarials in cutaneous lupus erythematosus.** Aileen Y Chang, Evan W Piette, Kristen P Foering, Thomas R Tenhave, Joyce Okawa and Victoria P Werth. Philadelphia, PA.
- 478 **Association of the numbers of CD163 $^{+}$ macrophages in lesional skin and serum levels of soluble CD163 with disease progression of cutaneous T cell lymphoma.** Makoto Sugaya, Tomomitsu Miyagaki, Hanako Ohmatsu, Hiraku Suga, Hiromichi Kai, Masahiro Kamata, Yayoi Tada and Shinichi Sato. Tokyo, Japan.
- 479* **Pralatrexate selectively induces apoptosis and synergizes with bexarotene through up-regulation of p53/Bax/PUMA in cutaneous T-cell lymphoma cells.** Sophia Rangwala, Xiang Zhang, Chunlei Zhang and Madeleine Duvic. Houston, TX.
- 480 **NVP-BFH722, a potent inhibitor of VEGF receptor tyrosine kinases, is effective in models of skin inflammation.** Josef G Meingassner, Hermann Fahrngruber, Elisabeth Kowalsky, Andreas Billich, Guido Bold, Amanda Littlewood-Evans and Anton Stuetz. Vienna, Austria and Basel, Switzerland.
- 481 **Skin physiology in neonates and young children of different age groups compared to adults: A randomized study.** Joachim W Fluhr, Nadège Lachmann, Caroline Baudouin, Clarence de Belilovsky, Philippe Msika and Jean-Pierre Hachem. Berlin, Germany; Epernon, France; Paris, France and Brussels, Belgium.
- 482 **Use of a magnet-containing barbell in the tongue to operate the tongue drive system.** Julia Minocha, Jaimee Holbrook, Behnaz Yousefi, Jeonghee Kim, Xueliang Huo, Diane Rowles, Brenda Bartlett, Lisa Ruppert, Sean Johnson-Bice, Dennis West, Emir Veledar, Elliot Roth, Maysam Ghovanloo and Anne Laumann. Chicago, IL and Atlanta, GA.
- 483 **Evaluation of psoriasis area and severity index, static physician's global assessment, and lattice system-physician's global assessment for assessing psoriasis severity.** Conroy Chow, Zhenyang Zhang, Michael T Goldfarb, Matthew J Simpson and Charles N Ellis. Ann Arbor, MI.
- 484 **Effect of extracorporeal photopheresis on dendritic cell populations in patients with Sézary syndrome and graft-versus-host disease and its correlation with the clinical response.** Lisa Shiue, Madeleine Duvic, Meghali Goswami, Amin Alousi, Chitra Hosing and Xiao Ni. Houston, TX.
- 485 **Persicaria hydropiper (L.) Spach and its flavonoid components, isoquercitrin and isorhamnetin, activate the Wnt/ β -catenin pathway and inhibit the adipocyte differentiation of 3T3-L1 cells.** Bora Kim, Soung-Hoon Lee, Myoung Jin Oh, Jin Eun Kim, Su Min Lee, Juyong Yoon, Hyun Yi Kim, Kye Jong Lee, Hyuk Kim, Joo Dong Lee and Kang-Yell Choi. Incheon, South Korea and Seoul, South Korea.
- 486 **Serum proteins responsible for pruritus in cutaneous T cell lymphoma.** Hiraku Suga, Makoto Sugaya, Tomomitsu Miyagaki, Hanako Ohmatsu, Hideki Fujita and Shinichi Sato. Tokyo, Japan.
- 487 **IL-10 is a therapeutic target for intense pulsed light in acne vulgaris.** Marisa Taylor and Maria Gonzalez. Cardiff, United Kingdom.
- 488 **Modulating survivin expression in the skin helps against UV damage. In vivo study.** Yolene Guerif Ferreira, Laurine Bergeron, Alexia Lebleu, Gilles Oberto, Arlette Berghi, Karine Cucumel, Jean Marie Botto, Claude Dal Farra and Nouha Domloge. Sophia Antipolis, France and Wayne, NJ.
- 489 **Immunologic dysregulation in acneiform eruption due to EGFR inhibitor therapy.** F Wang, W Lee, T Do, N Smith, D Sachs, M Zalupska, J J Voorhees, S Kang and G J Fisher. Ann Arbor, MI and Baltimore, MD.
- 490 **FDG PET/CT demonstrates increased vascular inflammation in patients with severe psoriasis.** Nehal N Mehta, YiDing Yu, Babak Saboury, Negar Foroughi, Anna Raper, Amanda Baer, Rachel Ochotny, Parasuram Krishnamoorthy, Jules Antigua, Abby Van Voorhees, Drew A Torigian, Abass Alavi and Joel M Gelfand. Philadelphia, PA.
- 491 **Reversion of aging-related gene expression and clinical benefits of a Saccharina longicurvis extract.** Alain Thibodeau. St-Augustin, Canada.
- 492* **A pilot study of an oral phosphodiesterase inhibitor (apremilast) for atopic dermatitis.** Aman Samrao, Trista Berry and Eric Simpson. Portland, OR.

Human Clinical Research and Therapeutics

All orals [designated with an asterisk (*)] listed below are presented in the Human Clinical Research and Therapeutics Minisymposium on Saturday, May 7, 2011 from 12:30-4:00 p.m. in Grand Sonoran G, JW Marriott Desert Ridge. Orals designated by two asterisks (***) will be presented during a Plenary Session.

- 475 **Non-lesional atopic dermatitis skin is characterized by broad terminal differentiation defects and variable immune abnormalities.** Suzanne Tintle, Mayte Suárez-Fariñas, Avner Shemer, Andrea Chiricozzi, Kristine Nograles, Irma Cardinale, Shenghui Duan, Anne Bowcock, James G Krueger and Emma Guttman-Yassky. New York, NY; Tel-Aviv, Israel; Rome, Italy and St. Louis, MO.



- 493* **Antagonism of p40 cytokines in psoriasis patients may promote paradoxical cardiovascular risk.** Caitriona Ryan, Craig Leonardi, James Krueger, Alexa Kimball, Bruce Strober, Kenneth Gordon, Richard Langley, Daniel Kaplan and Alan Menter. Dallas, TX; Saint Louis, MO; New York, NY; Boston, MA; Chicago, IL; Halifax, Canada and Minneapolis, MN.
- 494 **Type I interferon-inducible genes are up-regulated in the peripheral blood of discoid lupus patients.** Lin-chiang Tseng, Shurong Chang, Laurie S Davis, Quan Z Li, Chandra Mohan and Benjamin F Chong. Dallas, TX.
- 495 **Oral administration of a hydrophilic extract of Polypodium leucotomos for the prevention of polymorphic light eruption.** Adrian Tanew, Sonja Radakovic, Salvador Gonzalez, Eduardo Reyes, Marina Venturini and Piergiacomo Calzavara-Pinton. Vienna, Austria; New York, NY; Alcala de Henares, Spain and Brescia, Italy.
- 496 **The hemangioma investigator group (HIG): A cost-effective, collaborative model for clinical research.** B Drole, M Chapman and I Frieden. Milwaukee, WI and San Francisco, CA.
- 497 **Distinctive pattern activation of pain and itch in human brain cortex by near infra-red (NIR) optical topography.** Chien-Hui Hong, Tohru Yoshioka, Ayako Kudo, Fukue Fujino, Yu-Wen Chen, Mie Sakata and Chih-Hung Lee. Kaohsiung, Taiwan and Yokosuka, Japan.
- 498 **The study about transmission of *Staphylococcus aureus* from mothers to children with atopic dermatitis.** Jong-Rok Lee, So-young Na and Joo-young Roh. Incheon City, South Korea.
- 499 **Quality of life in patients with uremic xerosis.** Patrick Dupuy, Jacek Szepietowski, Elias Balaskas and Klaus Taube. Toulouse, France; Wroclaw, Poland; Thessaloniki, Greece and Halle, Germany.
- 500 **The anti-inflammatory benefits of tridecylcarboxyethylate.** Helen Meldrum, John Bajor, JoAnn Alicea, Vickie Foy, Jaime O'Leary, Bijan Harirchian and Carol Bosko. Trumbull, CT.
- 501* **An internet-based survey and contest: A novel method for improving acne outcomes.** Brad A Yentzer, Ashley A Wood, Matthew J Sagransky, Jenna L O'Neill, Adele R Clark, Lisa L Williams and Steven R Feldman. Winston Salem, NC.
- 502* **ANA and anti-dsDNA in patients under treatment with Infliximab — A potential predictor for non-response to infliximab.** Jochen Hoffmann, Martin Hartmann, Alexander H Enk and Eva N Hadischik. Heidelberg, Germany.
- 503 **Positive results of a pivotal phase II trial testing a manufactured 0.02% mechlorethamine gel in mycosis fungoides (MF).** Stuart Lessin, Madeleine Duvic, Joan Guitart, Amit Pandya, Bruce Strober, Elise Olsen, Christopher Hull, Elizabeth Knobler, Alain Rook, Ellen Kim, Mark Naylor, David Adelson, Alexa Kimball, Gary Wood, Hong Wu, Barry Walker and Youn Kim. Philadelphia, PA; Houston, TX; Chicago, IL; Dallas, TX; New York, NY; Durham, NC; Salt Lake City, UT; Oklahoma City, OK; Boston, MA; Madison, WI; Radnor, PA and Palo Alto, CA.
- 504 **An investigator-initiated, open-label study evaluating the efficacy and safety of ustekinumab in patients with moderate to severe palmar plantar psoriasis.** Andrew C Wang, Todd A Kerensky, Shiu-chung Au, Shimrat Yaniv, Melissa Michelon, Israel Andrews, Nicole Dumont and Alice B Gottlieb. Boston, MA; Bronx, NY and Beer-Sheva, Israel.
- 505 **Safety and efficacy of AN2728 ointment in a Phase 2b dose-ranging, bilateral study of mild-to-moderate plaque psoriasis.** Lee T Zane, Mirna Toledo-Bahena, Matilda H Hughes and Frederic A Heerinckx. Palo Alto, CA and Mexico City, Mexico.
- 506 **Inhibition of cathelicidin processing enzymes as therapy for rosacea.** Kimberly N Kanada, Teruaki Nakatsuji, Eugene Y Huang and Richard L Gallo. La Jolla, CA and San Diego, CA.
- 507 **Treatment and outcomes in nephrogenic systemic fibrosis.** Kevin N Christensen and Mark R Pittelkow. Rochester, MN.
- 508 **Association of skin aging severity with blood isoprostane levels in healthy middle-aged Japanese women.** Tiffany C Chang, Bharathi Lingala, Dale G Kern, Steve M Wood, Hidekazu Toyoda, Helen Knaggs and Anne Lynn S Chang. Redwood City, CA and Provo, UT.
- 509 **Using a RNAi-based screen to identify targets to be combined with BRAF inhibitors for treating melanomas.** Yiqun G Shellman, Katie A Partyka, Chris Porter, Matias Casas, Aik Choon Tan, Jihye Kim, Mark Gregory, Shilo Smith, Mayumi Fujita, James DeGregori and David A Norris. Aurora, CO.
- 510 **Open-label, multiple-application pharmacokinetic (PK) study of naftifine 2% cream (NAFT-2) in subjects with tinea cruris & tinea pedis.** Babajide Olayinka, Eric J Pappert and Bhushan Hardas. Greensboro, NC.
- 511 **Evaluation of the phototoxicity & photoallergenicity potential of naftifine 2% cream (NAFT-2).** Eric J Pappert and Bhushan Hardas. Greensboro, NC.
- 512 **Evaluation of the sensitization & irritation potential of naftifine 2% cream (NAFT-2) in healthy human volunteers.** Bhushan Hardas and Eric J Pappert. Greensboro, NC.
- 513 **Withdrawn.**
- 514 **The impact of smoking in cutaneous lupus erythematosus and dermatomyositis.** Evan W Piette, Kristen P Foering, Aileen Y Chang, Joyce Okawa and Victoria P Werth. Philadelphia, PA.
- 515 **First-time-in-man, safety/tolerability and pharmacokinetics of ascending oral doses of apremilast (APR) in healthy subjects (HS).** Anfan Wu and Michael Scheffler. Summit, NJ.
- 516 **The immunomodulatory effect of intense pulsed light on acne vulgaris.** Musheera M Ali, Maria L Gonzalez, Fiona S Ruge and Rebecca M Porter. Cardiff, United Kingdom.
- 517 ***Staphylococcus aureus* colonization does not increase the rate of infection among psoriasis patients using biologic therapy.** Kelly Griffith-Bauer, Cara D Varley, Kevin L Winthrop, Andrew Blauvelt, Atul A Deodhar, Antony Bakke, Robert Vega and Benjamin D Ehst. Portland, OR.
- 518 **Hair growth stimulation by mesenchymal stem cell-derived proteins.** Chong Hyun Won, Jeong Eun Kim, Sungeun Chang, Chae Hwa Kim, Byung Soon Park and Won Serk Kim. Seoul, South Korea.
- 519 **Disseminated granuloma annulare: Successful anti-TNF-alpha treatment with adalimumab. A case series in 6 patients: clinical course and immunohistochemistry.** Rudolf E Schopf and Erogul Peresics. Mainz, Germany.
- 520* **The histone deacetylase inhibitor, romidepsin, suppresses *in vivo* immune functions of cutaneous T-cell lymphoma patients.** Michael J Kelly-Sell, Bernice Benoit, Youn H Kim, Cameron Harrison, Katherine Sutherland, Louise C Showe, Maria Wysocka and Alain H Rook. Philadelphia, PA and Palo Alto, CA.
- 521 **Collagen deposition during the early phase of remodeling is similar in young and aged human skin.** Laure Ritté, Jeffrey S Orringer, Dana L Sachs, John J Voorhees and Gary J Fisher. Ann Arbor, MI.
- 522 **Label-free microarray-based protein profiling in human serum.** Benjamin L Miller, Rashmi Sriram, Amrita R Yadav, Scott Tobis, Jared A Carter, Christopher C Striemer, Sourabh D Mehta, Michael V Mungillo and Charles R Mace. Rochester, NY and Henrietta, NY.
- 523 **A cross-sectional study of resistin in psoriasis patients.** D Kast, N Borkar, I Grozdev, D Carlson, R Feig, P Pujari, D Babineau, E Kern, T McCormick, K Cooper and N Korman. Cleveland, OH.
- 524 **The degree of correlation between the physician's global assessment (PGA) and psoriasis area and severity index (PASI) in randomized controlled trials of biologic agents for moderate to severe plaque psoriasis.** Amanda H Robinson, Marisa Kardos and Alexandra B Kimball. Boston, MA.
- 525 **Clinical efficacy of a new natural ingredient that simultaneously addresses multiple facets of acne pathogenesis.** Johane Guay and Brigitte Page. Quebec City, Canada.
- 526* **Blood involvement in stage IA mycosis fungoides by flow cytometry predicts or is associated with higher rate of progression.** Rakhshanda Talpur, Lotika Singh, Amishi Shah, Seema Daulat, Ping Liu and Madeleine Duvic. Houston, TX.
- 527 **Evaluation of itch and pain as presenting symptoms in non-melanoma skin cancer.** Kyle C Mills, Ashley N Feneran, Alex Zeitany, Hong L Tey, Andrew Lee, Omar P Sangüea, Philip Williford, Daniel Pearce and Gil Yosipovitch. Winston-Salem, NC.
- 528 **Triple antibiotic ointment for the eradication of *Staph aureus* in healthcare workers.** Elizabeth Grossman, Jennifer Gordon, Ann Cameron Haley, Meghan Dubina and Peter Lio. Chicago, IL.
- 529 **Sensitization to benzalkonium chloride and benzethonium chloride.** Harry Dao, Susan T Nedost and Chris Fricker. Cleveland, OH and Akron, OH.

- 530 **Crosstalk between UV-induced PI-3 kinase/Akt/mTOR and Fyn/RSK2 signaling pathways: Implications in skin carcinogenesis.** Yira Bermudez, Steven P Stratton, Clara Curiel-Lewandrowski, James Warneke, George T Bowden, Zigang Dong, Ann M Bode, Craig A Hurst, Julie E Lang, David S Alberts and Janine G Einspahr. Tucson, AZ and Austin, MN.
- 531 **Disposition, metabolism and mass balance of [¹⁴C]apremilast following oral administration.** Matthew Hoffmann, Gondi Kumar, Peter Schafer, Dorota Cedzik, Lori Capone, Kei-Lai Fong, Zhe-ming Gu, Dennis Heller, Hao Feng, Sekhar Surapaneni, Oscar Laskin and Anfan Wu. Summit, NJ; Berkeley, CA and Plainsboro, NJ.
- 532 **Administration of vitamin K does not counteract the ectopic mineralization of connective tissues in *Abcc6*^{-/-} mice, a model for pseudoxanthoma elasticum.** Qiujie Jiang, Qiaoli Li, Alix E Grand-Pierre, Leon J Schurgers and Jouni Uitto. Philadelphia, PA and Maastricht, Netherlands.
- 533 **Hair follicle organ culture combined with cytotoxic lymphocytes yields a novel bioassay for screening drugs for immune mediated hair disorders.** Pallavi Singh, Luzhou Xing, Claire Higgins, Raphael Clynes and Angela M Christiano. New York, NY.
- 534* **T cells in the skin lesions of stage I mycosis fungoïdes show markedly suppressed cytokine production.** Rei Watanabe, Marianne Tawa, Natalie Adams, Andrew Dorosario, David C Fisher, Thomas S Kupper and Rachael A Clark. Boston, MA.
- 535** **Hematopoietic and mesenchymal stem cell transplantation for recessive dystrophic and junctional epidermolysis bullosa.** Jakub Tolar, John A McGrath, Douglas R Keene, Maria Hordinsky, Mark J Osborn, Megan J Riddle, Ana Junqueira Bertin, David Woodley, Mei Chen, Alain Hovnanian, Katsuto Tamai, Bruce R Blazar and John E Wagner. Minneapolis, MN; London, United Kingdom; Portland, OR; Minneapolis, MN; Los Angeles, CA; Paris, France and Osaka, Japan.
- 536* **Curcumin intervention and plasma biomarkers for radiation dermatitis in breast cancer patients.** Julie L Ryan, Marilyn Ling, Jacqueline Williams, Gary R Morrow and Alice P Pentland. Rochester, NY.
- 537 **Oral azathioprine therapy improves the clinical and cutaneous antimicrobial response in children with moderate to severe atopic dermatitis.** Wynnies Tom, Paul Kotol, David Audish, Therese Cosan and Richard Gallo. San Diego, CA.
- 538 **T4 endonuclease V liposome (T4N5) treatment ameliorates gene expression profile in actinic keratoses and sun-exposed skin of renal transplant patients.** Rubina Shafi, Wendy Cantrell, William E Grizzle, Mohammad Athar and Craig A Elmets. Birmingham, AL.
- 539 **Anthralin successfully treats alopecia areata: A half-side comparison.** Rudolf Schopf. Mainz, Germany.
- 540* **Efficient and reliable skin responses with unconventional low-dose total skin electron beam therapy in mycosis fungoïdes: A phase II study.** Cameron Harrison, Daniel Navi, Bharathi Lingala, Randy Armstrong, Wen-Kai Weng, Uma Sundram, Bouthaina Dabaja, Lotika Singh, Madeleine Duvic, Richard T Hoppe and Youn H Kim. Stanford, CA and Houston, TX.
- 541 **11 β -hydroxysteroid dehydrogenase type 1 increases with age and photoexposure in human skin *ex vivo*.** Ana Tiganescu, Elizabeth A Walker, Andrew E Mayes and Paul M Stewart. Birmingham, United Kingdom and Bedford, United Kingdom.
- 542 **Total skin electron beam and non-myeloablative allogeneic hematopoietic stem-cell transplantation in advanced mycosis fungoïdes and sezary syndrome.** Lotika Singh, Chitra Hosing and Madeleine Duvic. Houston, TX.
- 543* **A role for PD-1 in suppressing T cell activity in human merkel cell carcinomas.** Mitra Dowlatshahi, Linda Wang, Jessica E Teague, Michael K Lichtman, Ahmed Gehad, Rei Watanabe, William J Crisler, Thomas S Kupper and Rachael A Clark. Boston, MA.
- 544 **Vitamin encapsulated nanosomes affect changes in Syk and Erk1/2 induced by skin UV exposure.** Chetana Sunkari, Zhenyu Huang, Jouni Uitto and Elisabeth Papazoglou. Philadelphia, PA.
- 545* **Early rituximab therapy of autoimmune blistering disease is associated with better clinical response.** Luisa Lunardon, Kathleen J Tsai, Nicole Fett, John R Stanley, Donald E Tsai, Victoria P Werth and Aimee S Payne. Philadelphia, PA.
- 546 **Functional MRI investigations of brain processing of itch sensation in end-stage-renal-disease patients with chronic pruritus.** Alexandru D Papoiu, Robert Coghill, Liliana Banari, Robert Kraft and Gil Yosipovitch. Winston-Salem, NC.
- 547* **Reversal of local immune evasion mechanisms and regression of human Merkel cell carcinoma by intralesional injection of interferon-beta.** Kelly Paulson, Andrew Tegeder, Cristoff Willmes, Jayasri Iyer, David Schrama, David Koelle, Michele Cleary, Shailender Bhatia, Jürgen Becker and Paul Nghiem. Seattle, WA; North Wales, PA and Graz, Austria.
- 548* **Psoriasis family history portends earlier age of onset, higher incidence of psoriatic arthritis, and increased likelihood of biologic treatment in psoriasis patients.** Neil Borkar, Douglas Kast, Ivan Grozdev, Diana Carlson, Lauren Cao, Rivka Feig, Prasad Pujari, Brian Schmotzer, Denise Babineau, Thomas McCormick, Kevin Cooper and Neil Korman. Cleveland, OH.
- 549** **An investigator-initiated, phase II randomized, double-blind, placebo-controlled trial of GDC-0449 for prevention of BCCs in basal cell nevus syndrome (BCNS) patients.** Jean Y Tang, Julian M Mackay-Wiggan, Michelle Aszterbaum, Joselyn Lindgren, Kris Chang, Carol Coppola, Angela Campbell, Anita Chanana, Jackleen Marij, David R Bickers and Ervin H Epstein. Oakland, CA; Redwood City, CA and New York, NY.
- 550 **Clinical benefits of topical application of *Artemisia abrotanum* (Southernwood) on photodamaged skin.** Meghan Russell, Tara Zedayko, Claude Saliou and Samantha Tucker-Samaras. Skillman, NY.
- 551 **Age-matched multiplex analysis reveals global immune dysregulation in patients with CTCL.** Larisa J Geskin, Oleg E Akilov, Diana E Linzer, Yan Lin, Louis D Falo and Anna E Lokshin. Pittsburgh, PA.
- 552 **The comorbidities associated with serum vitamin D deficiency in veteran patients with psoriasis.** Chen Young, Sayeeda Fatima, Benjamin Workman, Julie Kado and Leonard Savoy. Detroit, MI.
- 553 **The population pharmacokinetics of briakinumab in subjects with moderate to severe plaque psoriasis.** Matthew Hruska, Susan Paulson, Martin Kaul, Walid Awni and Peter Noertersheuer. Abbott Park, IL; Ludwigshafen, Germany; Abbott Park, IL and Ludwigshafen, Germany.
- 554 **HIV infection and non-melanoma skin cancer risk.** Michael J Silverberg, Wendy Leyden, E Margaret Warton, Eric A Engles and Maryam M Asgari. Oakland, CA and Rockville, MD.

Immunology 1: Adaptive Immunity

All orals [designated with an asterisk (*)] listed below are presented in the Immunology 1: Adaptive Immunity Minisymposium on Thursday, May 5, 2011 from 2:00-5:30 p.m. in Grand Canyon 9-10, JW Marriott Desert Ridge. Orals designated by two asterisks (**) will be presented during a Plenary Session.

- 555 **Biosensor system to detect the tumor reactive population in bulk tumor infiltrating T cells.** Takashi Inozume, Ken-ichi Hanada, Steven A Rosenberg, Shinji Shimada and James C Yang. Chuo, Japan and Bethesda, MD.
- 556 **Preferential expression of miR-10a in regulatory T cells.** Hayato Takahashi, Yuka Kanno, Shingo Nakayamada, Stefan Kuchen-Brandes, Rafael Casellas and John J O'Shea. Bethesda, MD.
- 557* **β 2-adrenergic agonists bias TLR-2- and -NOD2-activated dendritic cells towards inducing an IL-17 immune response.** Michela Manni, Richard D Granstein and Georges Maestroni. New York, New York and Locarno, Switzerland.
- 558 **A class 4 semaphorin, Sema4B regulates activation of basophils.** Yukinobu Nakagawa, Hyota Takamatsu, Ichiro Katayama and Atsushi Kumanogoh. Suita, Japan.
- 559 **Epidermal CCR6+ γ 6 T Cells are essential producers of IL22 and IL17 in an IL23-mediated murine model of psoriasiform dermatitis.** Tomotaka Mabuchi, Tomonori Takekoshi and Sam T Hwang. Milwaukee, WI.
- 560 **A novel STAT3 inhibitor (rR9-GRIM19) markedly enhances antitumor effects by Treg suppression when combined with Th1-type immunotherapy in melanoma-bearing mice.** Takashi Okamoto, Naotaka Shibagaki, Fumie Hanawa and Shinji Shimada. Yamanashi, Japan.



- 561*** **Production of SJS/TEN model mice using patients PBMCs and skin.** Nao Saito, Riichiro Abe, Naoya Yoshioka, Hongjiang Qiao, Yasuyuki Fujita, Daichi Hoshina and Hiroshi Shimizu. Sapporo, Japan.
- 562*** **Generation of tumor-specific anti-melanoma T-cell responses by extracorporeal photochemotherapy-induced dendritic cells.** Anna K Engberg, Carole L Berger, Douglas J Hanlon and Richard L Edelson. New Haven, CT.
- 563*** **Granulocyte-derived dendritic cells (grDC) are specialized for bacterial antigen presentation.** Shuo Geng, Hironori Matsushima, Paul Kotol, Richard Gallo and Akira Takashima. Toledo, OH and San Diego, CA.
- 564** **Melanoma secretes the T cell inhibitor DC-HIL: A novel mechanism of tumor-induced systemic immunosuppression.** Kyoichi Tamura, Jin-Sung Chung, Ponciano D Cruz and Kiyoshi Ariizumi. Dallas, TX.
- 565** **Inhibition of the effector phase of contact hypersensitivity in sensitized mice via *in vivo* induction of Foxp3+ regulatory T cells by UV radiation.** Agatha Schwarz, Fatemeh Navid, Tim Sparwasser, Björn Clausen and Thomas Schwarz. Kiel, Germany; Hannover, Germany and Rotterdam, Netherlands.
- 566** **Langerhans cells are critical in the pathogenesis of atopic dermatitis via TSLP receptor signaling.** Saeko Nakajima, Yoshiki Miyachi and Kenji Kabashima. Kyoto, Japan.
- 567** **N-acetyl-S-farnesyl-L-cysteine (AFC) inhibits Langerhans cell (LC) antigen presenting capability.** Jason Lee, Laura Englander, Michael Schierl, Rachel Moquete, WanHong Ding, Joel S Gordon, José R Fernandez, Eduardo Perez, Maxwell Stock and Richard D Granstein. New York, NY and Monmouth Junction, NJ.
- 568** **Tobacco smoke extract inhibits Langerhans cell (LC) antigen presenting capability.** Wanhong Ding, Michael Schierl, Rachel Moquete, Daxesh Patel, Andrew J Dannenberg and Richard D Granstein. New York, NY.
- 569** **Epidermal growth factor receptor inhibitors augment the expression of MHC class I and class II genes.** Brian P Pollack, Bishu Sapkota and Todd V Cartee. Atlanta, GA and Decatur, GA.
- 570** **Disruption of the epidermal barrier induces regulatory T cells in a Langerhans cell-dependent fashion.** Fatemeh Navid, Björn Clausen, Thomas Schwarz and Agatha Schwarz. Kiel, Germany and Rotterdam, Netherlands.
- 571** **Ontogeny of CD45+CD36+ cells in developing prenatal human skin.** Christopher Schuster, Christine Vaculik, Christian Fiala, Georg Stingl, Wolfgang Eppel and Adelheid Elbe-Bürger. Vienna, Austria.
- 572** **Effects of repeated application of Dermatophagoides farinae (D.farinae) on the expressions of atopic dermatitis(AD)-like inflammatory skin mediators in NC/Nga mice.** Ji-Yun Kim, Mi-Sook Jeong, Kui-Young Park, Kapsok Li and Seong-Jun Seo. Seoul, South Korea.
- 573** **Effects of repeated formaldehyde (FA) exposure on atopic dermatitis (AD)-like immune responses in NC/Nga mice.** Kapsok Li, Ji-Yun Kim, Mi-Sook Jeong, Dong-Ha Kim and Seong-Jun Seo. Seoul, South Korea.
- 574** **Statins inhibit chemotactic interaction between CCL20 and CCR6 *in vitro*: Possible relevance to psoriasis treatment.** Taegyun Kim, Dashilkhumbe Byamba, Wen Hao Wu, Hyunjoong Jee, Do-Young Kim and Min-Geol Lee. Seoul, South Korea.
- 575** **Brn2 exerts its possible role as positive feedback regulator of TNF- α in lichenoid tissue reaction.** Kyu Uang Whang, Ji Hoon Sim, Jung Eun Kim, Gun Hong Lee, Nam Ji Jeung, Kyung Cheol Sohn, Dae Kyoung Choi, Young Lee, Young Joon Seo, Chang Deok Kim and Jeung Hoon Lee. Seoul, South Korea and Daejeon, South Korea.
- 576*** **Blocking galectin-1 ligand biosynthesis enhances immunity against melanoma.** Eliberto Cedeno-Laurent, Matthew Opperman, Steven R Barthel, Danielle Hays, Tobias Schatton, Quian Zhan, Markus H Frank, George F Murphy and Charles J Dimitroff. Boston, MA.
- 577** **Corticotropin-releasing hormone downregulates IL-10 production by adaptive FoxP3+ regulatory T cells in atopic dermatitis patients.** Sang H Oh, Chang O Park, Wen H Wu, Ji Y Kim, Shan Jin, Byung G Bae, Seongmin Noh, Ji Y Noh and Kwang H Lee. Seoul, South Korea.
- 578** **Active transport of contact allergens modulates their activation of human monocyte derived dendritic cells.** Hans F Merk, Ruth Heise, Hagen Ott, Katharina Czaja, Yvonne Marquardt, Jens M Baron and Claudia Skazik. Aachen, Germany.
- 579*** **IRF8 is an essential regulator of CD8 T cell effector function.** Fumi Miyagawa, Hong Zhang, Keiko Ozato, Yutaka Tagaya and Stephen Katz. Bethesda, MD.
- 580** **Human dermal-derived interfollicular mesenchymal stem cells drive the differentiation of naive helper T cells towards a regulatory phenotype without provision of costimulatory molecules.** Karin Pfisterer, Christine Vaculik, Gero Kramer, Dirk Strunk and Adelheid Elbe-Bürger. Vienna, Austria and Graz, Austria.
- 581*** **Re-thinking the role of chemokine receptor CCR7 in generating skin-imprinted memory and effector T cells.** Bryan Vander Lugt, Noah J Tubo, Marianne Boes, Robert C Fuhlbrigge, Thomas S Kupper and James J Campbell. Boston, MA.
- 582** **Signaling via neurokinin-1 receptor promotes type-1 DTH by abrogating IL-10 secretion in myeloid dendritic cells.** Brian M Janelsins, Tina L Sumpter, Alicia R Mathers, Olga Tkacheva, William Shufesky, Adrian E Morelli and Adriana T Larregina. Pittsburgh, PA.
- 583*** **Autocrine TGF β is required to prevent Langerhans cell migration.** Aleh Bobr, Botond Z Igártó, Krystal M Haley, Ming O Li, Richard A Flavell and Daniel H Kaplan. Minneapolis, MN; New York, NY and New Haven, CT.
- 584*** **Skin-resident DC subsets promote distinct and opposing antigen-specific T helper responses.** Botond Z Igártó, Krystal Haley, Daniela Ortner, Maryam Gerami-Nejad, Sandra M Zurawski, Bernard Malissen, Gerard Zurawski, Judith Berman and Daniel H Kaplan. Minneapolis, MN; Dallas, TX and Marseille, France.
- 585** **Continuous antigen exposure elicits increased IL-10 production, but intermittent antigen exposure induces IL-4 production.** Kei-ichi Yamanaka, Kenshiro Tsuda, Tomoko Akeda, Takehisa Nakanishi, Hiroshi Kitagawa, Masato Kakeda and Hitoshi Mizutani. Tsu, Japan.
- 586*** **Pregnane X Receptor (PXR) regulates cutaneous immunity.** Matthias Schmuth, Andreas Elentner, Frank Gonzalez and Sandrine Dubrac. Innsbruck, Austria and Bethesda, MD.
- 587*** **Adenosine produced by regulatory T cells acts as chemo-attractant for dendritic cells and promotes formation of Treg-DC clusters.** Sabine Ring, Alexander H Enk and Karsten Mahnke. Heidelberg, Germany.
- 588** **Rhealba® oat plantlets interest in the management of atopic patients.** Marie-Françoise Aries, Anne Mandéau, Nathalie Castex-Rizzi, Jean-François Nicolas, Thomas Bieber, Marco Ambonati and Christine Coutanceau. Toulouse, France; Lyon, France and Bonn, Germany.
- 589*** **Langerin+ Dermal DC, but not Langerhans cells, are required for effective CD8 mediated immune responses after skin scarification (S.S.) with Vaccinia virus (VACV).** Julien Seneschal, Xiaodong Jiang and Thomas S Kupper. Boston, MA and Bordeaux, France.
- 590** **Cell volume regulation by the taurine transporter Taut determines T cell responses.** Susanne Kaesler, Małgorzata Sobiesiak, Thomas Volz, Florian Lang and Tilo Biedermann. Tübingen, Germany.
- 591** **A broad-spectrum human papillomavirus (HPV) vaccine to prevent mucosal and cutaneous HPV infections.** Christina Schellenbacher, KiHyuck Kwak, Saeed Shafti-Keramat, Helena Faust, Joakim Dillner, Richard Roden and Reinhard Kirnbauer. Vienna, Austria; Malmö, Sweden and Baltimore, MD.
- 592*** **Epidermal LC mediate constitutive stimulation of skin resident tregs and thereby control the inadvertent activation of skin effector memory T cells (TRM) in normal skin.** Julien Seneschal, Rachael A Clark and Thomas S Kupper. Boston, MA and Bordeaux, France.
- 593** **Migration patterns of T_{EM} and T_{CM} in humans: Lessons from CTCL lesional morphology.** Rachael A Clark, Rei Watanaabe, Marianne Tawa, Natalie Adams, Andrew Dorosario, David C Fisher and Thomas S Kupper. Boston, MA.
- 594** **MyD88 signaling in Langerhans Cells is required for efficient generation of Th17 cells, but not migration.** Krystal Haley, Botond Igártó, Aleh Bobr, Sakeen Kashem, Daniela Ortner, Dominik Schenten, Ruslan Medzhitov and Daniel H Kaplan. Minneapolis, MN and New Haven, CT.
- 595**** **IL-9 is a potent mediator of tumor immunity, and its expression is negatively regulated by the Th17 transcription factor ROR γ .** R Purwar, S Xiao, Y Takeda, W Elyaman, X Jiang, A Jetten, S Khouri, R Fuhlbrigge, V Kuchroo and T Kupper. Boston, MA and Triangle Park, NC.



- 596 **Correlation of intra- and extraepidermal CD8 T cell numbers with development of psoriatic epidermal pathology.** Alexander Navarini, Giulia Tonel and Curdin Conrad. Zurich, Switzerland and Lausanne, Switzerland.
- 597 **Tissue-based cytokine immunotherapy for skin cancer.** Mary Lokuta, Allen Comer, Brenda Soto, Marie Vander Zanden, Michelle Bucholtz and Lynn Allen-Hoffmann. Madison, WI.
- 598 **Ifng pathway signature dominates the gene expression profile of C3H/HeJ mouse model of alopecia areata.** Sivan Harel, Claire Higgins, Lynn Petukhova, John P Sundberg, Raphael A Clynes and Angela M Christiano. New York, NY and Bar Harbor, ME.
- 599 **Evaluation of the NF kappa B pathway in a mouse model of psoriasis.** Brian Poligone, Kathleen Gillespie, Sandi Toth and Sankar Ghosh. Rochester, NY and New York, NY.
- 600 **Withdrawn.**
- 601* **GILT modulates CD4+ T cell tolerance to the melanoma antigen TRP1.** Matthew P Rausch, Todd C Metzger, Mark S Anderson and Karen T Hastings. Phoenix, AZ and San Francisco, CA.
- 602 **Virus specific CD8 effector memory T cells (Tem) can be recruited to skin in the absence of CD4 T cells, but their persistence as long term resident memory T cells (Trm) is impaired.** Xiaodong Jiang, James J Campbell, Luzheng Liu, Zachary Beck, Noah Tubo, Julien Seneschal, Rahul Purwar, Tian Tian and Thomas S Kupper. Boston, MA and Bordeaux, France.
- 603 **Skin resident memory T Cells (Trm) accumulate globally throughout skin in response to repetitive antigenic challenges.** Xiaodong Jiang, Rachael A Clark and Thomas S Kupper. Boston, MA.
- 604 **CD45RO loss in histopathological specimens of lymphomatoid papulosis.** Derek V Chan, Savina Aneja, Kord S Honda and Kevin D Cooper. Cleveland, OH.
- 605 **Targeting Of antigen-loaded nanoparticle-based vaccine into differential skin layers induces distinct arms of immunity.** Christelle Liard, Severine Munier, Bernard Verrier, Mauricio Arias, Darragh Duffy, Robin Shattock and Behazine Combadiere. Paris, France; Lyon, France and London, United Kingdom.
- 606 **Intradermal immunization triggers epidermal langerhans-cell mobilization required For CD8 T-cell immune responses.** Christelle Liard, Severine Menier, Alix Joulin-Giet, Annika Vogt, Olivia Bonduelle, Sabrina Hadam, Darragh Duffy, Bernard Verrier and Behazine Combadiere. Paris, France; Lyon, France and Berlin, Germany.
- 607 **Interaction of regulatory T cells and tolerogenic CD11c+ dendritic cells prevents contact allergy in mice.** Ulrike Luckey, Nikolai Pfender, Nadine Lorenz, Talke Schmidt, Stefan M Martin, Thilo Jakob and Kerstin Steinbrink. Mainz, Germany and Freiburg, Germany.
- 608* **IL-37 suppresses contact hypersensitivity by inhibiting maturation of dendritic cells.** Xiangna Cai, Yuchun Luo, Claudia A Nold-Petry, Marcel F Nold, Philip Bufler, Charles A Dinarello and Mayumi Fujita. Aurora, CO; Shantou, China and Munich, Germany.
- 609 **Proteasome inhibition with bortezomib suppresses T cell proliferation in a CTLA-4-dependent manner.** Heather Gibson, Timothy Hake, Pierluigi Porcu and Henry Wong. Detroit, MI and Columbus, OH.
- 610 **Treatment of nascent melanoma with anti-CTLA-4 and anti-PLD-1 promotes tumor growth and expansion of regulatory T cells.** Bhaskar Srivastava, William Damsky, Marcus Bosenberg and Susan Kaech. New Haven, CT.
- 611 **Autoantibody to HSC70 in patients with tumor stage of mycosis fungoïdes.** Oleg E Akilov, Peter E Yeh, Brian Hood, Thomas P Conrads, Louis D Falo and Larisa J Geskin. Pittsburgh, PA.
- 612 **Characterization of a novel skin resident IL-10 producing regulatory dendritic cell subset.** Chung-Ching Chu, Paola Di Meglio, Ania Skowrona, Niwa Ali, Katarzyna Grys, Luca Napolitano, Mark Peakman, Giovanna Lombardi and Frank O Nestle. London, United Kingdom.

Immunology 2: Innate Immunity and Microbiology

All orals [designated with an asterisk (*)] listed below are presented in the Immunology 2: Innate Immunity and Microbiology Minisymposium on Friday, May 6, 2011 from 2:00-5:30 p.m. in Wildflower A, JW Marriott Desert Ridge. Orals designated by two asterisks (**) will be presented during a Plenary Session.

- 613* **Psoriatic patients show enhanced cathelicidin expression after injury and this is normalized by TNF- α inhibition.** Jeremiah Miller, Tissa Hata, Paul Kotol, Michelle Jackson, Doru Alexandrescu, Filamer Kabigting, Monika Gerber, Yuping Lai and Richard Gallo. La Jolla, CA.
- 614* **Ultraviolet damage to non-coding RNA triggers skin inflammation.** Jamie J Bernard, Christopher Cowing-Zitron, Teruaki Nakatsuji, Benjamin D Yu and Richard L Gallo. San Diego, CA.
- 615 **Regulation of TSLP expression in the skin by the inflammasome and its impact on T cell fate.** Sonia Schuepbach-Mallepell, Virginie Philippe, Stephanie Roques and Olivier Gaidé. Geneva, Switzerland and Boston, MA.
- 616* **Viral envelopes induce mast cell degranulation through sphingosine 1-phosphate receptor-2 pathway.** Zhenping Wang and Anna Di Nardo. La Jolla, CA.
- 617* **Neutrophils express IL-17 and form extracellular traps in cutaneous lupus erythematosus.** Ritika Khandpur, Andrew M Lin, Cory J Rubin, MaryBeth L Riblett, Srilakshmi Yalavarthi, Eneida C Villanueva, Mariana J Kaplan and Allen T Bruce. Ann Arbor, MI.
- 618* **Staphylococcus aureus infection in mouse skin induces antimicrobial peptide expression — the effect is partially regulated by IL-1.** Kerstin Ahrens, John S Cho, Jürgen Harder, Lloyd S Miller and Ehrhardt Proksch. Kiel, Germany and Los Angeles, CA.
- 619 **An orally delivered CCR5 inhibitor, Maraviroc prevents HIV-1 acquisition in Langerhans cells and transmission to CD4+ T cells.** Youichi Ogawa, Tatsuyoshi Kawamura, Andrew Blauvelt and Shinji Shimada. Yamanashi, Japan and Portland, OR.
- 620 **In vivo imaging of behavioral responses of dendritic epidermal T cells to mechanical stress.** Ran Lu, Robert E Tigelaar and Akira Takashima. Toledo, OH and New Haven, CT.
- 621* **The dermis is not sterile: Discovery of a microbiome within and beneath the epidermis.** Teruaki Nakatsuji, Shangi B Jiang, Kimberly N Kanada and Richard L Gallo. San Diego, CA.
- 622 **Interferon gamma enhances innate immune response of epidermis through TLR3 in keratinocytes.** Ai Kajita, Shin Morizane, Kenshi Yamasaki, Yumi Aoyama and Keiji Iwatsuki. Okayama, Japan and Sendai, Japan.
- 623 **Scavenger receptor antagonism blocks HSV-1 infection of keratinocytes and limits cutaneous disease.** Daniel T MacLeod, Kenshi Yamasaki, Lester Kobzik and Richard L Gallo. La Jolla, CA; San Diego, CA and Boston, MA.
- 624* **Real-time kinetics and mechanism of IL-1 β production during a *S. aureus* skin infection in vivo.** John S Cho, Frank Hebron, Romelal Ramos, Hironori Matsushima, Akira Takashima and Lloyd Miller. Los Angeles, CA and Toledo, OH.
- 625 **The anti-inflammatory mechanism of action of pkc-alpha inhibitor- in skin.** Yuval Sagiv, Moshe Ben Hamo, Marina Gartsbein, Liora Braiman-Wiksman and Tamar Tennenbaum. Rehovot, Israel.
- 626* **Modulation of Toll-like receptor responses by bone morphogenic protein 4 (BMP4).** Navid Ezra, Miguel-Angel Gutierrez, Rosane Teles, Dennis Montoya, Maria Teresa Ochoa, Delphine Lee, Daniel Cruz and Robert Modlin. Los Angeles, CA.
- 627 **Defective epidermal innate immunity and resultant dermatophytosis in adult T cell leukemia/lymphoma.** Yu Sawada, Motonobu Nakamura, Miwa Kobayashi and Yoshiaki Tokura. Kitakyushu, Japan and Hamamatsu, Japan.
- 628 **Morbidity of HSV and VZV infections in pancreas and kidney/pancreas organ transplant recipients.** Elena Netchiporuk, Roni Munk, Steven Paraskevas, Jean Tchervenkov and Robin C Billick. Montreal, Canada.
- 629 **Function of Hypoxia-Inducible Factor (HIF)1 α in dendritic cells.** Theresa Köhler, Boris Reizis, Randall Johnson, Jean Krutmann, Heike Weighardt and Irmgard Förster. Düsseldorf, Germany; New York, NY and San Diego, CA.

- 630 **DNase 2 degrades DNA on the skin surface.** Heinz Fischer, Jennifer Scherz, Sandra Szabo, Michael Mildner, Charaf Benarafa, Alicia Torriglia, Erwin Tschachler and Leopold Eckhart. Vienna, Austria; Bern, Switzerland and Paris, France.
- 631 **Interplay of vitamin D and innate immune responses affects bacterial skin infection.** Beda Muehleisen, Daniel D Bikle and Richard L Gallo. San Diego, CA.
- 632 **A role for CCR2 in the recruitment of myeloid-derived suppressor cells to human squamous cell carcinomas.** Jessica E Teague, Ahmed Gehad, William J Crisler, Michael K Lichtman, Chrysalyne D Schmults, Ying Jiang, Mitra Dowlatshahi, Rei Watanabe, Thomas S Kupper and Rachael A Clark. Boston, MA.
- 633* **Mast cells and neutrophils release IL-17 through extracellular trap formation in psoriasis.** Andrew M Lin, Cory J Rubin, Ritika Khandpur, Jennifer Y Wang, MaryBeth Riblett, Srilakshmi Yalavarthi, Eneida C Villanueva, Parth Shah, Mariana J Kaplan and Allen T Bruce. Ann Arbor, MI.
- 634 **Distinct single chain fragment variable-gp-100 conjugates, targeting dendritic cells *in vivo*, have different efficiencies to induce anti-tumor immunity in a RET melanoma model.** Michael Maas, Sabine Ring, Alexander H Enk and Karsten Mahnke. Heidelberg, Germany.
- 635* **IFN- α activation of a vitamin D-dependent antimicrobial response depends on skin pigmentation.** Mario Fabri and Robert L Modlin. Los Angeles, CA and Cologne, Germany.
- 636 **Characterization of microbial communities in non-healed versus healed venous insufficiency wounds using deep sequencing methods.** Marie S Tuttle, Eliot Mostow, Mahmoud A Ghannoum, Fen Z Hu, Racheal Melton-Kreft, Garth Ehrlich and Scot E Dowd. Cleveland, OH; Akron, OH; Pittsburgh, PA and Lubbock, TX.
- 637* ***Staphylococcus aureus*-derived PGN enhances the integrity of epidermal tight junctions.** I-Hsin Kuo, Anna De Benedetto, Takeshi Yoshida and Lisa A Beck. Rochester, NY.
- 638 **Reduced skin microbiome diversity is associated with atopic dermatitis severity and disease status.** Heidi H Kong, Julia Oh, Elizabeth A Grice, Sean P Conlan, Clay Deming, Patrick R Murray, Maria L Turner and Julia A Segre. Bethesda, MD.
- 639 **Antimicrobial and anti-inflammatory effects of newly synthetic Cecropin A (1-8)-Magainin 2 (1-12) hybrid peptide (CA-MA) and its analogue P5 against Propionibacterium acnes infection in human keratinocytes.** Peter I Song, Sunhyo Ryu, Samudra Acharya, Yoonkyung Park, Cathy Gurley and Cheryl A Armstrong. Little Rock, AR and Gwangju, South Korea.
- 640** **Interference with the IL-1 network leads to impaired cutaneous response to vaccinia virus scarification.** Tian Tian, Q Jin, K Dubin, G F Murphy, T S Kupper and R C Fuhlbrigge. Boston, MA and Palo Alto, CA.
- 641 **Retinoid-related orphan receptor (ROR)gt roles in T cell neoplasia and lymphoid tissue development are genetically influenced.** Scott Roberts, Renata Filler and Michael Girardi. New Haven, CT.
- 642 **Cutaneous TLR2 ligands induce systemic immune regulation mediated by myeloid-derived suppressor cells.** Yuliya Skabytska, Martin Koeberle, Ko Ming Chen, Susanne Kaesler and Tilo Biedermann. Tuebingen, Germany.
- 643* **Cutaneous papillomatosis due to a novel laboratory mouse papillomavirus (MuSPV) infection.** John P Sundberg, Christopher S Potter, Kathleen A Silva, Arvind Ingle, J Joh, Shin J Gim and A B Jenson. Bar Harbor, ME; Louisville, KY and Mumbai, India.
- 644 **Nitric oxide from myeloid-derived suppressor cells inhibits vascular E-selectin expression in human squamous cell carcinomas.** Ahmed Gehad, Michael K Lichtman, Chrysalyne D Schmults, Jessica E Teague, William J Crisler, Mitra Dowlatshahi, Rei Watanabe, Thomas S Kupper and Rachael A Clark. Boston, MA.
- 645 **Irritant induced production of IL-6 is mediated via EGFR and NF κ B independent mechanisms.** Kellie J White, Vincent J Maffei and Robert A Swerlick. Atlanta, GA and Decatur, GA.
- 646 **Immune modulation by isotretinoin *in vivo*.** Melanie C Dispenza, Amanda M Nelson, Kathryn L Gilliland, Zhao yuan Cong and Diane M Thiboutot. Hershey, PA and Baltimore, MD.
- 647 **An *in vitro* model to investigate the mechanisms involved in inflammatory acne.** Michael Ingrassia, Vasile Ionita Manzatu, Jack Lombardi and Thomas Mammone. Melville, NY.
- 648 **Effect of lactobacillus extract on acne.** Neelam Muizzuddin, Wanda Maher, Michael Sullivan, Steve Schnittger and Thomas Mammone. Melville, NY.
- 649 **Three dimensional (3D) reconstructed psoriatic tissue model.** Seyoum Ayehunie, Cristy Hedin, Tim Landry, Amanda Wang, Maureen Spratt, Rachael Clark, Thomas Kupper and Mitchell Klausner. Ashland, MA and Boston, MA.
- 650 **Galectin-3 regulates the innate immune response of human monocytes.** Andrew Chung, Rosane Teles, Dennis Montoya, Stephan Krutzik, James Krahenbuhl, Dan Hsu, Fu Tong Liu, Euzenir N Sarno, Thomas H Rea, Robert L Modlin and Delphine J Lee. Los Angeles, CA; Baton Rouge, LA; Sacramento, CA and Rio de Janeiro, Brazil.
- 651* **Non-neuronal cholinergic activation dampens the antimicrobial peptide response to bacteria in keratinocytes.** Brenda J Curtis and Katherine A Radek. Chicago, IL.
- 652* **Imiquimod-induced TLR7 signaling enhances repair of DNA Damage Induced by UVL in bone marrow-derived cells.** Rita Fishelevich, Yuming Zhao, Papapit Tuchinda, Hannah Liu, T C Meng, Jim Lee and Anthony Gaspari. Baltimore, MD and Exton, PA.
- 653 **An expanding role for novel polyomaviruses in skin disease.** John C Browning, Mark R Matthews, Richard C Wang, Loderick Matthews, Robert Law, Greg Hosler, Joe Susa, Clay Cockerell and Kim B Yancey. San Antonio, TX and Dallas, TX.
- 654* **Toll like receptor-4 (TLR4) deficiency prevents ultraviolet (UV) radiation induced cutaneous photoimmunosuppression by DNA repair mechanism.** Nabiha Yusuf. Birmingham, AL.
- 655 **The transmission of skin microflora from mother to infant.** Kimberly Capone, Mark Green, Georgios N Stamatatos and Janeta Nikolovski. Skillman, NJ and Issy-les-Moulineaux, France.
- 656 **Haplotype genetic screen identifies host factors important in Chlamydia trachomatis infection.** David Rosmarin, Jan Carette, Thijn Brummelkamp and Hidde L Ploegh. Boston, MA.

Photobiology

All orals [designated with an asterisk (*)] listed below are presented in the Photobiology Minisymposium on Saturday, May 7, 2011 from 12:30-4:00 p.m. in Wildflower C, JW Marriott Desert Ridge. Orals designated by two asterisks (**) will be presented during a Plenary Session.

- 657 **UVA induces lesions resembling seborrheic keratoses in mice with keratinocyte-specific PTEN down-regulation.** Mei Ming, Christopher R Shea, Li Feng, Keyoumars Soltani and Yu-Ying He. Chicago, IL and Research Triangle Park, NC.
- 658* **Sunscreens may prevent UV-induced facial fat loss by blocking the production of IL-11.** Wen-Hwa Li, Apostolos Pappas, Li Zhang and Druie Cavender. Skillman, NJ.
- 659 **Effects of topical cholesterol, linoleic acid, and synthetic ceramide III, and an equimolar mixture, on UV-induced skin responses in tape-stripped human skin *in vivo*.** Hee Jin Byun, Kwang Hyun Cho, Min-Jung Lee, Youngae Lee, Serah Lee, Kyu Han Kim and Jin Ho Chung. Seoul, South Korea.
- 660 **The expression of methylenetetrahydrofolate reductase in the skin under low suberythemal doses of ultraviolet radiation B.** Aleksandra Lesiak, Karolina Wodz-Naskiewicz, Rafal Pawliczak, Michal Rogowski-Tylman, Anna Sysa-Jedrzejowska and Joanna Narbut. Lodz, Poland.
- 661 **Seasonal changes in 25-hydroxyvitamin D serum level and pigment protection factor in Polish children.** Michal Rogowski-Tylman, Aleksandra Lesiak, Anna Sysa-Jedrzejowska and Joanna Narbut. Lodz, Poland.
- 662 **Photoprotective effect of a Polypodium leucotomos extract against ultraviolet radiation on human peripheral blood monocytes.** Zaida Moreno, David Diaz, Eduardo Reyes, Salvador Gonzalez and Melchor Alvarez-Mon. Alcala de Henares, Spain; Madrid, Spain and New York, NY.

- 663 **Effect of UVB irradiation on human cutaneous innervation and mast cells.** Ioanna G Panoutsopoulou, Elhabib Benhabib, Gwen Wendelschafer-Crabb, George L Wilcox, William R Kennedy and Maria K Hordinsky. Minneapolis, MN.
- 664 **Quercetin inhibits UV irradiation induced inflammatory cytokine production in primary human keratinocytes by suppressing NF- κ B pathway.** Yiru Xu, Fabiana T Vicentini, Tianyuan He, Yuan Shao, Maria J Fonseca, Waldiceu A Verri and Gary J Fisher. Ann Arbor, MI; São Paulo, Brazil and Londrina, Brazil.
- 665 **Hesperidin promotes cyclobutane pyrimidine dimer repair in UVB exposed mice epidermis.** Dan Luo and Bingrong Zhou. Nanjing, China.
- 666 **Mitochondria protection against oxidative stress with a new dimethionine derivative.** Mathilde Frechet, Lionel Valenti, Erika Lomonte, Frederic Maccario, Pascale Prouheze and Jean-François Nicolaï. Monaco, Monaco.
- 667 **Differential ku 70 expression patterns in t cells following photodynamic therapy with pc 4 and other apoptosis-inducing modalities.** Paul C Jou, Minh Lam, Katalin Ferenczi, Nancy L Oleinick, Kevin D Cooper and Elma D Baron. Cleveland, OH and Farmington, CT.
- 668* **Nucleotide excision repair of UV radiation photoproducts requires protein kinase C delta.** Christopher Negro, Edward LaGory and Mitchell F Denning. Maywood, IL.
- 669 **Evaluation of extracorporeal photopheresis for prevention and the treatment of bronchiolitis obliterans syndrome after lung transplantation.** Robert Knobler, Ulrike Just and Peter Jakobs. Vienna, Austria.
- 670* **Molecular effects of fractional laser on photo-aged skin.** Paul C Jou, Autumn Potaracke, Minh Lam, Elma D Baron and Jose Garcia-Zuazaga. Cleveland, OH.
- 671 **Impact of UVA+ UVB full spectrum compared to UVA or UVB mono-wavelength on fibroblasts.** Audrey Amoyel, Sandrine Pinacolo, Rachel Chabert, Noelle Garcia, Frederique Portolan, Claude Dal Farra and Nouha Domloge. Sophia Antipolis, France and Wayne, NJ.
- 672* **Silymarin inhibits UV-induced immunosuppression through inactivation of CD4+ T cells and stimulation of CD8+ effector T cells.** Mudit Vaid, Tripti Singh and Santosh K Katiyar. Birmingham, AL.
- 673* **UVB suppresses PTEN expression by upregulating miR-141 in HaCaT cells.** Wei Li, Bingrong Zhou and Dan Luo. Nanjing, China.
- 674* **Modification of microRNA expression by baicalin in UVB irradiated mouse skin using a microRNA microarray.** Dan Luo and Bingrong Zhou. Nanjing, China.
- 675 **Microarray analysis of microRNA expression in skin of Xpc+/- mice and wildtype mice.** Dan Luo and Bingrong Zhou. Nanjing, China.
- 676 **Protective effect of Baicalin on multiple ultraviolet B exposure-mediated damages in C57BL/6 mouse skin.** Di Wu, Bingrong Zhou and Dan Luo. Nanjing, China.
- 677 **Confocal microscopic features of radiation dermatitis.** Sergio Vano-Galvan, Eva Fernández-Lizarbe, Virginia Sánchez, Mayte Truchuelo, Blanca Diaz-Ley, Luis Ríos, Eliseo Vañó, Pedro Jaén and Salvador González. Madrid, Spain and New York, NY.
- 678** **Bath-psoralen UVA and narrow-band UVB reduce circulating Th17 cells and induce circulating regulatory T cells in psoriasis.** Takuya Furuhashi, Chiyo Saito, Kan Torii, Emi Nishida and Akimichi Morita. Nagoya, Japan.
- 679* **The aryl hydrocarbon receptor (AhR) is a negative regulator of nucleotide excision repair (NER).** Thomas Haarmann-Stemmann, Katrin Frauenstein, Thierry Douki, Marc Majora, Julia Tigges, Susanne Grether-Beck, Charlotte Esser, Josef Abel, Ellen Fritsche and Jean Krutmann. Düsseldorf, Germany; Grenoble, France and Aachen, Germany.
- 680* **UV modulation of subcutaneous fat metabolism.** Eun Ju Kim, Yeon Kyung Kim, Ji Eun Kim, Sojeong Kim, Min-Kyoung Kim, Chi-Hyun Park and Jin Ho Chung. Seoul, South Korea.
- 681 **Ultraviolet B (UVB) radiation and reactive oxygen species (ROS) modulate IL-31 expression in T-lymphocytes, monocytes and dendritic cells.** Christian Cornelissen, Richard Brans, Katharina Czaja, Claudia Skazik, Yvonne Marquardt, Gabriele Zwadlo-Klarwasser, Arianna Kim, David R Bickers, Juliane Lüscher-Firzlaff, Bernhard Lüscher and Jens M Baron. Aachen, Germany and New York, NY.
- 682* **Photoprotection against UVAR: Naturally occurring actives require a chemical structure that confers cell membrane lipid raft stabilizing properties.** Mirko Bayer, Peter Proksch, Ingo Felsner, Heidi Brenden, Zippora Kohne, Rehab Walli, Tu Ngoc Duong, Jean Krutmann and Susanne Grether-Beck. Duesseldorf, Germany; Hilden, Germany and Hanoi, Viet Nam.
- 683 **Apoptosis induced by photodynamic therapy with the photosensitizer Pc 4 in Candida albicans.** Minh Lam, Paul C Jou, Christi L Malbasa, Ali A Lattif, Yoojin Lee, Pranab K Mukherjee, Nancy L Oleinick, Mahmoud A Ghannoum, Kevin D Cooper and Elma D Baron. Cleveland, OH.
- 684 **Different microRNA-34a responses following p53 upregulation after exposure to ultraviolet radiation and ionising radiation.** Eirini Vavatsikou, Tilman Sanchez-Elsner, Chris Pickard and Eugene Healy. Southampton, United Kingdom.
- 685 **Spectral imaging detects physiologic parameters that contribute to photoaging among twins.** Christi L Malbasa, E D Baron, P Fu, M S Matsui, C Fthenakis, G Vanderover, P Cummins and K D Cooper. Cleveland, OH and Melville, NY.
- 686 **Melatonin suppresses UV-induced DNA damage represented by cyclobutane pyrimidine dimers formation via enhancing antioxidative enzymes in a human full skin model *in vitro*.** Konrad Kleszczynski, Lena H Hardkop, Nathalie Kruse, Detlef Zillikens and Tobias W Fischer. Lübeck, Germany.
- 687* **Ultraviolet B radiation augments melanoma tumor growth through its ability to generate platelet-activating factor agonists.** Ravi P Sahu, Sonia Da Silva, Christopher Touloukian, Raymond L Konger and Jeffrey B Travers. Indianapolis, IN.
- 688* **Novel oxidatively-modified glycerophosphocholines with platelet-activating factor activity mediate UVB photosensitivity in xeroderma pigmentosum A deficiency.** Jeffrey B Travers, Katheen A Harrison, Robert C Murphy and Raymond L Konger. Indianapolis, IN and Aurora, CO.
- 689 **Reflectance analysis — A non-invasive method to study skin biochemical pathways *in vitro* and *in vivo*.** Dina Turgeman, Marina Frusic-Zlotkin, Yoram Soroka, Francois M Bregegere, Eyal Ben-Dor and Yoram Milner. Tel Aviv, Israel and Jerusalem, Israel.
- 690 **Involvement of the epidermal platelet-activating factor receptor and cytoplasmic phospholipase A2 in UVB-mediated platelet-activating factor agonist production.** Mathew J Turner, Mohammed Al-hassani, Aiden Thompson, Jeffrey T Travers, Raymond L Konger and Jeffrey B Travers. Indianapolis, IN.
- 691* **Solar ultraviolet irradiation induced decorin degradation renders type I collagen susceptible to cleavage by matrix metalloproteinase-1 in human skin.** Yong Li, Wei Xia, Ying Liu, Yuan Shao, John J Voorhees and Gary J Fisher. Ann Arbor, MI.
- 692* **Sex differences in UVB-induced cutaneous tumor development in Skh-1 mice following topical antioxidant/anti-inflammatory treatment.** Erin M Burns, Kathleen L Tober, Nicholas J Sullivan, Jonathan S Schick, Judith A Rigenbach, Gregory S Young, Gregory B Lesinski and Tatiana M Oberyszyn. Columbus, OH.
- 693* **Cysteine-rich Protein 61 (CCN1) mediates upregulation of IL-1 β by UV irradiation in human skin fibroblasts.** Zhaoping Qin, John J Voorhees, Gary J Fisher and Taihao Quan. Ann Arbor, MI.
- 694 **Key features of short-term photodamage *in vivo* require TNF α :** Infiltration of inflammatory cells, collagenase induction in dermis, and dermal collagen loss. Meena R Sharma and Victoria P Werth. Philadelphia, PA.
- 695 **A plant extract protects from cutaneous photoaging via protection of collagen and elastin networks.** Valérie Cenizo, Amandine Lhost, Sébastien Bonnet, Aurélie Boher, Christelle Gaillard, Nabil Abdul-Malak, Nicolas Bechettoille and Valérie André-Frei. Lyon, France.
- 696 **The inside-out of photaging: UV-inducible mitochondrial DNA deletions in dermal fibroblasts drive epidermal aging.** Marc Majora, Bianca A Schuermann, Susanne Franke, Christine Goetz, Susanne Grether-Beck and Françoise Bernerd. Duesseldorf, Germany and Clichy, France.
- 697 **Reevaluating the toxicity and mutagenicity of photoactivated Rose Bengal in Chinese hamster ovary cells.** Lindsey Hunter, Shuguang Wang, Jeffrey Wickliffe and Michael Wilkerson. Galveston, TX and New Orleans, LA.



- 698 **Ultraviolet as a regulator of stress system in the human skin.** Cezary Skobowiat, John C Dowdy, Robert M Sayre, Robert C Tuckey and Andrzej Slominski. Memphis, TN; Cordova, TN and Crawley, Australia.
- 699 **The GS-nitroxide JP4-039 is a potent topical antioxidant that mitigates skin damage from ionizing radiation.** Rhonda Brand, M Epperly, J Stottlemeyer, R Cline, H Kim, X Gao, S Li, S Huq, P Wipf, V Kagan, J Greenberger and Louis D Falo. Pittsburgh, PA.
- 700 **Skin compartments of different body areas harbour different amounts of mitochondrial deletions in aged wildtype mice.** Jennifer Knoch, York Kamenisch, Hartmut Geiger, Martin Röcken, Karin Scharffetter-Kochanek and Mark Berneburg. Tuebingen, Germany and Ulm, Germany.
- 701 **The pathomechanistic role of ABCC6 in pseudoxanthoma elasticum — The vitamin K connection.** Qijie Jiang, Krisztina Fülop, Viola Pomozi, Alix Grand-Pierre, Sophia Siu, Hugues de Boussac, Gabriella Köblös, Pál Szabó, Tamás Arányi, András Várdi and Jouni Utto. Philadelphia, PA and Budapest, Hungary.
- 702 **Mechanistically-based optimization of UV radiation therapy in psoriasis.** Diana Carlson, Shere Agaiby, Ning Lu, Thomas S McCormick and Kevin D Cooper. Cleveland, OH.
- 703 **Fungicidal photodynamic effect *in vitro* of hypericin on dermatophytes.** M Pablo Paz-Cristobal, Antonio Rezusta, M Carmen Alejandre, Carmen Aspiroz, M Jose Revillo and Yolanda Gilaberte. Zaragoza, Spain and Huesca, Spain.
- 704 **Molecular characterization of squamous cell carcinoma cells resistant to photodynamic therapy.** Angeles Juarranz, Laura Milla, Francisco Sanz-Rodríguez, María Matabuena, Viviana Rivarola, Salvador González, Jesús Vera-Alvarez and Yolanda Gilaberte. Madrid, Spain; Rio Cuarto, Argentina; New York, NY and Huesca, Spain.
- 705* **Proteomic identification of cathepsin B as a novel target of UVA photodamage upstream of autophagic-lysosomal dysregulation in human skin fibroblasts.** Sarah D Lamore, Shuxi Qiao and Georg T Wondrak. Tucson, AZ.
- 706 **Ultraviolet radiation from ambient light sources: Incandescent and compact fluorescent bulbs.** Monica M Van Acker, T Minsue Chen and Quenby L Erickson. East Lansing, MI; Houston, TX and Saint Louis, MO.
- 707 **Cumulative ultraviolet radiation flux and risk for incident psoriasis in the United States.** R A Vleugels, J Han and A A Qureshi. Boston, MA.
- 708 **Persistent pigment development is induced by a single day of recreational sun exposure in Hispanic children and is not predicted by native pigmentation levels.** M Catherine Mack, Georgios N Stamatias, Nikiforos Kollias and Katharine M Martin. Skillman, NJ.
- 713 **Green tea catechins inhibit melanoma cell migration and invasion by inhibiting the expression of cyclooxygenase-2 and NF-κB activation.** Santosh K Katiyar and Tripti Singh. Birmingham, AL.
- 714 **87 cases of vulvar melanoma: The Duke experience.** Janet Y Tcheung, Maria A Selim, Jennifer Marcello, Amy P Abernethy and Kelly C Nelson. Durham, NC.
- 715* **Targeting deregulated HIF1 signaling in human melanoma by conditional HIF1 knockdown promotes tumor progression.** Kevin T Nash, Angelo E Ayar, Monique E Verhaegen, Tim M Johnson and Anj A Dlugosz. Ann Arbor, MI.
- 716 **Modeling combinational drug therapies in melanoma: A conundrum of monolayer versus anchorage independent systems.** Stephen A Rosenberg, Scot Niglio, Byeong-Seon Jeong, Seung-Shick Shin, Yu Wen, Jiadong Li, Jami Fukui, Joseph Chan and James Goydos. New Brunswick, NJ.
- 717 **Examination of skin lightening ingredients via genomic microarrays.** James V Gruber and Robert Holtz. South Plainfield, NJ and Jefferson, CO.
- 718 **Possible involvement of shedding vesicle system in the melanosome transfer pathway.** Hideya Ando, Yoko Niki, Masaaki Ito, Mary S Matsui, Daniel B Yarosh and Masamitsu Ichihashi. Kobe, Japan; Kyoto, Japan; Niigata, Japan and Melville, NY.
- 719 **The comparative study in treatment of solar lentigines with trichloroacetic acid 40% vs. cryotherapy.** Mohamad Goldust, Farideh Golforoushan, Mohamad Sadeghi and Elham Rezaee. Tabriz, Iran.
- 720* **Role of oxidative stress and unfolded protein response in development of vitiligo.** Sivash Toosi, Seth J Orlow and Prashiela Manga. New York, NY.
- 721* **Linking UVB irradiation to pigmentation induction through FGF2-STAT3-PAX3 signaling in melanocytes.** Yinchuan Li, Liang Dong, Eric Pier and Rutao Cui. Boston, MA.
- 722 **Identifying novel therapeutic agents for vitiligo.** A U Tan, S J Orlow and P Manga. New York, NY.
- 723* **WIP1 coordinates melanogenic gene transcription and melanosome formation via TORC1 inhibition.** Hsiang Ho, Rubina Kapadia, Sejad Al-Tahan, Safoora Ahmad and Anand Ganesan. Irvine, CA.
- 724** **Myeloid derived suppressor cells (MDSC) express DC-HIL, which is responsible for their potent T cell-inhibitory and melanoma growth-promoting effects.** Jin-Sung Chung, Kyoichi Tamura, Rohit R Sharma, Ponciano D Cruz and Kiyoshi Ariizumi. Dallas, TX.
- 725* **The MEF2C transcription factor regulates melanocyte development, interacts directly with SOX10 and is a candidate gene for Waardenburg Syndrome.** Maria L Wei, Pooja Agarwal, Michael Verzi, Thuyen Nguyen, David McCullery, Shan-Mei Xu, Evdokia Dodou, Joshua Anderson and Brian Black. San Francisco, CA.
- 726* **MAPK pathway regulates the expression of p18INK4c and p21Waf1/Cip1 cyclin-dependent kinase inhibitors through the AP-1 transcription factor.** Ahmad Jalili, Christine Wagner, Kirsten D Mertz, Mikhail Pashenkov, Georg Stingl, Sridhar Ramaswamy and Stephan N Wagner. Vienna, Austria; Moscow, Russian Federation and Boston, MA.
- 727* **CCR7-expressing B16 melanoma cells down-regulate interferon (IFN)-γ-mediated inflammation and increase lymphangiogenesis in the tumor microenvironment.** Tomonori Takekoshi, Lei Fang, Ryan Sells and Sam T Hwang. Milwaukee, WI and Bethesda, MD.
- 728 **A simple assay method for melanosome transfer.** Hyo-Jin Kim, Hye-Ryung Choi, So-Hee Park and Kyoung-Chan Park. Seongnam-si, South Korea.
- 729 **Expressing matrix metalloproteinase-2,9 in reconstructed human skin melanoma model with MV3 cells.** Hongguang Lu, Yu Lv and Yuehong Ma. Guiyang, China.
- 730 **Inhibition of pigmentation by keratinocyte-derived sFRP2.** Ju Hye Lee, Mi Yoon Kim, Jimi Yoon, Jin Gu Kim, Young Lee, Chang Deok Kim, Jeung-Hoon Lee and Tae-Jin Yoon. Daejeon, South Korea and Jinju, South Korea.
- 731 **Nrf2 regulates melanogenesis by activating the PI3K/Akt pathway.** Jung-Min Shin, Jin-Hwa Kim, Hwa Mi Kim, Jin Gu Kim, Myung Im, Chang Deok Kim, Young-Joon Seo, Jeung-Hoon Lee and Tae-Jin Yoon. Daejeon, South Korea and Jinju, South Korea.

Pigmentation and Melanoma

All orals [designated with an asterisk (*)] listed below are presented in the Pigmentation and Melanoma Minisymposium on Thursday, May 5, 2011 from 2:00-5:30 p.m. in Wildflower B, JW Marriott Desert Ridge. Orals designated by two asterisks (**) will be presented during a Plenary Session.

- 709 **Suppression of human malignant melanoma cell proliferation and invasion by gamma-tocotrienol, a constituent of palm vitamin E.** Wn Yap, A Chen, Sh Lee, S Ong, V Teo, Mt Ling, Yc Wong and Yl Yap. Singapore, Singapore; Brisbane, Australia and Hong Kong, Hong Kong.
- 710 **Melanin inhibition by tocotrienols through suppressing of constitutive and uv-induced tyrosinase activation.** A Chen, Wn Yap, Sh Lee, S Ong, V Teo, S Shunichi and Yl Yap. Singapore, Singapore and Yokohama, Japan.
- 711 **Omeprazole (proton pump inhibitor) inhibits melanin synthesis by decrease pH in acidic cell compartment.** Yoko Niki, Masaki Yoshida, Hideya Ando, Mary S Matsui, Daniel B Yarosh and Masamitsu Ichihashi. Kobe, Japan; Kizugawa, Japan and Melville, NY.
- 712* **Differential effects of UV irradiation and visible light on skin pigmentation *in vitro*.** Connie B Lin, Nannan Chen, Dianne Rossetti, Yaping Hu, Jie Zhang, Paulo Bargo, Theresa Chen and Miri Seiberg. Skillman, NJ.
- 727* **CCR7-expressing B16 melanoma cells down-regulate interferon (IFN)-γ-mediated inflammation and increase lymphangiogenesis in the tumor microenvironment.** Tomonori Takekoshi, Lei Fang, Ryan Sells and Sam T Hwang. Milwaukee, WI and Bethesda, MD.
- 728 **A simple assay method for melanosome transfer.** Hyo-Jin Kim, Hye-Ryung Choi, So-Hee Park and Kyoung-Chan Park. Seongnam-si, South Korea.
- 729 **Expressing matrix metalloproteinase-2,9 in reconstructed human skin melanoma model with MV3 cells.** Hongguang Lu, Yu Lv and Yuehong Ma. Guiyang, China.
- 730 **Inhibition of pigmentation by keratinocyte-derived sFRP2.** Ju Hye Lee, Mi Yoon Kim, Jimi Yoon, Jin Gu Kim, Young Lee, Chang Deok Kim, Jeung-Hoon Lee and Tae-Jin Yoon. Daejeon, South Korea and Jinju, South Korea.
- 731 **Nrf2 regulates melanogenesis by activating the PI3K/Akt pathway.** Jung-Min Shin, Jin-Hwa Kim, Hwa Mi Kim, Jin Gu Kim, Myung Im, Chang Deok Kim, Young-Joon Seo, Jeung-Hoon Lee and Tae-Jin Yoon. Daejeon, South Korea and Jinju, South Korea.

- 732 **B7-H1 expression in benign and malignant melanocytic lesions and colocalization with infiltrating T lymphocytes.** Janis Taube, Robert Anders, Haiying Xu, Suzanne Topalian and Lieping Chen. Baltimore, MD.
- 733 **Genetically determined ABCB5 functionality correlates with pigmentation phenotype and melanoma risk.** Jennifer Y Lin, Mingfeng Zhang, Tobias Schatton, Brian J Wilson, Allireza Alloo, Abrar A Qureshi, Markus H Frank, Jiali Han and Natasha Y Frank. Boston, MA.
- 734 **A label-free indicator for melanoma cells based on the CH₂-stretch ratio.** Sander van den Driesche, Wojciech Witarski, Silvia Pastorekova, Heimo Breiteneder, Michael J Vellekoop and Christine Hafner. Vienna, Austria; Bratislava, Slovakia and St. Poelten, Austria.
- 735 **Novel secosteroids regulate melanocytic activity.** A Slominski, Z Janjetovic, R C Tuckey, W Li, T Kim, A Postethwaite, M A Zmijewski, T Sweatman, J Chen, J Zwawiony, M N Nguyen, T C Chen, M F Holick and D Miller. Memphis, TN; Crawley, Australia; Gdansk, Poland; University, MS and Boston, MA.
- 736 **Image color analysis method to quantify clinical efficacy of skin lightening product.** Di Qu and John V Scimeca. Ada, MI.
- 737 **Vascular features of cutaneous metastatic melanoma.** Amanda Raymond, Caterina Longo, Giovanni Pellacani, Janet Y Tcheung, Puja Puri, Angelica Selim, Douglas Tyler and Kelly C Nelson. Durham, NC and Modena, Italy.
- 738 **AhR mediates FICZ-induced pigmentation.** Earl Goyarts, L Ming, B Wolf, D Yarosh and N Pernodet. Melville, NY.
- 739 **Melanocytic nevus nests unexpectedly contain two cell populations — nevus cells and myeloid (CD11c+) dendritic cells.** Nicholas Gulati, Felix Kiecker, N S McNutt, Hiroshi Mitsui and James G Krueger. New York, NY and Berlin, Germany.
- 740 **Genetic analysis of pre-malignant pigmented lesions in xeroderma pigmentosum patients.** Taro Masaki, John J DiGiovanna, Yun Wang, Sikandar G Khan, Thomas Hornyak, Mark Raffeld, Chyi-Chia Richard Lee and Kenneth H Kraemer. Bethesda, MD.
- 741 **Agonistic signaling via neurokinin-1 receptor is required for anti-melanoma immunity elicited by cutaneous genetic immunizations.** Alicia R Mathers, Olga Tkacheva, Brian M Janelsins, William Shufesky, Adrian E Morelli and Adriana T Larregina. Pittsburgh, PA.
- 742 **Melanoma classification based on dermoscopic features.** Margaret I Sanchez, Harold S Rabinovitz, Margaret Oliviero and James M Grichnik. Miami, FL.
- 743 **Transcriptome profiling of whole blood cells identifies PLEK2 and C1QB in human melanoma.** Yuchun Luo, Steven Robinson, Junichi Fujita, Lisa Siconolfi, Jay Magidson, Carl K Edwards, Karl Wassmann, Kathleen Storm, David A Norris, Danute Bankaitis-Davis, William A Robinson and Mayumi Fujita. Aurora, CO; Boulder, CO and Belmont, MA.
- 744 **Meiosis protein REC8 is expressed in melanoma.** Andrea S Oriolo, Margaret I Sanchez, Jie Li, Zhao-Jun Liu and James M Grichnik. Miami, FL.
- 745 **Reduced expression of the tumor suppressor FBW7 in human melanoma.** Yabin Cheng, Magdalena Martinka and Gang Li. Vancouver, Canada.
- 746 **MSH protects from H2O2-induced loss of melanocyte dendricity via activation of mTOR pathway.** Fuquan Lin, Jerry Wan, Regis Chang, Gabriella Brum, Nicola Kouttab, Aie Xu and Yinsheng Wan. Providence, RI; Boston, MA and Hangzhou, China.
- 747 **MSH does not affect TNF α -induced NF κ B activation in cultured human skin melanocytes.** Jerry Wan, Fuquan Lin, Regis Chang, Nicola Kouttab, Aie Xu and Yinsheng Wan. Providence, RI; Hangzhou, China and Boston, MA.
- 748* **Novel cAMP signaling pathways in melanoma.** Jonathan H Zippin, Cynthia Magro, Lonny Levin and Jochen Buck. New York, NY.
- 749 **Time interval from diagnostic biopsy to surgical excision for melanoma at 4 institutions: Is it acceptable?** Laura S Huff, Caroline A Chang, Paul Blomquist, Nellie Konnikov and Robert P Dellavalle. Aurora, CO; Boston, MA; Boston, MA and Denver, CO.
- 750 **MKK6 increases the melanocyte dendricity through the regulation of Rho family GTPases.** Mi Yoon Kim, Ju Hye Lee, Jin-Hwa Kim, Jin Gu Kim, Kyung-Cheol Sohn, Chang Deok Kim, Jeung-Hoon Lee and Tae-Jin Yoon. Daejeon, South Korea and Jinju, South Korea.
- 751* **Identification of EMMPRIN as a novel receptor for S100A9: Its involvement in melanoma metastasis.** Toshihiko Hibino, Shoko Miyamoto, Masakiyo Sakaguchi, Akira Motoyama, Mami Yamamoto, Ryoji Tsuboi and Nam-ho Huh. Yokohama, Japan; Okayama, Japan and Tokyo, Japan.
- 752 **In vivo melanoma phenotype switch from invasive to proliferative in the absence of the extracellular matrix protein vitronectin.** Laurent Mesnard, Aurelie Prignon, Maya Halabi, Samantha Hodgson, Herlinda Handoko, Graeme Walker, Brett Hollier, Eric Rondeau, Selim Aractingi and Kiarash Khosrotehrani. Paris, France and Brisbane, Australia.
- 753* **The effect of E-cadherin loss on melanoma progression and markers of epithelial-mesenchymal transition in a conditional mouse model.** Lara E Rosenbaum, William E Damsky and Marcus Bosenberg. New Haven, CT.
- 754 **Melanocyte behaviors in C57BL/6 nu/nu mice.** Hiroshi Kato, Motoki Nakamura, Erika Ito, Osamu Taguchi and Akimichi Morita. Nagoya, Japan.
- 755 **Alternation of CYP27B1 expression during progression of pigmented lesions in the skin.** Anna A Brozyna, Wojciech Jozwicki and Andrzej Slominski. Bydgoszcz, Poland and Memphis, TN.
- 756 **2,4,6-octatrienoic acid promotes melanogenesis in normal human melanocytes, through PPAR-gamma.** E Flori, A Mastrofrancesco, D Kovacs, G Giuliani, S Briganti and M Picardo. Milan, Italy and Rome, Italy.
- 757 **Withdrawn.**
- 758 **SIRT1 is overexpressed in human melanoma cells and its inhibition imparts anti-proliferative effects.** Minakshi Nihal, Mary Ndiaye, Gary S Wood and Nihal Ahmad. Madison, WI.
- 759 **Tumor stage-specific detection of ABCB5+ circulating malignant melanoma-initiating cells.** Allireza Alloo, Jennifer Y Lin, Jie Ma, Brian J Wilson, Natasha Y Frank, Jun Zhou, Frank S Hodi and Markus H Frank. Boston, MA.
- 760 **Neuropilin-2: A novel biomarker for malignant melanoma.** M Eller, E Rushing, M Stine, S Hahn, S Shea, A Naif, S Khanna, W Westra, A Jungbluth, K Busam, M Mahalingam and R Alani. Boston, MA; Baltimore, MD and New York, NY.
- 761 **Chronic inflammatory demyelinating polyneuropathy (CIDP) heralding metastatic melanoma.** F R Vleugels, S J Huang, K M Collins, T J Hollman and J Y Lin. Cincinnati, OH and Boston, MA.
- 762* **Epigenetic control of gene expression programs in the skin: Distinct nuclear architecture and higher order chromatin organization of cell-type specific genes in melanocytes and keratinocytes.** Michal R Gdula, Tatyana Y Sharova, Michael Y Fessing and Andrey A Sharov. Boston, MA and Bradford, United Kingdom.
- 763 **The dual role of IFN- α in TRAIL-induced apoptosis of melanoma cells.** Madeleine L Kalb, Astrid Glaser, Frieder Koszik and Georg Stingl. Vienna, Austria.
- 764 **Temozolomide induces strong, synergistic apoptosis of melanoma cells when combined with the BH3-mimetic ABT-737 in a Noxa-dependent fashion.** Steven N Reuland, Nathaniel B Goldstein, Katie A Partyka, Shilo Smith, Mayumi Fujita, Yiqun G Shellman and David A Norris. Aurora, CO.
- 765 **Pigmentary changes during pregnancy.** Sarah Baker, Ann C Haley, Katherine Brown, Beatrice Nardone, Dennis P West, June K Robinson and Mary K Martini. Chicago, IL.
- 766 **Ultraviolet A radiation plays a role in the pathogenesis of malignant melanoma through involvement of the Warburg effect in skin reconstructs.** York P Kamenisch, Evi Maczey, Martin Röcken, Friedegund Meier and Mark Berneburg. Tuebingen, Germany.
- 767 **Correlation between VEGF-A, VEGFR-1, pAkt, and pErk expression in melanocytic lesions and degree of histological atypia.** Clara Curiel-Lewandrowski, Lindsay LaPresto, Chengcheng Hu, Kathlynn Saboda, Mary Krutzsch, Ray Nagle and Janine Einsphar. Tucson, AZ.
- 768 **SOX2 promotes human melanoma cell invasion.** Sasha Girouard, Alvaro Laga, Qian Zhan and George F Murphy. Boston, MA.
- 769* **Deficiency in IL-23, but not IL-12, promotes increased initiation and growth of melanocytic nevi induced by exposure to carcinogenic polycyclic aromatic hydrocarbons.** Tahseen Nasti, Nabiba Yusuf, Laura Timares and Craig Elmets. Birmingham AL.

- 770 Identification of microRNA-211 targets in melanocytes and their role in melanoma. Nityanand Maddodi, Shajil Madhavan, Sulochana Devi, Micheal Newton and Vijayasaradhi Setaluri. Madison, WI.
- 771 Reconstructed human skin model to study melanoma at different stages of progression. Mitchell Klausner, Yulia Kaluzhny and Seyoum Ayehunie. Ashland, MA.
- 772 Non-invasive genomic analysis discriminates invasive from *in situ* melanoma. William Wachsman, Tara J Palmer, George B Schwartz and Sherman Chang. San Diego, CA and La Jolla, CA.
- 773 Effect of oral sulindac on biomarkers of drug bioavailability and carcinogenesis in melanocytic nevi—A double-blind, randomized, placebo-controlled trial. Clara Curiel-Lewandrowski, Susan Swetter, Janine Einspahr, Chiu-Hsieh Hsu, Kathlynn Saboda, Ray Nagle, Lindsay LaPresto, Paul Sagerman, Fangru Lian, J Tangrea, H Parnes and Hsiao-Hui Chow. Tucson, AZ; Palo Alto, CA and Bethesda, MD.
- 774 BMP-Smad signaling pathway inhibits proliferation and migration of melanoma cells. Nicha Rungsimanond, Tatyana Sharova and Andrey Sharov. Boston, MA.
- 775 An automated change detection image analysis system as an aid in the early identification of skin cancer. K. Seybold, F Mertz, R Pina, I Chou, L Morrison, C Bowersox, J Zirato, L De Paula, P Solima and C Curiel-Lewandrowski. Tucson, AZ and San Diego, CA.
- 776* DNA methylation differences between melanomas and nevi. Kathleen Conway, Sharon N Edmiston, Zakaria S Khondker, Pamela A Groben, Xin Zhou, Haitao Chu, Pei Fen Kuan, Honglin Hao, Craig Carson, Marianne Berwick, David W Ollila and Nancy E Thomas. Chapel Hill, NC; Minneapolis, MN and Albuquerque, NM.
- 777 Anti-tyrosinase related protein 1 antibody in combination with cyclophosphamide enhances immunogenicity of established b16 melanoma. Yvonne Saenger, Michael Pan, Daigo Hashimoto, Bradley Glodny, Shailly Shah, Taha Merghoub, Jedd Wolchok, Mar K Lebwohl and Miriam Merad. New York, NY.
- 778 Ellagic acid induces apoptosis and cell cycle arrest through upregulation of p53. James D Jensen, Yuchun Luo, Weimin Liu, Robert P Dellavalle and Mayumi Fujita. Aurora, CO and Denver, CO.
- 779 Dual role of apoptosis-associated speck-like protein containing a CARD (ASC) in human melanoma cells. Weimin Liu, Charles A Dinarello, David A Norris and Mayumi Fujita. Aurora, CO.
- 780* The redox antimalarial dihydroartemisinin targets human melanoma cells but not melanocytes through induction of NOXA (PMAIP1)-dependent apoptosis that occurs as a function of intracellular labile iron availability. Christopher M Cabello, Sarah D Lamore, Warner B Bair and Georg T Wondrak. Tucson, AZ.
- 784* Skin-derived precursors as a source of progenitors for cutaneous nerve regeneration. Sanjay Pradhan, Chiachi Liu and Lu Q Le. Dallas, TX.
- 785* Compromised TGF- β signaling, reduced wound healing and spontaneous skin erosions characterize CLIC4-/- mice. Padmakumar Velayuthan Chellammal, Mary Ann Stepp, Kelsey Speer, Samuel Dengler, John Edwards, Vincenzo Coppola, Lino Tessarollo and Stuart Yuspa. Bethesda, MD; Washington DC; Frederick, MD and Chapel Hill, NC.
- 786* Hair follicle neogenesis induced by fibroblast-like skin tumor cells from patients with tuberous sclerosis complex. Shaowei Li, Rajesh L Thangapazham, Ji-an Wang, Sangeetha Rajesh, Tzu-Cheg Kao, Leonard Sperling, Joel Moss and Thomas N Darling. Bethesda, MD.
- 787 Increased REG3A/Regilly by Th17 cytokines promotes keratinocyte proliferation after skin injury. Yuping Lai, Dongqing Li, Ziwei Jiang, Changwei Li, Tian Zhang, Kotol Paul, Tissa R Hata, Morizane Shin and Richard L Gallo. Shanghai, China and San Diego, CA.
- 788 Management of irritant dermatitis by promoting a rapid and effective epidermal healing. Caroline Baudouin, Stéphanie Brédif, Franck Menu and Philippe Msika. Epernon, France.
- 789 Impaired wound healing in SAD mice: A novel model to understand sickle cell ulcers. Dany Nassar, Tamara Galaz, Pierre-Louis Tharaux and Selim Aractingi. Paris, France.
- 790 p16 influences the aging phenotype in the living skin equivalent. Jean Adamus, Jianming M Lee, Sirpa Aho, Helen Meldrum and Carol Bosko. Trumbull, CT.
- 791 Ultrastructural and three dimensional imaging analysis of perivascular cells in the dermis. Haruyo Yamanishi, Shigeyoshi Fujiwara, Yumiko Ishimatsu-Tsuiji, Yukiko Matsunaga, Kazunori Toida and Tsutomu Soma. Yokohama, Japan and Kurashiki, Japan.
- 792 Durable and reproducible murine splinted excisional wound model. Marie S Tuttle, Lisa A Long, Nicole L Ward and Mahmoud A Ghannoum. Cleveland, OH.
- 793 Survivin expression level and intra-cellular localization is regulated by the nuclear export protein Exportin 1 mediating nucleo-cytoplasmic repartition in keratinocytes. Florian Labarrade, Jean Marie Botto, Claude Dal Farra and Nouha Domloge. Sophia Antipolis, France and Wayne, NJ.
- 794 Epidermolysis bullosa simplex keratinocyte stem cells exhibit a growth disadvantage compared to normal keratinocyte stem cells. Li Li, William Buitrago, Jiang Chen and Dennis R Roop. Aurora, CO; Houston, TX and Beijing, China.
- 795 Stem cell rescuing effect of oligo-HA in the skin. Kyoung-Chan Park, Hyeyoung Choi, Youn-A Kang and Sun-Young Huh. Seongnam-si, South Korea.
- 796 Platelet rich plasma promotes wound healing process through increased proliferation, migration, type I collagen production in human skin fibroblasts. Jae Cho, Sung Kim and Kyu Lee. Daegu, South Korea.
- 797* Quantitative hair plucking reveals stem cell activation is modulated by interactions with extra-follicular macro-environment. Chih C Chen, Maksim Plikus and Cheng M Chuong. Los Angeles, CA and Taipei, Taiwan.
- 798* Ganglioside depletion reverses the wound healing defect of diabetes. Amy S Paller, Hristo Iordanov, Adam Whittington, Amy Sasman, Mahima Vijayaraghavan, David L Chen, Nandita Gatla, David Bach, Dan Zheng, David Giljohann, Chad A Mirkin and Xiaoqi Wang. Chicago, IL and Evanston, IL.
- 799 Automicroneedle therapy system combined with topical retinoid shows better regenerative effects and fewer epidermal side effects compared with each individual treatment. Iae-Hong Kim, Hwa-Young Park, Minyoung Jung and Eung Ho Choi. Wonju, South Korea and Yanggu, South Korea.
- 800* Targeted genetic alteration in hyaluronan catabolism delays wound healing in mice. Jun Muto, Aaron F Carlin, Andrea Garcia, Ajit Varki and Richard L Gallo. La Jolla, CA.
- 801 Liver X receptor (LXR) activator reverses psychological stress-induced delays in cutaneous wound healing by inhibiting the activity and/or expression of 11 β -hydroxysteroid dehydrogenase type 1. Jong-Kyung Youm, Peter M Elias, Kyungho Park, Aegean Chan, Yoshikazu Uchida and Water M Holleran. San Francisco, CA.

Tissue Regeneration, Stem Cells and Wound Healing

All orals [designated with an asterisk (*)] listed below are presented in the Tissue Regeneration, Stem Cells and Wound Healing Minisymposium on Friday, May 6, 2011 from 2:00-5:30 p.m. in Wildflower B, JW Marriott Desert Ridge. Orals designated by two asterisks (**) will be presented during a Plenary Session.

- 781 Alteration of the dermal papillary fibroblast population: A new key to understand skin aging — Beneficial effects of rhamnose. Hervé Pageon, Hélène Zucchi and Daniel Asselineau. Clichy, France.
- 782 Regulation of keratinocyte migration and cutaneous wound epithelialization by cholinergic peptides involves modulation of integrin expression. Alexander I Chernyavsky, Mina Kalantari-Dehaghi, Courtney Phillips, Steve Marchenko and Sergei A Grando. Irvine, CA.
- 783* The bulge area is the major hair follicle source of nestin-expressing cells which can repair the spinal cord compared to the dermal papilla. Fang Liu, Aisada Uchugonova, Hiroaki Kimura, Chuansen Zhang, Ming Zhao, Lei Zhang, Karsten Koenig, Jennifer Duong, Ryoichi Aki, Norimitsu Saito, Sumiyuki Mii, Yasuyuki Amoh, Kensei Katsuoka and Robert M Hoffman. San Diego, CA; Shanghai, China; Saarbruecken, Germany; Kanazawa, Japan and Kanagawa, Japan.

- 802 Comparative analysis of two different polyurethane foam types for the use in NPWT treatment in a porcine wound healing model.** Pierre Croizat, Axel Eckstein, Ulrich Fink and Hans Smola. Heidenheim, Germany and Cologne, Germany.
- 803 Bioactivity of immobilized growth factor with polyelectrolyte multilayer assembly on keratinocytes.** Farzam Gorouhi, Nihar Shah, Brittany L Wood, Ankit Agarwal, Jill Covert, Nicholas L Abbott, Christopher J Murphy and Rivkah R Isseroff. Davis, CA and Madison, WI.
- 804 Organ regeneration in mammals: Development of a model for scarless wound healing using amputated mouse vibrissae follicles.** Keita Inoue, Claire Higgins, Angela Christiano and Collin Jahoda. New York, NY and Durham, United Kingdom.
- 805 TSC2-null fibroblast-like cells recreate multiple niches in grafted skin equivalents including dermal papilla.** Rajesh Thangapazham, Shaowei Li, Ji-an Wang, Sangeetha Rajesh, Joel Moss and Thomas N Darling. Bethesda, MD.
- 806 Inhibiting beta-adrenergic receptors improves wound healing of combined injury of thermal burning and irradiation.** Hsin-ya Yang, Huguette Albrecht, David Rocke and Rivkah Isseroff. Davis, CA.
- 807* Gene correction of recessive dystrophic epidermolysis bullosa patient-specific induced pluripotent stem cells by homologous recombination.** Munenari Itoh and Angela M Christiano. New York, NY.
- 808 Epinephrine mediates impairment of wound healing via IL-6 dependent neutrophil trafficking.** Min-Ho Kim, Scott I Simon and Roslyn R Isseroff. Davis, CA.
- 809 High cell density markedly increases resistance to oxidative stress.** Jonathan Yahay, Dennis Kim, Lauren Maloney, Fubao Lin, Monica McTigue and Richard A Clark. Stony Brook, NY.
- 810 Application of light emitting diode and Celecoxib (Cox-2 inhibitor) for the management of wounds.** Steven T Thng, Kumar Manoj, Mui Hong Tan, Pierce Chow, Shabbir M Moochhala and Jia Lu. Singapore, Singapore.
- 811* Induced pluripotent stem cells from individuals with lamellar ichthyosis.** Joyce Teng, Erin McMillan, Tisha Kawahara, Angela Martinsen, Guo Kai Chen, James Thomson, Vijay Setaluri and Sean Palecek. Madison, WI.
- 812 Prominent role of resident endothelial progenitors in skin wound angiogenesis.** Elke J Seppanen, Mathieu Rodero and Kiarash Khosrotehrani. Brisbane, Australia.
- 813** Maintenance of the epidermal progenitor state requires the long non-coding RNA Linc8D.** Cari Lee, Markus Kretz, Daniel Webster, Ross Flockhart, Kun Qu, Angela Mah, Cody Aros, Howard Chang, John Rinn and Paul Khavari. Palo Alto, CA.
- 814 Epidermal IGF-1 receptor is important in the maintenance of bulge stem cell and their response to skin wounds.** Edwige Roy, Fabien Linay, Martin Holzenberger, Michele Oster, Selim Aractingi and Kiarash Khosrotehrani. Herston, Australia and Paris, France.
- 815 Dihydrodehydrodiisoeugenol (DDE) enhances adipocyte differentiation and decreases lipolysis in murine and human cells.** Katja Nehrenheim, Imke Meyer, Jean Krutmann and Susanne Grether-Beck. Duesseldorf, Germany and Holzminden, Germany.
- 816 Induction of regulatory dendritic cells by artificial extracellular matrices used as coatings for biomaterials.** Sandra Franz, Inka Forstreuter, Vera Hintze, Stephanie Möller, Dieter Scharnweber, Matthias Schnabelrauch and Jan C Simon. Leipzig, Germany; Dresden, Germany and Jena, Germany.
- 817 Microbiome and corresponding cutaneous defense response in chronic diabetic wounds.** Elizabeth A Grice, Evan S Snitkin, Laura J Yockey, Dustin M Bermudez, Kenneth W Liechty and Julia A Segre. Bethesda, MD; Philadelphia, PA and Jackson, MS.
- 818 Burn injury induces early erythrocyte occlusion of surrounding cutaneous microvasculature prior to delayed microthrombus formation.** Wunan Zhou, Douglas A Hirth, Marcia G Tonnesen, Steve A McClain, Adam J Singer and Richard A Clark. Stony Brook, NY and Northport, NY.
- 819 Hydrogels can reduce dermal temperatures and speed epithelialization of second degree burns: Preliminary evaluations in a porcine model.** Stephen C Davis, Joel Gil, Jose Valdes and Abel Claro. Miami, FL.
- 820 Characterization and quantification of wound-induced hair follicle neogenesis using *in vivo* confocal scanning laser microscopy.** Chengxiang Fan, Michael A Luedtke, Stephen M Prouty, Michelle Burrows, Nikiforos Kollias and George Cotsarelis. Philadelphia, PA and Skillman, NJ.
- 821* Transregulation of α 2 and α 3 integrin expression by α 6 β 4 integrin in migrating keratinocytes.** Kristina Kligys, Susan Hopkinson and Jonathan Jones. Chicago, IL.
- 822* The collagen XVII-binding protein actinin-4 regulates the directed migration of keratinocytes.** Kevin J Hamill, Omar Skalli and Jonathan C Jones. Chicago, IL and Memphis, TN.
- 823 Natural products for epidermal barrier repair.** Balvinder Renu Rehal, Raja Sivamani and Rivkah Isseroff. Sacramento, CA.
- 824* Evidence for the existence of phenotypically distinct progenitors in epidermis.** Alexandra Charruyer, Lauren R Strachan, Stephen Fong, Lili Yue, Malik Abdul, Maria L Mancianti and Ruby Ghadially. San Francisco, CA and Berkeley, CA.
- 825 Drug allergy in hematopoietic stem cell transplantation.** Jennifer Gordon, Anand Haryani, Rademaker Alfred, Jayesh Mehta and Jonathan Cotlar. Chicago, IL.
- 826* Bone marrow derived mesenchymal stem cells: Regenerative medicine for pseudoxanthoma elasticum.** Qiuqie Jiang, Shunsuke Takahagi, Bethany Reutemann, Alix Grand-Pierre, Adele Donahue and Jouni Uitto. Philadelphia, PA.
- 827 Laminin 332 expression and processing is altered in irradiated and wounded skin.** A Lopez, E B Olasz, N E Duncan, A Schock, W Kittipongdaja, B L Fish, J E Moulder and Z Lazarova. Milwaukee, WI.
- 828 Secreted Hsp90 carries two unique properties for effectiveness in skin wound healing that are absent from conventional growth factor treatments.** D Sahu, C Cheng, F Tsen, Y Kuang, J Fan, M Chen, D Woodley and W Li. Los Angeles, CA.
- 829 A Rho-kinase inhibitor promotes cutaneous wound-healing by enhancing keratinocyte growth and migration in a JNK-dependent manner.** Vineela Gandham, Maddala Rupa, Vasanth Rao, Jane Jin, David Epstein, Russell Hall and Jennifer Zhang. Durham, NC.
- 830* Elastin is essential for vascular development — A zebrafish model.** Qiaoli Li, Adele Donahue, Hye Young Choi and Jouni Uitto. Philadelphia, PA and Seoul, South Korea.
- 831 The potential of a jasmonic acid derivative: A new anti ageing molecule.** Jean Francois Michelet, Dominique Fagot, Christian Olive, Elodie Rieux, Anne Marie Minondo, Yann Mahe, Charlotte Tacheau, Anne Colonna and Bruno Bernard. Aulnay sous Bois, France and Clichy, France.
- 832 Human keratinocytes have an immediate, autonomous response to injury that upregulates protective and immune-enhancing gene expression.** Milène K Crispin, Erika Billick, Hiroshi Mitsui, Hideki Fujita, Mayte Suárez-Fariñas and James G Krueger. New York, NY.
- 833* Germinative epithelium signature of the human hair follicle.** Claire A Higgins, Keita Inoue, Colin A Jahoda and Angela M Christiano. New York, NY and Durham, United Kingdom.
- 834 Cutaneous antimicrobial barrier function is diminished in burn wounds following psychological stress.** Jennifer K Plichta, Steve Droho, Richard L Gamelli and Katherine A Radek. Maywood, IL.
- 835 PPAR γ -TGF β -AGTR1 nexus modulates epithelial-mesenchymal transition and collagen synthesis in scarring alopecia.** Sreejith P Panicker, Taneeta Ganguly, Mary C Consolo, Kord Honda and Pratima Karnik. Cleveland, OH.
- 836 A novel report of non-uremic calciphylaxis in the setting of excessive exogenous calcium intake.** S Gee, F.R Vleugels and L S Winterfield. Boston, MA and Cincinnati, OH.
- 837 P12, a fibronectin-derived peptide, reduces burn injury progression in a porcine burn model.** Richard A Clark, Fubao Lin, Marcia G Tonnesen and Adam J Singer. Stony Brook, NY and Northport, NY.
- 838 Oxidative damage fails to correlate spatiotemporally with cell necrosis during burn injury progression.** D Kim, S Lanier, S McClain, F Lin, M Tonnenissen, A Singer and R Clark. Stony Brook, NY and Northport, NY.
- 839 In vivo assessment of wound induction and repair of a skin injury produced by liquid nitrogen.** Melissa Chu and Nikiforos Kollias. Skillman, NJ.

- 840 Agents that help protect epidermal stem cells from photodamage or induce differentiation.** Jon E Anderson, Young C Anderson, Robert Holtz, Stefan Borchert and Harald van der Hoeven. Allendale, NJ; Lakewood, CO and Berlin, Germany.
- 841 Cutaneous wound healing in the EpiDerm-FT™ full-thickness *in vitro* human skin model: Role of serum growth factors.** Alexander J Armento, Gina Stolper, Max Li, Seyoum Ayehunie, Mitchell Klausner and Patrick Hayden. Ashland, MA.
- 842 Effects of claudin-2 knockdown in cultured keratinocytes.** Steffani Ellis, Benny Lu and Dale Telgenhoff. Fort Worth, TX.
- 843 Laser assisted delivery of allogeneic porcine mesenchymal stem cells.** Stephen Davis, Jill Waibel, Marcela Salgado, Luis Rodriguez-Menocal, Dwayne Ford and Evangelos V Badiavas. Miami, FL.
- 844 Laser assisted bone marrow transplantation.** Jill Waibel, Stephen Davis, Luis Rodriguez-Menocal, Marcela Salgado, Dwayne Ford and Evangelos V Badiavas. Miami, FL.
- 845 Wound healing matrix displays properties useful for graft revascularization.** Warren K Hoeffler and Chris Tapia. Sausalito, CA.

KEYWORD INDEX

3-D Organ model	016, 148, 278, 283, 298, 347, 649, 696, 766, 784, 790, 841, 845	Auto-immunity	002, 020, 041, 042, 052, 053, 056, 059, 060, 064, 079, 202, 250, 453, 464, 533
Acantholysis	064, 082, 379, 701	Autophagy	113, 304, 705
Acne	078, 331, 386, 441, 487, 501, 516, 525, 639, 646, 647, 648	B cell	545
Actin	190, 822	B7	732
Actinic keratoses	538	Bacteria	563, 621, 636, 638, 655
Activation	557	Bacterial infections	184, 624
Adherens junction	190, 195, 398	Barrier function	010, 029, 184, 266, 269, 279, 280, 285, 291, 293, 302, 318, 320, 340, 345, 346, 350, 366, 481, 570, 630, 799, 834
Adhesion molecule	176, 189, 267, 303, 352, 625	Basal cell carcinoma	088, 105, 109, 116, 125, 133, 148, 156, 164, 169, 205, 213, 223, 458, 549, 554
Adipocytes	447, 485	Biofilm	792
Adipokines	201, 523	Biologic therapy	026, 493, 504, 517, 524
Adult T-cell leukemia/lymphoma	627	Biomarker	104, 150, 536, 551, 667, 743, 760, 767, 772, 773
Advanced glycation end products	002	Blistering	058, 070, 794
Aging	103, 191, 197, 198, 221, 230, 268, 284, 296, 303, 305, 306, 313, 317, 324, 341, 345, 359, 364, 370, 381, 394, 399, 439, 491, 508, 521, 541, 550, 658, 666, 695, 700, 781, 790, 815, 831	Blood vessel	818
AKT, mTOR	113, 133, 139, 156, 170, 530, 723, 731	BMP signaling	131, 432
AKt, Warburg	766	Bone health	393
Alopecia	023, 042, 059, 060, 430, 436, 442, 443, 453, 457, 459, 460, 462, 464, 467, 469, 533, 539, 598	BRAF	726
Androgen/androgen receptor	471	Bullous disease	035, 039, 043, 046, 053, 056, 194, 371, 387
Angiogenesis	177, 179, 186, 480, 812, 845	Burns, vasomotor activity, adrenergic receptors	806, 818, 819, 837, 838
Animal models for disease	036, 051, 118, 179, 435, 436, 460, 561, 579, 701, 786, 789, 805, 837	Cadherin	380, 753
Antigen presenting cell	558, 583, 601	Calcium	180, 314, 379, 836
Anti-microbial peptide	264, 288, 289, 290, 311, 319, 506, 537, 618, 627, 639, 651, 834	Calpain	007
Antioxidant	268, 287, 292, 317, 495, 664, 666, 686, 731	cAMP	081, 515, 748
Apoptosis	112, 137, 170, 479, 576, 683, 704, 709, 763, 764, 780	Cancer	090, 107, 114, 132, 161, 166, 195, 249, 256, 446, 461, 653, 716, 774, 778
Aquaporin	363	Cancer genetics	085, 126, 129, 136, 144, 175, 259
Artificial skin and skin equivalent	441, 831	Cancer prevention	149, 213, 240, 254, 259
Aryl hydrocarbon receptor	275, 305, 328, 460	Cancer stem cells	096, 159, 733, 759
Atherosclerosis	490	Carcinogenesis	089, 093, 099, 104, 105, 141, 154, 160, 162, 239, 657
Atomic force microscopy	048	Cardiovascular disease	031, 523
Atopic dermatitis	014, 021, 028, 051, 054, 231, 234, 245, 246, 248, 257, 269, 276, 337, 351, 355, 366, 375, 384, 385, 475, 478, 492, 498, 537, 566, 572, 573, 577, 588, 637, 638	Cardiovascular risk	023, 061, 211, 220
Atopy	214, 350	Caspase-14	283, 325
Autoantibody	039, 048, 050, 056, 062, 064, 080, 193, 502, 611	Cathelicidin	563, 613
Autoantigen	062	Cell adhesion	180, 200, 279, 338, 401, 587, 704, 821
		Cell biology	093, 189, 260, 356, 447, 723, 762, 774
		Cell cycle control	132, 151, 153, 157



Cell motility	145, 199, 821, 822, 828, 842	Desquamation	285, 321
Chemical carcinogenesis	097, 123	Development biology	261, 322, 323, 432, 449, 466, 571, 725, 830
Chemokine	012, 025, 054, 092, 109, 130, 167, 273, 574, 581	Diabetes	201, 204, 206, 243, 302, 798
Chemoprevention	152, 163, 549, 773	Diagnostic tool	448
China	369	Differentiation	138, 188, 200, 262, 266, 267, 270, 271, 283, 291, 304, 316, 323, 325, 333, 335, 339, 357, 358, 360, 362, 372, 392, 395, 396, 811, 815, 840
Cholesterol	172, 315, 659	DNA methylation	089, 115, 776
Chromosomal passenger complex	793	DNA mutation	162
Chronic wound	625	DNA repair	086, 126, 153, 174, 377, 538, 652, 668, 679
Cilia	444	Early detection	217, 775
Circadian gene	324, 473	Ectodomain shedding	181
Claudin	842	Eczema	337
Clinical research	212, 251, 292, 297, 410, 476, 488, 496, 500, 507, 515, 519, 520, 531, 535, 536, 539, 545, 550, 648, 802	Effectiveness research	207
Clinical trials	483, 503, 505, 524, 525, 549, 736	EGCG	713
Co-culture system	294	EGF	098, 108, 803
Collagen	039, 183, 191, 194, 196, 197, 198, 354, 387, 403, 535, 670, 691, 835	EGF-like growth factors	262
Complementary/alternative medicine	536	Elastin	695, 830
Connective tissue	514, 802, 830	Electron microscopy	309, 353, 791
Contact dermatitis	529, 578, 645	Endothelial cell	812
Contact hypersensitivity	005, 565, 570, 607, 608, 642	Eosinophil	043, 070
Cortico steroids	205, 327	Epicutaneous immunization	584
Cost effectiveness	226, 496	Epidemiology	042, 204, 206, 210, 211, 215, 216, 220, 224, 233, 234, 235, 236, 238, 240, 245, 246, 248, 249, 253, 257, 258, 548, 707
Cutaneous T cell lymphoma	074, 112, 122, 137, 147, 165, 168, 478, 479, 486, 503, 520, 526, 534, 540, 542, 551, 593, 604, 611, 641	Epidermal growth factor receptor	025, 082, 111, 134, 157, 172, 173, 489, 569
Cyclobutane pyrimidine dimers	686	Epidermal permeability barrier	298, 300, 309, 335, 353, 362
Cyclooxygenase	713	Epidermis	175, 265, 282, 304, 306, 322, 324, 332, 333, 334, 343, 359, 362, 389, 406, 416, 432, 466, 474, 499, 596, 696, 785, 788, 824
Cytochrome P450	399, 586, 755	Epidermolysis bullosa	196, 354, 371, 374, 391, 393, 794, 807
Cytokine	036, 046, 386, 522, 534, 566, 585, 615, 618, 672, 680, 693	Epigenetics	334, 373, 409, 474, 738, 776
Cytoskeleton	279, 338	Extracellular matrix	183, 190, 434, 752
Cytotoxicity	533, 809	Extracorporeal photopheresis	484
Darier's disease	379, 398	Fas	122
Decorin	185, 691	Fibroblast	094, 145, 296, 381, 385, 671, 781, 796
Defensin	008, 288	Fibroblasts, marionettes	294
Dendritic cell	024, 030, 037, 052, 055, 063, 067, 484, 557, 562, 563, 571, 578, 582, 587, 588, 589, 606, 607, 608, 612, 629, 634, 739, 816, 839	Fibronectin	199
Dermal papilla, tissue engineering	452, 462, 470, 783	Fibrosis	077, 183
Dermatitis herpetiformis	009	Filaggrin	269, 280, 300, 325, 355, 366, 375
Dermatologic surgery	482, 719	Fluorescence	084, 414
Dermatopathology	045, 127, 166, 604	Fungal therapy, fungus	510, 511, 512, 627, 683, 703
Dermatopontin	185	G protein	230
Dermis	187, 191, 201, 580	Galectin-3	650
Desmocollin	047, 182, 195	Gamma delta T cell	006, 275, 559, 620
Desmoglein	047, 058, 080, 138, 182, 188		
Desmosome	176, 192, 200, 338, 410		



Gangliosides	798	Immune evasion	073, 159, 239, 543, 547, 564, 576, 610, 724
Gene array analysis	014, 095, 147, 248, 291, 473	Immunoglobulin	049, 573
Gene expression	034, 090, 128, 131, 147, 301, 341, 386, 395, 407, 419, 717, 743, 768, 813, 833	Immunology	033, 073, 136, 149, 168, 556, 558, 562, 567, 568, 569, 581, 582, 585, 589, 590, 592, 598, 602, 603, 605, 606, 655, 761, 777
Gene regulation	122, 373, 392, 396, 415, 416, 455, 473, 762	Induced pluripotent stem cells	420
Gene therapy	377, 383, 388, 391, 414, 424, 807	Infant skin	274, 655
Genetic disease	176, 228, 343, 365, 367, 368, 374, 376, 382, 387, 391, 397, 400, 417, 418, 420, 422, 427, 429, 701, 826	Infection	264, 618, 631, 656, 792
Genodermatosis	369, 371, 376, 380, 402, 408, 415, 421, 426, 429, 440	Infectious disease	032, 214, 528, 605, 656
Genome-wide association study	144, 223, 238, 341, 419, 422	Inflammasome	045, 615, 779
Genomics	165, 351, 382, 428, 744, 772	Inflammation	003, 004, 010, 013, 015, 016, 018, 019, 034, 041, 046, 049, 051, 052, 053, 055, 057, 065, 069, 071, 072, 075, 124, 141, 160, 329, 400, 480, 487, 489, 500, 506, 515, 516, 519, 531, 586, 614, 620, 625, 642, 647, 662, 751, 832
Genotyping	337, 399, 468	Innate immunity	079, 621, 623, 624, 630, 633, 640, 649, 817
Glycosylation	117, 192	INOS	632, 644
GM-CSF	275	Insulin-like growth factor	339
Graft versus host disease	017, 825	Integrin	121, 336, 782, 821
Growth factor/growth factor receptors	103, 145, 157, 442, 471, 841	Interferon	060, 068, 132, 494, 598, 622
Hair	023, 088, 105, 230, 342, 405, 413, 431, 433, 434, 435, 437, 438, 440, 442, 443, 444, 445, 446, 448, 450, 451, 452, 453, 454, 455, 456, 458, 461, 462, 463, 468, 469, 471, 472, 474, 518, 539, 754, 786, 804, 805, 820, 833	Interleukin	018, 025, 038, 345, 384, 595, 645, 647, 681
Hairless gene, epithelial-mesenchymal transition	409	Involucrin	328
HDACs	076, 262, 449, 520	Ionizing radiation	677, 806, 827
Health services research	233, 247, 251, 256, 501	Itch	038, 040, 299, 497, 527
Heat shock protein	318, 611, 828	Kallikrein, cathelicidin, innate immunity, Calcium, skin barrier, transepidermal water loss	651
Herbal medicine	823	Keloid	299
Herpes simplex	623, 628	Keratinocyte	007, 008, 027, 054, 087, 089, 091, 134, 180, 263, 267, 270, 273, 278, 286, 288, 294, 301, 312, 314, 328, 342, 344, 348, 356, 357, 358, 360, 361, 363, 383, 395, 420, 421, 444, 599, 622, 639, 645, 718, 782, 793, 803, 823, 829
Herpes zoster	628	Keratins	113, 265, 333, 336, 374, 402, 404, 408, 424
Histone deacetylase inhibitor	076, 344, 449	Keratosis	425
HIV	554, 619	Knock-out mice	010, 012, 123
HLA	390	Lactate	810
Homeobox genes	373	Laminin	100, 199, 827
Human papillomavirus	591	Langerhans cell	029, 076, 090, 097, 277, 282, 566, 567, 568, 583, 584, 592, 594, 606, 619
Hyaluronic acid	094, 795, 800	Laser	443, 670, 843, 844
Hyperkeratosis	429	Laser capture microdissection	044, 095
Hypertrichosis	411	Leprosy	626, 650
Hypoxia	087, 263, 629	Linkage association/analysis	365, 368, 419
Ichthyosis	300, 350, 367, 368, 382, 401, 404, 425	Lipids	031, 289, 295, 309, 329, 343, 447, 616, 659
IgA	009	Loricrin	425
IgE	043, 214, 558		
IL-17	026, 027, 068, 141, 271, 557, 572, 617, 633		
IL-17R	065		
IL-23	769		
Imaging	049, 151, 166, 414, 433, 450, 620, 685, 736, 775, 783, 820		



Lupus erythematosus	003, 242, 477, 494, 617	Nerve growth factor	004, 486
Lymphangiogenesis	021, 181, 186, 727	Neuro-immune interaction	698, 761
Lymphatics	465	Neuroimmunology	030
Lymphocyte	588	Neurokinins	582, 741
Lymphocytic cicatricial alopecia (CA), lichen planopilaris (LPP), central centrifugal cicatricial alopecia	079, 172, 835	Neurological disease	482
Lymphoma	083, 228, 560	Neuropeptides	663
Lysyl oxidase	335	Neutrophil	009, 070, 617, 624, 808
Macrophage	016, 044, 072, 075, 110, 478, 571, 626, 662	Nevus	241, 739, 765, 767, 769
MAGE Proteins	146, 174	NF- κ B	059, 203, 290, 412, 423, 664, 709, 747, 779
MAP kinase	123, 202, 272, 281, 726	Nitric oxide	004, 092
Mast cell	035, 158, 616, 663	Noninvasive detection	476
Matrix biology	194	Notch	316, 330, 372, 457
Matrix metalloproteinase	178, 197, 203, 305, 691, 694, 729	Novel smoothened inhibitor	458
Medical decision making	225	Nuclear factor- κ B, SLURP-1, nicotinic acetylcholine receptor	599
Melanin	437, 445, 685, 708, 710, 711, 728, 738	Nutrition	467
Melanocyte	020, 155, 301, 319, 445, 712, 717, 718, 721, 722, 725, 730, 735, 746, 747, 750, 754, 756, 762, 770	Obesity	215, 244, 312
Melanoma	092, 094, 102, 106, 126, 139, 142, 146, 151, 174, 208, 209, 224, 255, 509, 555, 560, 562, 576, 610, 634, 687, 709, 713, 714, 715, 716, 724, 726, 727, 729, 732, 734, 735, 737, 740, 741, 742, 743, 744, 745, 748, 749, 751, 752, 753, 755, 758, 759, 760, 761, 763, 764, 766, 767, 768, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780	Outcomes research	212, 483
Melanoma, epidemiology	217, 219, 224, 237, 714, 733	Oxygen radicals	171, 284, 348, 697, 746, 809, 838
Melosome	711, 718, 723, 728	Ozone	348
Merkel cell carcinoma	143, 153, 543, 547, 653	P16	790
Mesenchymal stem cell	580	p53	125, 665, 684, 778
Metabolic syndrome, pitavastatin, VEGF	061	P63	332, 416
Metabolism	114, 308, 313, 531	P63, p16, senescence	154
Metalloproteinase	055, 193, 229, 400	P75NTR	270
MHC	569	Pachyonychia congenita, peptide nucleic acid	408
Microarray	013, 022, 349, 494, 538	Papillomavirus	643
MicroRNA	131, 161, 322, 372, 381, 403, 451, 556, 674, 675, 770	Paraneoplastic pemphigus	047
Microtubule	361	Patch test	529
MiRNA	101, 344	Patch/hedgehog	116
Mitochondria	313, 666, 699, 700	Pathogenicity	033
Mitochondrial DNA	167, 171, 203	Pemphigus	193, 545
Monocyte	626, 646, 650	Pemphigus foliaceus	058, 080
Mouse mutation	003, 037, 339, 435	Pemphigus vulgaris	048, 050, 062, 082, 192, 202, 352
Mutation	365, 367, 369, 404	Percutaneous, biomaterial	184
Mycosis fungoides	526, 540	Permeability barrier	310
Nail	342, 418	Phospholipase	363
Necrosis	819	Phospholipid	690
Nerve	178, 299, 497, 663, 784	Photobiology	240, 659, 660, 665, 669, 670, 677, 681, 682, 684, 689, 695, 696, 705, 708, 712
		Photodamage photoaging telomere	541, 685
		Photodynamic therapy	667, 683, 703, 704
		Photoprotection	247, 495, 682, 840
		Photosensitivity	495, 511, 688
		Phototherapy	207, 487, 678, 702
		PI3K	407

Pigmentation	071, 259, 472, 661, 710, 712, 721, 728, 730, 731, 733, 736, 754, 756, 769	Serum	250
PKC, SOD3, Stat1	096	Sezary syndrome	129, 484, 526
Platelet	818	Shh, FGF2	164
Platelet-activating factor	687, 688, 690	Signal transduction	100, 158, 260, 356, 357, 358, 360
Platelet-derived growth factor	121, 177, 407	SiRNA	424
Polyamines	405, 431	Sirtuin	086, 137, 170, 364, 370, 758
Polymerase chain reaction	468	Skin cancer	095, 103, 120, 136, 152, 163, 208, 209, 226, 254, 258, 463, 527, 597, 706, 749, 760, 771
PPAR	318	Skin color	235, 247, 635
Prevalence	231	Skin explant model	689, 829
Proliferation	155, 171, 173, 609	Skin graft	786, 805, 824
Prostaglandins	069, 071, 469	Skin imaging	078, 163, 221, 346, 497
Protease	035, 038, 040, 340	Smoking	227, 514
Protease inhibitors	401	Squamous cell carcinoma	073, 097, 098, 100, 101, 107, 108, 110, 111, 115, 117, 118, 119, 128, 129, 138, 140, 150, 154, 159, 173, 196, 205, 210, 213, 239, 457, 554, 632, 644, 692
Protein kinase	111, 544, 668	Srcasm	140
Proteomics	522, 551, 705	Staphylococcus	517, 528, 629, 637
Pruritus	178, 252, 260, 492, 499, 546	STAT3	011, 272, 281, 560
Psoriasis	001, 002, 006, 013, 018, 019, 022, 024, 026, 027, 031, 032, 034, 040, 044, 061, 063, 065, 067, 068, 081, 181, 186, 206, 207, 211, 212, 215, 216, 220, 227, 228, 232, 234, 236, 243, 244, 253, 271, 272, 273, 281, 330, 376, 390, 412, 422, 423, 483, 490, 493, 502, 504, 505, 517, 523, 524, 548, 552, 553, 559, 574, 596, 599, 612, 613, 633, 649, 689, 702, 707	Stem cell	148, 169, 286, 297, 396, 431, 456, 459, 472, 518, 535, 542, 768, 783, 784, 791, 793, 794, 795, 797, 807, 811, 813, 814, 824, 826, 840, 843, 844
Psychological stress, glucocorticoid, 11β-hydroxysteroid dehydrogenase type 1	541, 801	Stevens-Johnson syndrome	561
Psychology	218, 225, 246	Stratum corneum	353, 355, 630
Quality care	255, 749	Streptococcus	631
Quality of life	218, 242, 252, 253, 499	Stress	030, 185, 287, 293, 327, 364, 671, 698, 808, 834
Quality of life measures	258	Subcutaneous fat	658, 680, 700, 815
Ras	098, 134, 530	Sunlight	254, 708
Receptor	160, 586, 751	Sunscreen	658
Reflectance confocal microscopy, dermoscopy	297, 677, 737, 839	Superantigen	168
Reliability	433	Syndecan	037
Reprogramming	826	T cell	006, 008, 024, 312, 534, 543, 547, 555, 556, 564, 579, 581, 584, 589, 590, 592, 593, 595, 596, 601, 609, 610, 635, 641, 644, 667, 672, 732
Retinoid	646, 799	T regulatory cell	565, 570, 577, 587, 607, 678
Retinoid receptors	278, 641	Telomere, ginsenoside-Rg1, DNA oxidative damage	238
Retinol	544	Terminal differentiation, epidermal barrier	334, 475, 491
Risk factor	231, 706	TGF-beta	001, 109, 516, 583, 785, 835
Risk perception	237	TGF-beta receptor	001, 175
RNA-seq	022, 448	Th1/Th2	135, 572, 573, 615, 681
Rosacea	057, 069, 222, 506	Th17	504, 559, 574, 678, 787
Scleroderma	077	Therapeutics	057, 179, 326, 480, 493, 502, 503, 537, 837
Screening	226, 250, 255, 370, 656, 780	Tight junction	189, 277, 298, 347, 637
Sebaceous glands	459	Tissue model	162, 308, 771, 795
Sebocytes	307, 327, 329, 331, 441		
SEER database	217		



TNF-alpha	063, 519, 575, 613, 694, 747
Tobacco smoke, Th17	568
Toll-like receptors	295, 614, 622, 642, 652, 654
Toxic epidermal necrolysis	561
Toxicology	308, 697
TRAIL, TLR1/2	763
Transcription	394
Transcription factors	124, 146, 268, 316, 317, 351, 378, 392, 455, 456, 461, 715, 725
Transgenic mice	124, 169, 405, 532
Transplant	844
Transplant patients	542, 628, 669, 825
Tumor infiltrating lymphocyte	555, 595, 727, 739
Tumor model	135
Tumor progression	108, 115, 150, 167, 564, 715, 724, 753
Tumor suppressor gene	361, 657
Tumorigenesis	091, 451, 744
Tyrosinase	710, 711, 717
Tyrosine kinase	140, 188
Ulcer	789
Ultraviolet	084, 086, 099, 104, 164, 306, 530, 544, 565, 614, 652, 657, 662, 664, 665, 668, 671, 672, 673, 676, 679, 680, 684, 686, 687, 688, 690, 692, 693, 694, 698, 702, 706, 721, 740
UVA1, narrow-band UVB, tolerance	707
Vaccine	149, 591, 605, 634, 741
Vasculitis	012
Virus	165, 616, 623, 640, 653
Vitamin D	208, 245, 290, 378, 446, 464, 552, 631, 635, 661, 735, 755
Vitiligo	020, 601, 720, 722, 730, 746
Wnt signaling, beta-catenin	450, 485
Wnt-signaling	261, 330
Wound healing	072, 075, 204, 303, 346, 347, 430, 521, 636, 782, 785, 787, 789, 792, 796, 798, 800, 801, 802, 803, 804, 806, 808, 810, 812, 814, 817, 819, 820, 822, 823, 828, 829, 832, 836, 841, 842, 843, 845
Wrinkle	229, 476, 491, 831
Xeroderma pigmentosum	114, 144, 377, 378, 740
Zebrafish	415, 427

AUTHOR / SPEAKER INDEX

Conflict of Interest Disclosure Key

A - Advisory Board
B - Board of Directors
C - Consultant
E - Employee or Salary Support
F - Founder
G - Grant or Research Support
H - Honoraria
I - Investigator
P - Co-inventor on Patent Held by University of Corporation
SB - Speakers Bureau
SH - Stock Holder
O - Other

Unless otherwise noted, authors/speakers/presiders with no disclosure statements listed had no conflicts of interest to disclose.

A

Alborg, Jenny	240, 259	Akazawa, Yumiko	265
Abad, Patricia	370	Akeda, Tomoko	585
Abbas, Abul	041	Aki, Ryoichi	783
Abbott, Nicholas L.	803	Akilov, Oleg E.	551, 611
Abdul, Malik	824	Akiyama, Masashi	281, 343
Abdul-Malak, Nabil	695	Al Robaei, Ahmad	386
Abe, Riichiro	561	Ala-aho, Risto	150
Abecasis, Goncalo	157	Alam, R.	408
Abel, Josef	679	Al-Attar, Paul M.	027
Abernethy, Amy P.	714 (G - Amgen; C, G - Helsinn; C, G - Proventys)	Albea, Danielle	351
Abrams, Dominic J.	176	Alberti, P.	187
Abrink, Magnus	035	Albertini, Mark R.	174
Abu Bakar, Mohd Hilmi	431	Alberts, David S.	530
Abuabarwa, K.	207, 433	Albrecht, Huguette	806
Acharya, Samudra	639	Alejandre, M. Carmen	703
Achay, Zyra	084	Alexandrescu, Doru	613 (G, I - Amgen)
Adams, Natalie	534, 593	Alfred, Rademaker	825
Adamus, Jean	790 (E - Unilever)	Al-Habian, Amgad	201
Adhami, Vaqar M.	139	Al-hassani, Mohammed	690
Adhikary, Gautam	360, 425	Alhonnen, Leena	405
Aebischer, David	110	Ali, Musheera M.	516
Aeby, Pierre	308	Ali, Niwa	006, 612
Afaq, Farrukh	283	Ali, Nsrein	303
Agaiby, Shere	702	Alicea, JoAnn	500
Agarwal, Ankit	803	Alijarde, Roberto	245
Agarwal, Pooja	725	Alitalo, Annamari K.	110
Agostino, Nick	142	Allen-Hoffmann, Lynn	597 (F, P, B, A, O - Stratatech)
Ahmad, Nihal	137, 758	Alloo, Allireza	733, 759
Ahmad, Safoora	723	Alousi, Amin	484
Ahmadi, Kourosh	394	Al-Tahan, Sejad	723
Ahmed, Mohammed I.	131	Alvarez, Bryan T.	255
Aho, Sirpa	790 (E - Unilever)	Alvarez-Mon, Melchor	662 (C, H - IFC)
Ahrens, Kerstin	618	Al-Zaid, Tariq	459
Akasaka, Eijiro	417	AlZolibani, Abdullateef A.	386
		Amagai, Masayuki	269, 277
		Amargo, E.	182
		Amargo, Evangeline V.	200
		Ambonati, Marco	588
		Amini, Sadegh	436
		Amoh, Yasuyuki	783
		Amos, Chris	042 (G - NIAMS)
		Amoyel, Audrey	671
		Anderegg, Ulf	094
		Anders, Joanna	123
		Anders, Robert	732
		Andersen, Bogi	161, 362, 395, 416, 473
		Anderson, Jon E.	840
		Anderson, Joshua	725
		Anderson, Mark S.	601
		Anderson, Matthew L.	209
		Anderson, R. Rox	p. 19
		Anderson, Young C.	840
		Andl, Thomas	128, 451
		Ando, Hideya	711, 718
		André-Frei, Valérie	016, 335, 695
		Andreassi, L.	187
		Andreassi, M.	187
		Andrew, Marshall	184 (E, F, SH - Healionics)
		Andrews, Israel	504
		Andrulonis, Ryan	226
		Aneja, Sanjay	219

Aneja, Savina	219, 604	Baer, Amanda	490
Anfosso, Andrea	151	Baibergenova, Akerke T.	205
Angelova-Fischer, Irena	345	Baida, Gleb	160
Angulo, Evelyn	111	Bair, Warner B.	780
Anhalt, G. J.	062	Baird, Kristin	017
Anselmi, C.	187	Bajor, John	307, 500
Anthonavage, Mike	359 (E - Johnson & Johnson)	Baker, Carl	p. 38
Antigua, Jules	490	Baker, Sarah	765
Anzick, Sarah L.	126	Bakke, Antony	517
Aoki, Valeria	080	Balaiya, Velmurugan	463
Aoyama, Yumi	058, 622	Balaskas, Elias	499
Apter, A.	248	Banari, Liliana	546
Arányi, Tamás	701	Banchereau, Jacques	024 (E - Roche)
Aractingi, Selim	752, 789, 814	Bandyopadhyay, B.	145
Araki, Ryoichi	181	Bang, Seung Hyun	330
Araya, Menna	291	Bankaitis, Eric	035
Arbiser, Jack L.	091	Bankaitis-Davis, Danute	743
Arcioni, Marianne	294	Bao, Lei	014, 021
Arguelles-Grande, C.	250	Baran, Wojciech	052
Arias, Mauricio	605	Barberini, L.	187
Ariefdjohan, Merlin	463	Bargo, Paulo R.	078, 346
Aries, Marie-Françoise	054, 588	Bargo, Paulo	454, 712 (E, G - Johnson & Johnson)
Ariizumi, Kiyoshi	564, 724	Baron, Anna	259
Armento, Alexander J.	841	Baron, E. D.	685
Armstrong, April W.	212, 220 (H, SB - Abbott; H, SB - Centocor)	Baron, Elma D.	667, 670, 683 (P - Fluence Therapeutics)
Armstrong, Cheryl A.	639	Baron, Jens M.	278, 578, 681
Armstrong, Randy	129, 540	Barrett, Amy	394
Arnold, Françoise	190	Barron, Patricia	100
Aronova, Maria	266	Barthel, Steven R.	576
Aros, Cody	813	Bartlett, Brenda	482
Arthur, J. Simon C.	123	Bartlett, Mark	341 (E - Nu Skin Enterprises)
Arumugam, Aadithya	164	Basta, Milan	033
Asano, Yoshihide	012	Bataille, Veronique	394
Aschauer, Heinrich	458 (E, I - Novartis)	Baudouin, Caroline	274, 276, 280, 481, 788
Asdigian, Nancy	240, 259	Bauer, Claudia	144
Asgari, Maryam M.	258, 554	Bauer, Peter	144
Aspiroz, Carmen	703	Bause, Alexandra S.	313 (C, G - Estee Lauder)
Asselineau, Daniel	781	Bautista, Edgar	065 (E, SH, O - Amgen)
Aszterbaum, Michelle	549	Bauza, Eric	294
Athar, Mohammad	133, 141, 149, 152, 156, 164, 538	Bayer, Mirko	682
Attigada, Venkatram	074	Beaugerie, Laurent	239
Atwood, Scott X.	088	Bebo, B. F.	207, p. 38
Au, Shiu-chung	061, 504	Bechettoille, Nicolas	016, 695
Aubert, Pamela	045 (E, G, O - NIH/Pfizer)	Beck, Lisa A.	271, 637 (G, I - Centocor)
Audish, David	537	Beck, Zachary	602
Aurora, Amrita	111	Becker, Jürgen	547
Averbeck, Marco	037	Becker, Verena	345
Avery, Stuart	175	Beheshti, Kayvan	102, 142
Awni, Walid	553 (E - Abbott)	Behrendt, Mary	271
Ayar, Angelo E.	143, 715	Beier, David	310
Ayehunie, Seyoum	162, 649, 771, 841 (E - Mattek)	Bektas, Meryem	117
Azfar, Rahat S.	206	Belaubre, Françoise	314
Azukizawa, Hiroaki	029	Belkin, Daniel A.	118, 119
		Bell, Robert H.	105
		Ben Hamo, Moshe	625 (E, SH - HealOr Ltd.)
		Benarafa, Charaf	630
		Ben-Dor, Eyal	689
		Beneketh, Antisar	148
		Benjamin, Latanya	215
		Benhabib, Elhabib	663
		Benoit, Bernice	520
		Berardesca, Enzo	274
		Bereiter-Hahn, Jürgen	282
		Bergamaschi, Daniele	332
		Berger, Carole L.	562
		Bergeron, Laurine	287, 488
		Berghi, Arlette	292, 297, 488

B

Babineau, D.	523
Babineau, Denise	548
Bach, Daniel	111
Bach, David	798
Bachrach, Laura K.	393
Baciu, Paul	143
Back, Jungho	133, 170
Badiavas, Evangelos V.	166, 843, 844
Bae, Byung G.	577 (E - NeoPharm Co.)
Bae, Jong Hwan	051



Bergman, Reuven	368	Bollag, Wendy B.	363
Bergstresser, Paul	126	Bonduelle, Olivia	606
Berkowitz, Paula	192	Bonnans, Magali	285
Berliner, Judith A.	031	Bonner, Michael Y.	091
Berman, Judith	584	Bonnet, Sébastien	695
Bermudez, Dustin M.	817	Borchert, Stefan	840
Bermudez, Yira	530	Bordeaux, Jeremy S.	219, 249
Bernard, Bruno	831	Borkar, N.	523
Bernard, Jamie J.	614	Borkar, Neil	548
Bernd, August	282	Borkowski, Andrew W.	295
Berneburg, Mark	144, 700, 766	Boscardin, W. J.	256
Bernerdt, Françoise	696	Bosenberg, Marcus	472, 610, 753
Berrios, Ricardo L.	091	Bosko, Carol	307, 500, 790 (E - Unilever)
Berry, Trista	492	Botchkarev, Vladimir	334, 456
Bertin, Ana Junqueira	535	Botchkareva, Natalia V.	131
Bertin Sugitani, Nestor	467	Botti, Elisabetta	115
Berwick, Marianne	776	Botto, Jean Marie	185, 286, 287, 288, 296, 297, 488, 793
Besse, J.	054	Bouvier, Anne-Marie	239
Bettany, Sonya	413	Bowcock, Anne	422, 475
Bhagat, Nina A.	142	Bowden, George T.	530
Bhagavathula, Narasimharao	025	Bowden, Paul E.	148
Bhandari, Ambica	161, 362	Bowersox, C.	775
Bhatia, Neehar	146, 176	Bowszyc-Dmochowska, Monika	009
Bhatia, Shailender	547	Box, Neil F.	240, 259
Bhatnagar, Divya	476	Boyce, Steven T.	470
Bhatt, Pinaki	318	Boyle, Jennifer	378
Biancheri, P.	400	Brahmbhatt, Krupa	348
Bichakjian, Christopher K.	143	Braiman-Wiksman, Liora	625 (E, SH - HealOr Ltd.)
Bichsel, Kyle J.	442	Brand, Rhonda	699
Bickers, David R.	114, 133, 170, 278, 549, 681	Brandner, Johanna M.	300
Bieber, Thomas	588	Brans, Richard	681
Biedermann, Tilo	135, 590, 642	Brash, Alan	310
Biesinger, Jacob	362	Braumüller, Heidi	132, 135
Biggs, Leah C.	392	Brédif, Stéphanie	276, 788
Bigler, Jeannette	065, 068 (E, SH - Amgen)	Bregegere, Francois M.	689
Bikle, Daniel D.	180, 379, 446, 631	Breiteneder, Heimo	734
Bill, Matthew	120	Brenden, Heidi	191, 682
Billich, Andreas	480	Brenner, Ellen	132
Billick, Erika	095, 155, 301, 832	Bressier, Gregory	285
Billick, Robin C.	628	Brewer, Carmen	126
Bilousova, Ganna	420	Briganti, S.	756
Binamer, Yousef	001	Broeckel, Ulrich	427, 428
Bingham, Michael	084	Broesby-Olsen, Sigurd	175
Biró, Tamas	431	Brown, Katherine	765
Birchall, James	414	Brown, Sara J.	375
Bizet, Albane A.	001	Browning, John C.	653
Black, Brian	725	Brozyna, Anna A.	755
Bland, P.	401	Bruce, Allen T.	617, 633
Blandino, Giovanni	115	Bruckner, Anna L.	393
Blanpain, Cedric	p. 61	Bruening, Jens C.	339
Blas, Venus	291	Brulas, Marie	294
Blasi, P.	187	Brum, Gabriella	746
Blatt, Hanz	188	Brummelkamp, Thijn	656
Blaauvelt, Andrew	253, 517, 619	Brunner, Patrick M.	063
Blaydon, D. C.	400, 401	Bucholtz, Michelle	597 (E - StrataTech Corporation)
Blecher, Karin	003	Buck, Jochen	081, 748
Bliskovski, Val	002	Buddenkotte, Jörg	260
Blobel, Carl P.	340	Budunova, Irina	160
Block, Julie	p. 38	Bühligen, Johannes	037
Blomquist, Paul	749	Bufler, Philip	608
Blumenberg, Miroslav	123	Bui, Duc T.	476
Bobr, Aleh	583, 594	Buitrago, William	794
Bode, Ann M.	530	Bukala, Daniel	135
Bodemer, Christine	374	Burger, Bettina	365, 404
Boes, Marianne	581	Burkly, Linda	003 (E - Biogen Indec)
Boher, Aurélie	695	Burmeister, Brian T.	046
Bold, Guido	480	Burns, Carole	123

Burns, Erin M.	692	Cha, Shih-Ting	109, 381
Burns, Erin	120	Chabert, Rachel	671
Burrows, Michelle	820	Chadoutaud, Bernard	276
Burrows, Nigel	175	Chadwick, Robert	362
Busam, K.	760	Chambers, Cindy J.	212
Buster, Kesha	235	Chamcheu, Jean Christopher	139
Butman, John	126	Chan, Aegean	801
Byamba, Dashlkhumbe	574	Chan, Chih-Chieh	439, 452
Byekova, Yevgeniya A.	156	Chan, Derek V.	604
Byun, Hee Jin	659	Chan, I Ja	158
C			
Cabello, Christopher M.	780	Chan, Joseph	716
Cabezas, J.	426	Chan, Jung-Yi	452
Cabral, R. M.	400, 401	Chan, Lawrence S.	014, 021
Cabral, Rita M.	176	Chan, Yiong Huak	234
Cai, Lining	097	Chanana, Anita	549
Cai, Suiqing	369	Chang, Aileen Y.	477, 514
Cai, Xiangna	608	Chang, Anne Lynn S.	222, 508 (G, I - Medicis; G - Nu Skin)
Callahan, Shields	215	Chang, Caroline A.	749
Callis Duffin, K.	207, p. 38	Chang, Howard Y.	373
Calzavara-Pinton, Piergiacomo	495	Chang, Howard	129, 396, 813
Camargo, Carlos A.	257	Chang, Kris	549
Camera, E.	331	Chang, Mee Soo	127
Camilleri, M. J.	062	Chang, Pi-Ling	074
Campbell, Angela	549	Chang, Regis	746, 747
Campbell, James J.	581, 602	Chang, Sherman	772 (E, SH - DermTech International)
Campbell, Linda E.	375	Chang, Shurong	494
Cantrell, Wendy	538	Chang, Stella	389
Cao, Lauren	548	Chang, Sungeun	330, 518
Cao, Yuan	424	Chang, Tiffany C.	508
Cao Wikramanayake, Tongyu	430	Chang, Yuan	165
Capone, Kimberly	655 (E - Johnson & Johnson)	Chapman, M.	496
Capone, Lori	531 (E, SH - Celgene)	Charruyer, Alexandra	824
Carbal, Steve	013	Chaudhary, Sandeep C.	152
Carbonnel, F.	239	Chaussabel, Damien	024
Cardenas Perez, Monica L.	402	Chavakis, Triantafyllos	002
Cardinale, Irma	475	Chen, A.	709, 710 (E - Tocotrienol Manufacturer)
Carette, Jan	656	Chen, Chih C.	797
Carlin, Aaron F.	800	Chen, Cynthia	019, 027
Carlson, D.	523	Chen, David L.	383, 798
Carlson, Diana	548, 702	Chen, GuoKai	811
Carlson, Sean W.	083	Chen, Haoyan	422
Carr, Nicholas	105	Chen, Hong-Duo	076, 344
Carrat, Fabrice	239	Chen, J.	138, 735
Carson, Craig	776	Chen, Jiang	413, 420, 444, 794
Cartee, Todd V.	569	Chen, Jiangli	195
Carter, Jared A.	522 (E - Adarza BioSystems)	Chen, Jianjun	077
Carucci, John A.	095, 118, 119	Chen, Jie	118
Carver, R. S.	349	Chen, Ko Ming	642
Casas, Matias	509	Chen, Lieping	732
Casellas, Rafael	556	Chen, Li-Hao	107
Casta, Alex	409	Chen, M.	039, 145, 194, 387, 828
Castex-Rizzi, Nathalie	054, 314, 588	Chen, Mei	196, 535
Cataisson, Christophe	002, 098, 123	Chen, Nannan	712 (E, G, I - Johnson & Johnson)
Cathcart, Martha	075	Chen, Siming	370
Cavender, Druie	658 (E - Johnson & Johnson)	Chen, Suephy C.	252
Cawthorne, Michael A.	201	Chen, T. Minsue	706
Cedeno-Laurent, Filiberto	576	Chen, Theresa	712 (E, G - Johnson & Johnson)
Cedzik, Dorota	531 (E, SH - Celgene)	Chen, Ying	173, 364
Cela, Carolina	322	Chen, Yong	373
Celli, Anna	298, 319, 379	Chen, Yu-Wen	497
Cenizo, Valérie	335, 695	Cheng, C.	828
Cerio, R.	116	Cheng, Yabin	745
Cevikbas, Ferda	260	Chernyavsky, Alexander I.	064, 782
		Chevaux, Jean-Baptiste	239
		Chew, Yap C.	360
		Chi, Woo	462
		Chikh, Anissa	332

Chimenti, Sergio	115	Coats, Israel	045, 095, 119
Chin, Lynda	472	Coats, Stephanie	175
Chin, Shu Shien	316	Cockerell, Clay	653
Chiricozzi, Andrea	475	Cogan, J.	039, 194, 387
Chiu, Hsien-Ching	381, 109	Coghill, Robert	546
Chiu, Y.	427	Cohn, Heather Irina I.	371
Chlebowski, Rowan T.	209	Coles, Danielle R.	291
Chmill, Stefanie	275	Collins, K. M.	761
Cho, Jae	796	Colmont, Chantal	148
Cho, John S.	618, 624	Colombel, Jf	239
Cho, Kwang Hyun	127, 659	Colonna, Anne	831
Cho, Soyun	127, 230, 311	Combadiere, Behazine	605, 606
Choate, Keith A.	382, 426, p. 63	Comer, Allen	597 (E, P, I - Stratatech)
Choi, Byung-Kook	015	Compe, Emmanuel	378
Choi, Dae-Kyoung	096, 575	Cong, Zhao yuan	646
Choi, Eung Ho	010, 028, 302, 799	Conkling, Nicole	476
Choi, Gue In	267	Conlan, Sean P.	638
Choi, Hye In	267	Conrad, Curdin	596
Choi, Hye Young	830	Conrads, Thomas P.	611
Choi, Hye-Ryung	728, 795	Consolo, Mary C.	079, 172, 460, 835
Choi, Irene F.	416	Contag, Christopher H.	389, 414, 424
Choi, Jee Ho	330	Conway, Kathleen	776
Choi, Kang-Yell	485	Cook, Kathleen	261
Choi, Ki Ju	353	Cooper, Kevin D.	044, 072, 075, 523, 548, 604, 667, 683, 685, 702, p. 30 (C - Estee Lauder; P - Fluence Therapeutics)
Choi, Murim	382	Coppola, Carol	549
Chong, Benjamin F.	494	Coppola, Vincenzo	785
Chong, Katy	023	Coquet-Morel, Corrine	292
Choon, Siew Eng	215	Cordes-Zimmerman, Ryan	373
Chou, I.	775 (P - skin cancer detection system)	Cordell, Heather J.	375
Chou, Wei Chin	472	Cordoro, Kelly M.	215 (C, H - Topaz Pharmaceuticals)
Choudhary, Sonal	101	Cornelissen, Christian	681
Chow, C. W.	371	Cosan, Therese	537
Chow, Conroy	483	Costanzo, Anne E.	312
Chow, Jennifer	396	Costanzo, Antonio	115
Chow, Pierce	810	Cotliar, Jonathan	825
Chren, M.	256	Cotsarelis, George	820
Chren, Mary-Margaret	258	Coutanceau, Christine	588
Christensen, Kevin N.	507	Covert, Jill	803
Christiano, Angela M.	042, 059, 060, 250, 322, 405, 409, 411, 418, 419, 455, 533, 598, 804, 807, 833, p. 38 (G - NIAMS)	Cowan, Bryce	105, 107
Christman, Andrea L.	204	Cowen, Edward W.	017, 045
Chu, Anthony C.	090	Cowing-Zitron, Christopher A.	448, 614 (P)
Chu, Chia-Yu	109, 381	Crane, Lori A.	240
Chu, Chung-Ching	612	Crisler, William J.	073, 543, 632, 644
Chu, Haitao	776	Crispin, Milène K.	832
Chu, Melissa	346, 839 (E - Johnson & Johnson)	Croizat, Pierre	802 (E - Paul Hartmann AG)
Chubb, H.	218	Crumrine, Debra	298, 300, 309, 310, 315, 321, 350, 382
Chung, Andrew	650	Cruz, Daniel	626
Chung, Jin Ho	659, 680	Cruz, Ponciano D.	564, 724
Chung, Jin-Sung	564, 724	Csiszar, Katalin	435
Chuong, Cheng M.	797	Cua, E.	194
Chuong, Cheng-Ming	474	Cucumel, Karine	292, 297, 437, 488
Cirotto, C.	187	Cueto, Inna	065
Clark, Adele R.	501	Cui, Ruta O.	721
Clark, R.	838	Cula, Gabriela O.	078 (E - Johnson & Johnson Consumer Co.)
Clark, Rachael A.	073, 534, 543, 592, 593, 603, 632, 644, 649	Culton, Donna A.	080
Clark, Richard A.	809, 818, 837 (P - P12; F, O - NeoMatrix Formulations)	Cummins, P.	685 (E - Estee Lauder)
Claro, Abel	819 (G, I - Waterjet Technologies)	Curhan, Gary	243
Clausen, Björn	565, 570	Curiel-Lewandrowski, Clara	530, 767, 773, 775 (P - skin cancer detection system; H, SB - Eisai)
Cleary, Michele	547	Curtis, Brenda J.	293, 651
Clegg, Daniel O.	232	Czaja, Katharina	278, 578, 681
Cline, R.	699		
Clynes, R.	250		
Clynes, Raphael	059, 060, 533, 598		

D

Da Silva, Sonia	687	Dimitroff, Charles J.	576
Dabaja, Bouthaina	540	Dinarello, Charles A.	608, 779
Dagum, Alexander B.	476	Ding, Wahnong	030, 567, 568
Dai, Daisy	444	Ding, Yingguo	369
Dai, Xing	323	Dispenza, Melanie C.	646
Dai, Xiuju	181	Dizon, Diana	161, 362
Dainichi, Teruki	047, 059, 380	Dlugosz, Andrzej A.	169, 715 (C, H - Novartis)
Dal Farra, Claude	185, 285, 286, 287, 288, 292, 296, 297, 437, 438, 488, 671, 793	Dmochowski, Marian	009
D'Alessandro, Mariella	175	Do, T.	489
Dallaglio, Katiuscia	270, 306	Döbel, Thomas	052, 055
Damsky, William E.	610, 753	Dodou, Evdokia	725
Dannenberg, Andrew J.	568	Dolan, Joseph G.	045
Dao, Harry	529 (G, I - GOJO Industries)	Domloge, Nouha	185, 285, 286, 287, 288, 292, 294, 296, 297, 437, 438, 488, 671, 793
D'Arcangelis, Alexandra	318	Donahue, Adele	415, 826, 830
Dargitz, Carl	084	Donahue, Cara	388
Darlenski, Razvigor	274	Dong, Liang	721
Darling, Thomas N.	786, 805	Dong, Tiffany K.	153
Daulat, Seema	526	Dong, Zigang	530
Davari, Parastoo	121	Doreian, Bryan W.	072, 075
Davis, Laurie S.	494	Dorosario, Andrew	534, 593
Davis, Stephen C.	819, 843, 844 (G, I - Waterjel Technologies)	Douki, Thierry	679
Dawes, S.	025	Dowd, Scot E.	636 (E, F, - Research Testing Laboratory; E, F - Pathogenius)
Dawson, Annelise L.	254	Dowdy, John C.	698
de Belilovsky, Clarence	274, 276, 481	Dowlatabadi, Mitra	073, 543, 632, 644
De Benedetto, Anna	271, 637 (G, I - Centocor R & D)	Draelos, Zoe D.	284 (I, O - Dermatology Consulting Services)
de Boussac, Hugues	701	Drake, Lynn	p. 19
de Guzman Strong, Cristina	351	Dreher, Frank	103 (E - Neocutis)
De Paula, L.	775 (P - skin cancer detection system)	Droho, Steven	293, 834
de Strooper, Bart	340	Drolet, Beth	407, 427, 428, 496
de Verneuil, Hubert	303	Du, L.	387
Degen, Martin	100	Duan, Shenghui	475
DeGregori, James	509	Dubin, K.	640
Dekker, Job	373	Dubina, Meghan	528
Dellavalle, Robert P.	233, 240, 254, 255, 259, 749, 778	Dubrac, Sandrine	586
Deloukas, Panos	394	Duffin, Kristina C.	227, 228, 232 (C - Amgen; C - Abbott Laboratories; C - Centocor)
DeLuca, Jane	162 (E - Mattek Corporation)	Duffy, Darragh	605, 606
DeMara, M.	108	Duffy, K.	427
Demetriou, Stephanie K.	153	Duffy, Kelly J.	407
Deming, Clay	638	Dumont, Nicole	061, 504
Deng, April	106	Duncan, N.	108, 827
Deng, Yu	416	Dunnick, Cory A.	255
Dengler, Samuel	785	Dunnwald, Martine	392
Denning, Mitchell F.	668	Duong, Jennifer	783
Dentchev, Tzvete	140, 457	Dupas, JL	239
Deodhar, Atul A.	253, 517	Dupuy, Patrick	033, 499
Deraison, C.	410	Durbin, Richard	394
Desai, B. V.	138	Durkin, Helen G.	214
Detmar, Michael	110, 181, 186	Duvic, Madeleine	042, 250, 479, 484, 503, 526, 540, 542 (G, I - Allos Therapeutics Inc.; G - Therakos Inc.)
Devere, Theresa	253	Dwyer, David W.	136
Devi, Sulochana	770		
Dewell, Scott	022		
Dharamsi, Alif	002		
Di, W.	400		
Di Meglio, Paola	006, 394, 612		
Di Nardo, Anna	616		
Diaz, David	662		
Diaz, Luis A.	035, 080, 193		
Diaz-Ley, Blanca	677		
Dickerson, Tiffany J.	121		
Dicks, Jo	299		
DiGiovanna, John J.	126, 377, 378, 740		
DiGiovanni, John	013		
Dillner, Joakim	591		

E

Eberle, Jürgen	103
Ebihara, Tamotsu	277
Echtermeyer, Frank	037
Eckert, Richard L.	357, 358, 360, 361, 425
Eckhart, Leopold	355, 468, 630
Eckstein, Axel	802 (E - Paul Hartmann AG)
Edelson, Richard L.	562
Edhegård, Kim	056
Edir, Anissa	398
Edmiston, Sharon N.	776

Edwards, Carl K.	743	Fan, J.	145, 828
Edwards, John	785	Fanciulli, Maurizio	115
Edwards, Robert	308	Fang, Lei	727
Ee, Yaping	004	Fantauzzo, Katherine A.	411, 455
Efimova, Tatiana	123	Fantauzzo, Katie	322
Egawa, Gyohei	049	Farah, Rina	354, 467
Egly, Jean-Marc	378	Fares, Hani	285
Ehrlich, Garth	636 (C - Abbott Molecular)	Farhi, A.	426
Ehst, Ben L.	253	Farhi, Anita	382
Ehst, Benjamin D.	517	Farjo, Bessam K.	469
Eide, Melody	247	Farjo, Nilofer P.	469
Einspahr, Janine G.	530, 767, 773	Farooq, Muhammad	440
Eisinger, Magdalena	441 (E - Johnons & Johnson)	Farshchian, Mehdi	150
Ekmekekcioglu, Suhendan	092	Fatima, Sayeeda	552
Elalieh, Hashem	446	Faust, Helena	591
Elbe-Bürger, Adelheid	571, 580	Feig, R.	523
Elder, James T.	013, 019, 025, 027, 034, 157, 376, 390	Feig, Rivka	548
Elenitsas, Rosalie	210	Feigenbaum, Lionel	002
Elentner, Andreas	586	Feingold, Ken	298
Elgart, George	436	Feingold, Kenneth	319, 320
Elgart, Matthew	166	Feldman, David	208
Elias, Peter M.	191, 289, 290, 298, 300, 309, 310, 311, 315, 319, 320, 321, 350, 382, 801, p. 31 (A, B, H - ISDIN)	Feldman, Steven R.	251, 501
Eliason, M. J.	429	Felsen, Diane	118
Eliason, Steven L.	046	Felsner, Ingo	682
Eller, M.	760	Feneran, Ashley N.	527
Elliott, Jane	116	Feng, B.	429
Ellis, Charles N.	483 (F, O - LS-PGA; C, H - Novartis)	Feng, Bingjian	227
Ellis, Steffani	842	Feng, Hao	531
Elloso, Merle	271 (E - Centocor)	Feng, Huichen	165
Elmariah, Sarina B.	038, 040	Feng, Li	657
Elmets, Craig A.	074, 141, 152, 156, 235, 391, 538, 769	Feng, Xuyan	057 (E, SH - Argyle Therapeutics; E, SH - Signum Biosciences)
Elyaman, W.	595	Fenig, Shlomit	365
Emley, Andrew	106	Ferdinando, Dudley	299
Engberg, Anna K.	562	Ferenczi, Katalin	667
Englandier, Laura	567	Ferguson, Scott B.	341 (E, I - Nu Skin Enterprises)
Engles, Eric A.	554	Ferguson-Smith, Malcolm A.	175
Enk, Alexander H.	502, 587, 634	Fernández-Lizarbe, Eva	677
Enshell-Seijffers, David	462	Fernandes, Kerri	042
Eppel, Wolfgang	571	Fernandez, Jose R.	057, 567 (E, SH - Signum Biosciences; E, SH - Argyle Therapeutics)
Epperly, M.	699	Ferris, Laura K.	226
Epstein, Ervin H.	125, 549 (C, G - Genentech; C, H - Novartis)	Fessing, Michael Y.	334, 456, 762
Epstein, Jonathan	449	Fett, Nicole	545
Epstein, David	829	Fiala, Christian	571
Erdos, Geza	388	Filler, Renata	097, 147, 641
Erenburg, Irina	p. 19	Fink, Ulrich	802 (E - Paul Hartmann AG)
Erickson, Quenby L.	237, 706	Fischer, Heinz	468, 630
Ericson, Marna	465	Fischer, Sonja	132
Ermilov, Alexandre N.	169	Fischer, Tobias W.	345, 686
Escandon, Julia	430, 445	Fish, B. L.	827
Esselin, Nicolas	285	Fiskelevich, Rita	652
Esser, Charlotte	275, 679	Fisher, David C.	534, 593
Estes, Jacob	045	Fisher, G. J.	218, 489
Ezra, Navid	626	Fisher, Gary J.	026, 197, 198, 403, 521, 664, 691, 693
F		Fitzpatrick, James E.	195
Fabri, Mario	635	Flavell, Richard A.	583
Fagot, Dominique	831	Fleckman, Philip	184, 300
Fahrngruber, Hermann	179, 480	Flockhart, Ross	396, 813
Fahy, Caoimhe M.	366	Flores, Gustavo	080
Fairley, Janet A.	043	Flores, Manuel A.	389
Fallon, Padraig G.	366	Flori, E.	756
Falo, Louis D.	165, 168, 388, 551, 611	Fluhr, Joachim W.	274, 280, 481
Fan, Chengxiang	820	Flynn, Ryan A.	373
		Foering, Kristen P.	242, 477, 514
		Fogelman, Alan M.	031
		Foglar, Elisabeth	458

Foley, John	432 (C, H - Avagen)
Fong, Kei-Lai	531
Fong, Stephen	824
Fonseca, Maria J.	664
Fontaine, Thomas	016
Ford, Dwayne	843, 844
Forman, John P.	220
Forney, E.	442
Foroughi, Negar	490
Förster, Irmgard	629
Forstreuter, Inka	816
Foy, Vickie	500
Fraitag, Sylvie	374
Franco, Daniel	356
Frank, Markus H.	576, 733, 759 (C - Morphosys AG)
Frank, Michael	343
Frank, Natasha Y.	733, 759
Franke, Susanne	696
Frankel, Hillary C.	216, 257
Franz, Sandra	816
Franzen, C. A.	138
Frauenstein, Katrin	679
Frazier, Lindsay	257
Frearson, Julie	397
Frechet, Mathilde	666
Fricker, Chris	529 (G - GOJO Industries)
Friedel, Jean	175
Frieden, I.	496
Frieden, Ilona	428
Friedman, Adam	003
Fritzsche, Ellen	305, 308, 679
Frost, Gregory I.	183 (E - Halozyme Therapeutics Inc.)
Frusic-Zlotkin, Marina	082, 689
Frydman, Alexandra S.	043
Fthenakis, C.	685 (E - Estee Lauder)
Fu, P.	685
Fu, Peter	097
Fu, Teresa	208, 393
Fu, Wen	027
Fuchs, Elaine	261
Fuchs, Kerstin	135
Fuchs-Telem, Dana	365, 367, 368
Fuentes-Duculan, Judilyn	067
Fuet, Aurelie	287, 296
Fuhlbrigge, Robert C.	581, 595, 640
Fujii, Kazuyasu	058
Fujino, Fukue	497
Fujisawa, Yasuhiro	005
Fujita, Hideki	301, 486, 832
Fujita, Junichi	743
Fujita, Mayumi	509, 608, 764, 778, 779
Fujita, Yasuyuki	561
Fujiwara, Shigeyoshi	791
Fukuda, Shunpei	047
Fukui, Jami	716
Fülöp, Krisztina	701
Fung, Carmen K.	048
Furio, L.	410
Furstenberg, Gary	050
Furue, Masutaka	260, 328
Furuhashi, Takuya	678
Furukawa, Fukumi	130
Gagna, Claude E.	102, 142
Gaide, Olivier	615
Gaillard, Christelle	695
Galaz, Tamara	789
Galichet, Arnaud	352
Galitovskiy, V.	064
Gallo, Richard L.	295, 506, 537, 563, 613, 614, 621, 623, 631, 787, 800 (G, I - Amgen)
Gamble, Ryan G.	240, 254
Gambotto, A.	388
Gamelli, Richard L.	834
Gandham, Vineela	829
Ganesan, Anand	723
Ganguly, Taneeta	079, 172, 460, 835
Gao, X.	699
Gao, Xing-Hua	076, 344
Garcia, Andrea	800
Garcia, Imane	294
Garcia, Noelle	285, 671
Garcia-Zuazaga, Jose	670
Gardinier, Sophie	355
Gardini-Fournié, E.	410
Garfield, Susan	177
Garlapati, A.	039
Garrett-Sinha, Lee Ann	316
Gartner, Ulrike	397
Gartsbein, Marina	625 (E, SH - HealOr Ltd.)
Garza, Luis A.	204
Gaspari, Anthony	652 (G - Graceway Pharmaceuticals)
Gasser, Philippe	190
Gatla, Nandita	111, 798
Gatti, R.	387
Gdula, Michal R.	334, 762
Gee, S.	836
Gee, Sarah N.	225
Geen, Susan C.	004
Gehad, Ahmed	073, 543, 632, 644
Geiger, Hartmut	700
Gelfand, J. M.	207, 433, pp. 38, 63 (C, G, I - Amgen; C, G, I - Abbott Laboratories; C - Celgene; C, G, I - Novartis; C, G, I - Pfizer)
Gelfand, Joel M.	206, 210, 211, 253, 490 (C, G, I - Amgen; C, G, I - Abbott Laboratories; C - Celgene; C, G, I - Novartis; C, G, I - Pfizer)
Geng, Shuo	563
Gerami-Nejad, Maryam	584
Gerber, Monika	613
Gerdes, Anne-Marie	175
Geskin, Larisa J.	165, 168, 551, 611
Getsios, Spiro	188, 372, p. 64
Geyfman, Mikhail	473
Ghadially, Ruby	824
Ghannoum, Mahmoud A.	636, 683, 792
Gharavi, Nima M.	031
Ghosh, Sankar	059, 599
Ghovanloo, Maysam	482
Gibbs, David	428
Gibson, Heather	609
Giddelo, Christina	280
Gil, Joel	819 (G, I - Waterjel Technologies)
Gilaberte, Yolanda	245, 703, 704
Giljohann, David	383, 798 (E - Aurasense)
Gillespie, Kathleen	599
Gilliland, Kathryn L.	646

Gim, Shin J.	643	Granville, David	023
Gindi, V.	064	Gratz, Iris	041
Girardi, Michael	097, 147, 641	Green, K. J.	138, 182
Girolomoni, Giampiero	215 (C, H - Merck-Serono; C, H - Pfizer; C, H - Merck; C, H - Centocor; C, H - Abbott; C, H - Janssen-Cilag; C, H - Novartis; C, H - Celgene; C, H - Astellas)	Green, Kathleen J.	199, 200, 338, p. 64
Girouard, Sasha	768	Green, Mark	655 (E - Johnson & Johnson)
Giudice, George J.	046	Green, P. H.	250
Giuliani, G.	331, 756	Greenberger, J.	699
Glaser, Astrid	763	Gregory, Mark	509
Glass, Daniel	394	Greisenegger, Elli K.	337
Glazer, P.	408	Grether-Beck, Susanne	191, 679, 682, 696, 815 (G - ISDIN; G - Symrise)
Glazer, Peter M.	421	Gribben, Erin	123
Gleiss, Andreas	337	Grice, Elizabeth A.	638, 817
Gligorijevic, Bojana	p. 64	Grichnik, James M.	742, 744 (F, SH - DigitalDerm Inc.; C, I - Spectral Image Inc.; C, H - MELA Sciences Inc.; C, H - Genentech; G, I - SciBase)
Glodny, Bradley	777	Griessinger, Christoph M.	135
Godeberge, P.	239	Griffith-Bauer, Kelly	517
Godsel, Lisa M.	200	Grimm, Elizabeth	092
Goebel, Carsten	308	Grizzle, William E.	538
Goetz, Christine	308, 696 (G, I - COLIPA European Cosmetics Association)	Grkovic, Lana	017
Gogia, N.	442	Groben, Pamela A.	776
Gokhale, Rajesh S.	020	Grossman, Doug	p. 20
Goldbach-Mansky, Raphaela	045	Grossman, Elizabeth	528
Goldfarb, Michael T.	483	Grozdev, Ivan	523, 548
Goldgar, David E.	228	Grubbs, Clinton	074
Goldminz, Ari	061	Gruber, James V.	717
Goldstein, Nathaniel B.	764	Gruber, Robert	300
Goldust, Mohamad	719	Grundberg, Elin	394
Golforoushan, Farideh	719	Grys, Katarzyna	612
Gondran, Catherine	437, 438	Gu, Weikuan	077
Gonzalez, Frank	586	Gu, Zhe-ming	531
Gonzalez, Juana	155	Guay, Johane	525
Gonzalez, Maria L.	516	Gudjonsson, Johann E.	013, 018, 019, 026, 027, 157 (C, H - Novartis)
Gonzalez, Maria	487	Guenschmann, Christian	339
Gonzalez, Salvador	495, 662, 677, 704 (C, H - IFC)	Guerif-Ferreira, Yolene	292, 297, 488
Gonzalez, Victoria	240, 259	Guerrini, Luisa	115
González-González, Emilio	389, 414, 424	Guinot, Christiane	355
Gordon, Jennifer	528, 825	Guitart, Joan	503
Gordon, Joel S.	057, 567 (E, SH - Argyle Therapeutics; E, SH, P - Signum Biosciences)	Gulati, Nicholas	155, 739
Gordon, Katherine A.	101	Günther, Claudia	052
Gordon, Kenneth	493 (G, H - Abbott; G, H - Amgen; G, H - Centocor; H, C - Merck; H, C - Pfizer)	Guo, HongFei	464, 467
Gordon, Kristin	188	Guo, Xiumei	086
Gordon, William	161	Guo, Zhiru	459
Goreshi, Renato	242	Gupta, Kalpana	465
Görg, Kerstin	282	Gupta, R.	039
Gornowicz, Justyna	009	Gupta, Rajinish A.	373
Gorouhi, Farzam	803	Gupta, Somesh	020
Goswami, Meghali	484	Gurley, Cathy	639
Götte, Martin	037	Gutermuth, Jan	036
Gottlieb, Alice B.	504 (G - Amgen; G - Centocor; G - Wyeth; G - Pfizer; A, B, G - Schering; G - Celgene; A, B, G - Bristol Myers Squibb; A, B, G - Beiersdorf, Inc; G - Abbott; A, B, G - Roche Sankyo)	Gutierrez, Miguel-Angel	626
Goudie, David	175	Guttman-Yassky, Emma	475
Goyarts, Earl	738	Guzman, Andrew M.	018, 026
Goydos, James	716	Gwak, Hyung Sub	051 (E - NeoPharm Co., Ltd.)
Grénman, Reidar	150		
Grachtchouk, Marina	169		
Grandinetti, Lisa	226		
Grando, Sergei A.	062, 064, 782		
Grand-Pierre, Alix E.	532, 701, 826		
Granstein, Richard D.	030, 557, 567, 568 (A, B, G, I, SH - Signum Biosciences)		

H

Ha, Linan	154
Haab, Brian B.	050
Haarmann-Stemmann, Thomas	679
Haass, Nikolas K.	151
Hachem, Jean-Pierre	274, 280, 300, 481
Hadam, Sabrina	606
Hadaschik, Eva N.	502
Haegert, Anne	105
Hafner, Christine	734
Hahn, S.	760

Haigis, Marcia C.	313 (C, G - Estee Lauder; SB - GSK)	Hedin, Cristy	649 (E - Mattek)
Hake, Timothy	609	Heerinckx, Frederic A.	505 (E - Anacor Pharmaceuticals)
Hakim, Fran	017	Hefferman, Kevin	061
Halabi, Maya	752	Heinbach, Lisa	193
Haley, Ann C.	765	Heise, Ruth	278, 578
Haley, Ann Cameron	528	Helfrich, Y.	218
Haley, Krystal M.	583, 584, 594	Heljasvaa, Ritva	150
Hall, Russell P.	056, 829 (G, I - Genentech)	Heller, Dennis	531
Hamada, Takahiro	047, 380	Helms, Cynthia	422
Hamada, Tonoji	324	Helms, Jill A.	373
Hamada, Toshihisa	058	Hennies, H. C.	401
Hambrick, George	p. 38	Herndon, Rachel P.	362
Hamill, Kevin J.	199, 822	Herrmann, Jennifer L.	156
Hammerberg, Craig	197	Hertl, Michael	p. 37
Han, A.	145	Hibino, Toshihiko	325, 751
Han, Gangwen	013	Hickerson, Robyn P.	389, 414, 424
Han, J.	707	Hicks, Aiesha	142
Han, Jiali	032, 213, 216, 220, 223, 236, 238, 243, 244, 257, 733	Higashiyama, Shigeki	181
Han, Weinong	086	Higgins, Claire A.	060, 533, 598, 804, 833
Hanada, Ken-ichi	555	Hillary, Tom	280
Hanakawa, Yasushi	181	Hintze, Vera	816
Hanawa, Fumie	560	Hirakawa, Satoshi	181
Handoko, Herlinda	752	Hirose, Misa	053
Hanlon, Douglas J.	562	Hirth, Douglas A.	818
Hannah, Deborah	056	Ho, Elizabeth	071 (E - SkinMedica)
Hans, Gunter	080	Ho, Hsiang	723
Hänsel, Anja	052, 055	Hoang, Mai P.	106
Hansen, C. D.	402, 429	Hobbs, Ryan P.	338
Hansen, Laura A.	442	Hocquaux, Michel	434
Hao, Honglin	776	Hodgson, Samantha S.	450, 752
Hardas, Bhushan	510, 511, 512 (E - Merz Pharmaceuticals)	Hodi, Frank S.	759
Harder, Jürgen	618	Hoeffler, Warren K.	845
Hardkop, Lena H.	686	Hoffman, Robert M.	783
Harel, Sivan	060, 598	Hoffmann, Jochen	502
Harikumar, Parvathy	090	Hoffmann, Matthew	531 (E, SH - Celgene)
Harirchian, Bijan	307, 500	HogenEsch, Harm	406
Harper, J. I.	400	Holbrook, Jaimee	482
Harrison, Cameron	520, 540	Holick, M. F.	735
Harrison, Katheen A.	688	Holleran, Walter	289, 290, 311, 379, 801
Harrison, Wesley	431	Hollier, Brett	752
Hartmann, Martin	502	Hollman, T. J.	761
Haryani, Anand	825	Holtz, Robert	069, 717, 840 (C, O - BioInnovations Lab)
Hashimoto, Daigo	777	Holzenberger, Martin	814
Hashimoto, Koji	181	Holzer, Aton	149
Hashimoto, Takashi	047, 380	Honda, Kord S.	079, 460, 604, 835
Hashizume, Hideo	453	Hong, Chien-Hui	497
Hastings, Karen T.	601	Hong, Jin-Bon	439
Hata, Tissa	613, 787	Honma, M.	410
Hata, Tsuyoshi	269	Hood, Brian	611
Hatzimasoura, Elizabeth	176	Hoover, Paul	199
Hay, Ashley A.	233, 254	Hopkinson, Susan B.	199, 821
Hayashi, Mariko	221	Hoppe, Richard T.	540
Hayday, Adrian	006, 097	Hordinsky, Maria K.	042, 250, 354, 464, 465, 467, 535, 663 (G - NIAMS)
Hayden, Matthew S.	059	Hornyak, Thomas	740
Hayden, Patrick	162, 841 (E - Mattek)	Horsley, Valerie	p. 62
Hayes, Ian	175	Hoshina, Daichi	561
Hays, Danielle	576	Hosing, Chitra	484, 542
Hazelton, Julian	050	Hosler, Greg	653
Hde Tene, Samuel Franck	142	Hou, Y.	194, 387
He, Chun-Di	344	Hovnanian, Alain	374, 398, 535
He, Donggou	141	Howard, Zack	002
He, Tianyuan	198, 403, 664	Howe, William	254
He, Yu-Ying	086, 657	Hruska, Matthew	553 (E - Abbott)
Healy, Eugene	684	Hsieh, Meng-Chen	381
Heath, Candrice	215, 315	Hsu, Chiu-Hsieh	773
Hebronni, Frank	624	Hsu, Dan	650

Hu, Chengcheng	767
Hu, Fen Z.	636 (G, I - Abbott Molecular)
Hu, Frank	243
Hu, Rong-hua	414
Hu, Yaping	712 (E, G - Johnson & Johnson)
Hu, Yeh-Fang	109
Huang, Eugene Y.	506
Huang, Kai-Hsin	439
Huang, S. J.	761
Huang, Yi-Ching	439
Huang, Zhenyu	544
Hübenthal, Ulrike	305, 308
Huebner, Aaron J.	466
Huff, Laura S.	233, 240, 254, 749
Huggenberger, Reto	110, 186
Hughes, Matilda H.	505 (E, O - Anacor Pharmaceuticals)
Hughes, Michael W.	474
Hugot, Jp	239
Huh, Nam-ho	751
Huh, Sun-Young	795
Hui Wang, Ellen	299
Hull, Christopher M.	070, 503
Hundhausen, Christian	006
Hunter, Lindsey	697
Huo, Xueliang	482
Hupe, Melanie	311, 319, 320
Huq, S.	699
Hurst, Craig A.	530
Hwang, Cheng	447 (E - Avon Products)
Hwang, Joonsung	010
Hwang, Sam T.	559, 727
Hwang, Wei-Ting	210

Ito, Mayumi	472
Ito, Taisuke	453
Itoh, Munenari	418, 807
Ivanov, Andrei	271
Iwamoto, Ikuko	189
Iwata, Hiroaki	053
Iwatsuki, Keiji	058, 622
Iyer, Jayasri	547

J

Jabbari, Ali	022
Jackson, Michelle	613
Jackson, Shari	101
Jaeger, Karin	468
Jaén, Pedro	677
Jaenicke, Thomas	191
Jahnsen, Frode	350
Jahoda, Colin A. B.	322, 804, 833
Jakob, Thilo	607
Jaksch, Peter	669 (H, SB - Therakos Inc.)
Jalili, Ahmad	726
Jambusaria, Anokhi	210
James, Kirk	080
Jameson, Julie M.	312
Janda, Jaroslav	167, 171, 203
Jandova, Jana	167, 171, 203
Janelsins, Brian M.	582, 741
Janjetovic, Z.	735
Jay, Steven	154
Jee, Hyunjoong	574
Jee, Shiou-Hwa	109
Jensen, James D.	778
Jenson, A. B.	643
Jeon, Jeong Eun	051 (E - NeoPharm Co. Ltd.)
Jeong, Byeong-Seon	716
Jeong, Hyosun	264
Jeong, Mi-Sook	572, 573
Jeong, Se Kyoo	051, 327, 329 (E - NeoPharm Co Ltd.)
Jetten, A.	595
Jeung, Nam Ji	575
Jiang, Haibing	361
Jiang, Jenny	298
Jiang, Qiujie	532, 701, 826
Jiang, Shangi B.	621
Jiang, Ting-Xin	474
Jiang, X.	595
Jiang, Xiaodong	589, 602, 603
Jiang, Yi	173
Jiang, Ying	632
Jiang, Ziwei	787
Jiao, Yan	077
Jimenez, Joaquin J.	430, 435, 436, 443, 445
Jin, Jane	829
Jin, Q.	640
Jin, Shan	577
Jo, Seong Jin	230
Joh, J.	643
Johnson, Jodi L.	200
Johnson, Randall	629
Johnson, Ryan D.	112
Johnson, Tim M.	715
Johnson, Timothy M.	143
Johnson-Bice, Sean	482
Johnson-Huang, Leanne M.	045, 067
Johnston, Andrew	013, 018, 019, 025, 026, 027

Joks, Rauno	214	Karetsky, Viktor	162 (E - Mattek)
Jones, Brian	271 (E - Centocor R & D)	Karnik, Pratima	079, 172, 460, 835
Jones, David A.	001	Kashem, Sakeen	594
Jones, Jonathan C.	199, 822	Kaspar, Roger L.	389, 414, 424
Jones, Jonathan	821	Kasperkiewicz, Michael	053
Jorissen, Ellen	340	Kast, D.	523
Jou, Paul C.	667, 670, 683	Kast, Douglas	548
Joulin-Giet, Alix	606	Katayama, Ichiro	029, 558
Joy, Reeba	142	Katiyar, Santosh K.	141, 672, 713
Jozwicki, Wojciech	755	Kato, Hiroshi	754
Juarranz, Angeles	704	Katsuoka, Kensei	783
Julié, Séverine	314	Katz, Irving	464
Jun, Jung Eun	329	Katz, Stephen I.	036, 579, p. 38
Jung, Minyoung	028, 302, 799	Kaufmann, Roland	282
Jungbluth, A.	760	Kaul, Martin	553 (E - Abbott)
Junqueira Bertin, Ana	354, 464, 467	Kaur, Simarna	268 (E - Johnson & Johnson)
Just, Ulrike	669 (G - Therakos Inc.)	Kavand, Sima	465
Jux, Bettina	275	Kawabata, Keigo	265
		Kawachi, Yasuhiro	005
		Kawahara, Tisha	811
		Kawamura, Tatsuyoshi	619
		Kawasaki, Hiroshi	269, 277
		Keeling, Elena	084
Kabayashima, Kenji	049, 566	Keene, Douglas R.	535
Kabigting, Filamer	613 (G, I - Amgen)	Keiser, Elizabeth	209
Kaczmarek, Elzbieta	009	Keller, Gilbert A.	183 (E - Halozyme Therapeutics Inc.)
Kado, Julie	552	Kelly, Michael	407
Kadono, Takafumi	012	Kelly-Sell, Michael J.	520
Kadow, Stephanie	275	Kelsell, David P.	176, 400, 401
Kaech, Susan	610	Kempf, Wolfgang	132
Kaesler, Susanne	135, 590, 642	Kempkes, Cordula	260
Kagan, V.	699	Kennedy, Milene	095
Kähäri, Veli-Matti	150	Kennedy Crispin, Milene	301
Kai, Hiromichi	478	Kennedy, Victoria	406
Kajita, Ai	622	Kennedy, William R.	663
Kakeda, Masato	585	Kent, Kyla	393
Kalantari-Dehaghi, Mina	062, 782	Kepczynska, Malgosia A.	201
Kalb, Madeleine	063, 763	Kerensky, Todd	061, 504
Kalies, Kathrin	053	Kerkof, Keith	065, 068 (E, SH, O - Amgen)
Kallajoki, Markku	150	Kern, Dale G.	284, 341, 508 (E, I - Nu Skin Enterprises)
Kalthoff, Frank S.	458	Kern, E.	523
Kaluzhny, Yulia	162, 771 (E - Mattek)	Kezic, Sanja	345
Kamata, Masahiro	008, 478	Khamaysi, Ziad	368
Kamenisch, York	144, 700, 766	Khan, Naghma	283
Kaminaka, Chikako	130	Khan, Sami U.	476
Kamiya, Koji	058	Khan, Sikandar G.	126, 377, 378, 740
Kan, Nathan	291	Khandpur, Ritika	617, 633
Kanada, Kimberly N.	506, 621	Khanna, S.	760
Kanade, Santosh R.	357, 358	Khatcherian, Artemis	065
Kanagawa, Osami	151	Khavari, Paul	129, 396, 813, p. 20
Kanda, Naoko	008	Khidhir, Karzan G.	469
Kane, Ilima	254	Khnykin, Denis	350
Kanetsky, Peter	210	Khondker, Zakaria S.	776
Kang, S.	489	Khosrotehrani, Kiarash	239, 450, 752, 812, 814
Kang, Sewon	026	Khoury, S.	595
Kang, Youn-A	795	Kido, Makiko	260
Kanno, Yuka	556	Kiecker, Felix	739
Kanoh, Hiroyuki	189	Kim, Arianna L.	114, 133, 170, 681
Kao, Tzu-Cheg	786	Kim, Bora	015, 485
Kapadia, Rubina	723	Kim, Chae Hwa	518
Kaplan, Daniel H.	493, 583, 584, 594	Kim, Chang Deok	267, 575, 730, 731, 750
Kaplan, Mariana J.	617, 633	Kim, Chong	411
Kaplan, Nihal	188	Kim, D.	838
Kar, Hemant K.	020	Kim, Dennis	809
Karakawa, Masaru	273	Kim, Dong-Ha	573
Karapetyan, Adrine	291	Kim, Donghye	028
Karashima, Tadashi	047, 380	Kim, Do-Young	574
Kardos, Marisa	222, 524		

Kim, Ellen	503	Kligys, Kristina	821
Kim, Eugene	384	Klopot, Anna	160
Kim, Eun Ju	680	Knaggs, Helen E.	284, 341, 508 (E, C - Nu Skin Enterprises)
Kim, Geurim	222	Kneilling, Manfred	135
Kim, Grace	396	Knobler, Elizabeth	503
Kim, H.	699	Knobler, Robert	669 (C, H - Therakos Inc.)
Kim, Hee Kyung	149	Knoch, Jennifer	700
Kim, Heung Yeol	085	Knowles, David	394
Kim, Hongshin	264	Kobayashi, Miwa	627
Kim, Hwa Mi	731	Kobayashi, Yuki	409
Kim, Hyo-Jin	728	Kobayashi, Yukie	324
Kim, Hyuk	015, 485	Koblinski, J. E.	138
Kim, Hyun Jung	051	Köblös, Gabriella	701
Kim, Hyun Yi	485	Kobzik, Lester	623
Kim, Hyunmi	409	Koch, Peter J.	195, 463
Kim, Insik	264	Kochkodan, James	018
Kim, Jae-Hong	302, 799	Koeberle, Martin	642
Kim, Jeong Eun	330, 518	Koelle, David	547
Kim, Jeonghee	482	Koenig, Karsten	783
Kim, Ji Y.	577	Koetsier, Jennifer L.	200
Kim, Ji Eun	680	Köhł, Jörg	053
Kim, Ji Min	327, 329	Köhler, Theresa	629
Kim, Jihye	509	Kohne, Zippora	682
Kim, Jin Eun	015, 485	Kolasinski, Sharon	242
Kim, Jin Gu	730, 731, 750	Kolllias, Nikiforos	078, 346, 708, 820, 839 (E - Johnson & Johnson)
Kim, Jin Wou	231	Komine, Mayumi	007, 273
Kim, Jin-Hwa	731, 750	Kong, Heidi H.	638
Kim, Ji-Yun	572, 573	Konger, Raymond L.	163, 687, 688, 690
Kim, Jung Eun	575	Konnikov, Nellie	749
Kim, Kwang Ho	085	Kopelovich, Levy	152, 164
Kim, Kyu Han	230, 231, 659	Kopp, Tamara	337
Kim, Mi Yoon	730, 750	Koppel, Aaron C.	123
Kim, Min-Ho	808	Korekawa, Ayumi	417
Kim, Minji	127	Korgavkar, K.	218
Kim, Min-Kyoun	680	Korman, N.	523
Kim, Shin Woo	231	Koster, Maranke I.	195, 463
Kim, Sojeong	680	Koszik, Frieder	063, 763
Kim, Su Hee	267	Kotol, Paul	537, 563, 613
Kim, Sung	796	Koudelka, Caroline W.	246
Kim, T.	735	Kouttab, Nicola	746, 747
Kim, Taegyun	574	Kovacs, D.	331, 756
Kim, Won Serk	518	Kowalsky, Elisabeth	179, 480
Kim, Yeon Kyung	680	Koyama, Sachiko	432
Kim, Yeu Chun	414	Kraemer, Kenneth H.	126, 377, 378, 740
Kim, Youn H.	129, 503, 520, 540	Kraemer, Ursula	229
Kim, Young L.	163	Kraft, Robert	546
Kimball, Alexa B.	222, 225, 493, 503, 524, p. 19 (G, I - Medicis; C, H - Abbott; C, H - Centocor; C, H - Amgen; C, H - VBL; C, H - Novartis; C, H - Lilly; C, H - Idera)	Krahenbuhl, James	650
Kimmel, Stephen	211	Kramer, Gero	580
Kimura, Hiroaki	783	Krämer, Ursula	399
King, Kathryn E.	154	Kretz, Markus	129, 396, 813
Kinjiyo, Ichiko	151	Krishnamoorthy, Parasuram	490
Kippenberger, Stefan	282	Krishnaswami, Suguna R.	461
Kirkiles-Smith, Nancy	414	Kroboth, Karin	375
Kirnbauer, Reinhard	591 (P - HPV16 L1)	Kroshinsky, Daniela	225
Kishi, Tomoo	130	Krueger, G. G.	207 (E, C, H - Centocor; E, C, H, I - Amgen; E, C, H, I - Abbott Laboratories; H - Astellas)
Kissling, Grace E.	123	Krueger, Gerald G.	227, 228, 232
Kita, Ryosuke	010	Krueger, James G.	022, 045, 065, 067, 095, 118, 119, 155, 301, 475, 493, 739, 832 (H, C - Amgen; H, C - Centocor; H, C - Janssen; H, C - Ortho Biotech; H, C - Merck; H, C - Pfizer; H, C - Biogen Idec; H, C - GlaxoSmithKline)
Kitagawa, Hiroshi	585	Kruse, Nathalie	686
Kittipongdaja, W.	827	Krutmann, Jean	191, 229, 275, 305, 399, 629, 679, 682, 815 (A, B, H - ISDIN; A, B, H - Symrise)
Kiuru, Maija	418	Krutzsch, Mary	767
Kivisaari, Atte	150	Krutzik, Stephan	650
Klausner, Mitchell	162, 649, 771, 841 (E - Mattek)		
Kleiman, Edward	214		
Klein, Irene	063		
Kleszczynski, Konrad	686		

Kuan, Pei Fen	776	Larson, Joe	208
Kuang, Y.	828	Larson, Joseph C.	209
Kubick, Bradley J.	159	Laskin, Oscar	531 (E, SH - Celgene)
Kubo, Akiharu	058, 269, 277	Lasserre, Christelle	318
Kuchen-Brandes, Stefan	556	Lati, Elian	190
Kuchroo, V.	595	Latreille, Julie	355
Kudo, Ayako	497	Lattif, Ali A.	079, 172, 460, 683
Kulesz-Martin, Molly	412, 423	Laubach, Vesselina	282
Kumanogoh, Atsushi	558	Laumann, Anne	482
Kumar, Gondi	531 (E, SH - Celgene)	Lavker, Robert M.	188, 372
Kumar, Sandeep	244	Law, Robert	653
Kumar, Shantanu	461	Lawley, Leslie P.	252
Kundu, Anirban	183 (E - Halozyme Therapeutics Inc.)	Lazarova, Z.	108, 827
Kuo, I-Hsin	271, 637	Lazarus, Gerald S.	204
Kuo, Min-Liang	109	Le, Lu Q.	784
Kupper, T.	595, 640	Le Provost, Gabrielle	335
Kupper, Thomas S.	073, 534, 543, 581, 589, 592, 593, 602, 603, 632, 644, 649	Leachman, S. A.	429
Kurban, Mazen	411, 418	Leake, Devin	389 (E- siRNA)
Kurd, S. K.	433	LeBlanc, Erin	208
Kurundkar, Deepali	152	Lebleu, Alexia	287, 296, 488
Kuschal, Christiane	377	LeBoeuf, Matthew	449
Kuvin, Jeffrey	061	Lebrun, Elizabeth	101
Kuze, Tetsuya	265	Lebwohl, B.	250
Kwak, Kihyuck	591	Lebwohl, Mark	777
Kweon, Hee Seok	353	Lechler, Terry	279
Kwesi, Teye	047	Leclerc-Mercier, Stéphanie	374
Kwok, Pui-Yan	422	Lee, Andrew	527
Kwon, Hyouk-Soo	010	Lee, Bong Han	353
Kwon, In Ho	231	Lee, Brian	323
Kwon, Oh Sang	230	Lee, Cari	129, 396, 813
		Lee, Chih-Hung	497
		Lee, Chyi-Chia	045, 740
		Lee, Dae-Yon	051 (E - LegoChemBioScience Co. Ltd.)
		Lee, Delphine	626, 650
		Lee, Gun Hong	575
		Lee, Hae-Jin	028
		Lee, Hane	175
		Lee, Hyang Sook	051 (E - LegoChemBioScience Co. Ltd.)
		Lee, Jason	567
		Lee, James H.	p. 19
		Lee, Jeung Hoon	096, 267, 575, 730, 731, 750
		Lee, Jianming M.	790 (E - Unilever)
		Lee, Jim	652 (E - Graceway Pharmaceuticals)
		Lee, Jong Hee	127, 230
		Lee, Jong-Rok	498
		Lee, Joo Dong	015, 485
		Lee, Ju Hye	730, 750
		Lee, Junghee	264
		Lee, Jungsuk	264
		Lee, Kwang H.	577
		Lee, Kye Jong	485
		Lee, Kyu	796
		Lee, Mi Woo	330
		Lee, Min-Geol	574
		Lee, Min-Jung	659
		Lee, S.	194
		Lee, Sang Eun	051, 327, 329, 353
		Lee, Sangderk	031
		Lee, Serah	659
		Lee, Seung Hun	010, 051, 327, 329, 353
		Lee, Sh	709, 710 (E - Tocotrienol Manufacturer)
		Lee, Soung-Hoon	485
		Lee, Su Min	015, 485
		Lee, Suyel	264
		Lee, W.	489
		Lee, Wei-Li	004
		Lee, Yoojin	683

L

Labarrade, Florian	286, 297, 793	Lee, Sang Eun	051, 327, 329, 353
Lacasse, Isabelle	434	Lee, Sangderk	031
Lachmann, N.	481	Lee, Serah	659
Lacy, Katie E.	006	Lee, Seung Hun	010, 051, 327, 329, 353
Laga, Alvaro	768	Lee, Sh	709, 710 (E - Tocotrienol Manufacturer)
Laggner, Ute	006	Lee, Soung-Hoon	485
LaGory, Edward	668	Lee, Su Min	015, 485
Lagowski, James	412, 413	Lee, Suyel	264
Lai, Yuping	613, 787	Lee, W.	489
Laiho, Lily	084	Lee, Wei-Li	004
Lajoie, Bryan R.	373	Lee, Yoojin	683
Lam, Minh	667, 670, 683		
Lambert, Sylviane	034, 157		
Lambert, W. Clark	102, 142		
Lamore, Sarah D.	705, 780		
Landefeld, C. S.	256		
Landry, Tim	649 (E - Mattek Corporation)		
Lane, Birgitte	175		
Lane, David	p. 31		
Lang, Florian	590		
Lang, Julie E.	530		
Langan, Sinead	211		
Langerveld, Anna	341 (E, I - Genemarkers LLC)		
Langlands, Kenneth	090, 201		
Langley, Richard	493 (H, C - Abbott; H, C - Amgen; H, C - Biogen Idec; H, C - Celgene; H, C - Centocor; H, C - Leo; H, C - Schering; H, C - Merck; H, C - Novartis; H, C - Ortho Biotec)		
Lanier, S.	838		
LaPresto, Lindsay	767, 773		
Lara, Maria Fernanda	389, 414, 424		
Larregina, Adriana T.	582, 741 (A, B - ImmunRegen)		

Lee, Young	096, 267, 575, 730	Liebel, Frank	268, 454 (E - Johnson & Johnson)
Lee, Young Ho	267	Liechty, Kenneth W.	817
Lee, Youngae	659	Lifton, R.	426
Lee, Yun Sun	251	Lifton, Richard	382
Lefkowitz, Gloria K.	448	Lim, Henry	247
Lehen'kyi, V'yacheslav	314	Lim, Scott	169
Leiferman, K. M.	062	Lin, Andrew M.	617, 633
Leigh, I. M.	087, 263	Lin, Congxing	123
Leigh, Irene M.	262	Lin, Connie B.	712 (G, E - Johnson & Johnson)
Leiva, Angel G.	435	Lin, F.	838
Lemann, M.	239	Lin, Fubao	809, 837 (P - P12)
Lentini, Tim	067	Lin, Fuquan	746, 747
Leo, Alicia Marie	318	Lin, J. Y.	761
Leonardi, Craig	493 (H, C, SB - Abbott; H, C, SB - Amgen; H, C, SB - Centocor; H, C - Pfizer; H, C - Eli Lilly; G - Celgene; G, I - Genentech)	Lin, Jennifer Y.	733, 759
Lequoy, Valerie	437	Lin, Lan	035
Lerner, Ethan A.	038, 040	Lin, Meei-Hua	350
Lesiak, Aleksandra	660, 661	Lin, Samantha Y.	188
Lesinski, Gregory B.	120, 692	Lin, Sung-Jan	439, 452, 474
Lessin, Stuart	503 (C - Yaupon Therapeutics)	Lin, Tzu-Kai	300, 319, 320, 321
Leston, Richard	142	Lin, Wei-Ting	452
Leung, Marco L.	136	Lin, William	147 (G, I - Affymetrix)
Levesque, Marc	056 (G, I, H, C - Genentech)	Lin, Yan	551
Levin, Anna	464, 467	Linay, Fabien	814
Levin, Lonny	081, 748	Lindgren, Joselyn	549
Levine, Beth	113	Ling, Marilyn	536
Levine, Danielle	061	Ling, Mt	709
Lewis, Julia	097, 147	Lingala, Bharathi	508, 540
Leyden, Wendy	554	Linos, E.	256
Lhost, Amandine	695	Linos, Eleni	208
Li, Bingshan	157	Linton, Jay	036
Li, Changwei	787	Linzer, Diana E.	551
Li, Dongqing	787	Lio, Peter	528
Li, Gang	745	Lippincott-Schwartz, Jennifer	pp. 59, 64
Li, H.	408	Lipsky, Peter	p. 37
Li, Hui	141	Litchauer, J.	349
Li, Jiadong	716	Littlewood-Evans, Amanda	480
Li, Jie	744	Litvinov, Ivan V.	001
Li, Jun	141	Liu, Aimin	444
Li, Kapsok	572, 573	Liu, Bo	373
Li, Li	444, 794	Liu, Chiachi	784
Li, Max	841	Liu, Fan	098
Li, Ming O.	583	Liu, Fang	783
Li, Mischa	088	Liu, Fu Tong	650
Li, Ning	035, 193	Liu, Hannah	652
Li, Qiaoli	343, 415, 532, 830	Liu, Liang	409
Li, Quan Z.	494	Liu, Luzheng	602
Li, S.	699	Liu, Min	076
Li, Shaowei	786, 805	Liu, Ping	526
Li, Tricia	032, 213, 216, 220, 236, 257	Liu, Qiang	395, 473
Li, W.	145, 735, 828	Liu, Song	316
Li, Wei	077, 673	Liu, Weimin	778, 779
Li, Wen-Hwa	441, 658 (E - Johnson & Johnson)	Liu, Ying	691
Li, Wenqing	243	Liu, Yuangang	412, 423
Li, Xiaoling	086	Liu, Zhao-Jun	744
Li, Yinchuan	721	Liu, Zhi	035, 193
Li, Yong	197, 691	Lo, Blanche K.	107
Lian, Fangru	773	Lo, Roger	pp. 20, 30
Liang, Liming	223	Loing, Estelle	434
Liang, Yanhua	414, 421	Lokshin, Anna E.	551
Liao, Er-Yuan	173	Lokuta, Mary	597 (E, I - Stratatech)
Liao, Wilson	422	Lombardi, Giovanna	612
Liard, Christelle	605, 606	Lombardi, Jack	347, 647
Libove, Eileen	125	Lomberk, Gwen A.	146
Lichti, Ulrike	002, 266	Lomonte, Erika	666
Lichtman, Michael K.	073, 543, 632, 644	Long, Lisa A.	792
		Longley, Jack B.	146, 174
		Longo, Caterina	737

Loo, Daniel	061	Maier, Lisa	026
Lopez, A.	827	Majora, Marc	308, 679, 696
Lorenz, Nadine	607	Majumdar, A.	408
Lorier, R.	427	Makino, Teruhiko	325
Lotti, Roberta	270, 306	Malbasa, Christi L.	683, 685
Lowes, Michelle A.	045, 067	Maldonado, Mike	080
Loyd, Candace M.	025, 027	Malissen, Bernard	584
Lu, Benny	842	Maloney, Lauren	809
Lu, Hongguang	729	Malouff, T.	442
Lu, Jia	810	Mammone, Thomas	347, 647, 648
Lu, Jun	013	Man, Mao-Qiang	311, 319, 320
Lu, Kurt Q.	072, 075	Mancianti, Maria L.	824
Lu, Ning	702	Mandeau, Anne	588
Lu, Ran	620	Manga, P.	722
Lu, Y.	426	Manga, Prashiela	720
Lu, Yin	382	Manni, Michela	030, 557
Luan, Liming	128, 451	Manoj, Kumar	810
Luckey, Ulrike	607	Manson, JoAnn E.	208
Ludovici, M.	331	Mantel, Alon	333
Ludwig, Ralf	053	Mao, Xiaohong	369
Luedtke, Michael A.	820	Mao, Xuming	202
Luke, Courtney T.	405, 409	Marcello, Jennifer	714
Lüllmann-Rauch, Renate	340	Marchenko, S.	062, 064
Lunardon, Luisa	545	Marchenko, Steve	782
Luo, Dan	665, 673, 674, 675, 676	Marconi, Alessandra	270, 306
Luo, Yuchun	608, 743, 778	Mardaryev, Andrei	131, 334, 456
Lüscher, Bernhard	681	Margolis, David J.	206, 211, 248 (C - Abbott; C - Astellas)
Lüscher-Firzlaff, Juliane	681	Marinari, Barbara	115
Lushen, Anthony	285	Marini, Alessandra	191
Luyet, Camille	352	Marji, Jackleen	549
Lv, Yu	729	Marks, M.	299
Lyga, John	364, 370, 447 (E - Avon Products)	Marquardt, Yvonne	278, 578, 681
Lyle, Stephen	459	Marshall, Christine	140
Lynch, Kaari A.	470	Marshall, John	196

M

Ma, Jie	759	Martin, David A.	065, 068 (E, SH, O - Amgen Inc.)
Ma, Yuehong	729	Martin, Katharine M.	708 (E - Johnson & Johnson)
Maas, Michael	634	Martin, Stefan M.	607
Mabuchi, Tomotaka	559	Martin-Ezquerra, Gemma	311
Maccario, Frederic	666	Martin-Garrido, Abel	091
MacDonald, T. T.	400	Martini, Mary K.	765
Mace, Charles R.	522	Martinka, Magdalena	745
Mack, M. Catherine	708 (E - Johnson & Johnson)	Martins, Vera	196
Mackay-Wiggan, Julian M.	549	Martinsen, Angela	811
Mackenzie, Donald	311, 379	Martires, Kathryn J.	017, 249 (G - Pfizer)
MacLeod, Daniel T.	623	Maruziva, Daren	299
Maczey, Evi	766	Masaki, Taro	740
Maddison, Ben	299	Mascia, Francesca	002
Maddodi, Nityanand	770	Mastaloudis, Angela	341 (E - Nu Skin Enterprises)
Madhavan, Shajil	770	Mastrofrancesco, A.	331, 756
Maestro, Yannick	318	Matabuena, Maria	704
Maestroni, Georges	557	Mathers, Alicia R.	582, 741
Maffei, Vincent J.	645	Matsui, M. S.	229, 313, 399, 685, 711, 718 (E - Estee Lauder)
Magidson, Jay	743	Matsunaga, Yukiko	791
Magro, Cynthia M.	083, 748	Matsushima, Hironori	563, 624
Mah, Angela	129, 813	Matthews, Loderick	653
Mahalingam, M.	760	Matthews, Mark R.	653
Mahalingam, Meera	106	Mauro, Lucia M.	430, 436, 443, 445
Mahan, Meredith	247	Mauro, Theodora	289, 290, 298, 319, 379
Mahe, Yann	831	Mayes, Andrew E.	541
Maher, Wanda	648	Mazurier, Frederic R.	114, 303
Mahnke, Karsten	587, 634	McCarthy, James	348
Mahoney, Anne	215	McClain, S.	838
Maier, Elizabeth A.	470	McClain, Steve A.	818
		McCormick, T.	523
		McCormick, Thomas S.	044, 548, 702
		McCullery, David	725
		McElroy, Stuart	397

McElwee, Kevin J.	023, 105, 107	Minwell, Greg J.	249
McGrath, John A.	415, 535, p. 80	Miranda, Benjamin H.	471
McLean, W. H. Irwin	248, 300, 366, 375, 397	Mirkin, Chad A.	383, 798 (F, O - Aurasense)
McMichael, A.	299	Mirvish, Ezra D.	165, 168
McMillan, Erin	811	Miteva, Mariya	435
McNutt, N. S.	739	Mitra, N.	248
McTigue, Monica	809	Mitsuhashi, Yoshihiko	417
Meadows, Christiana	284 (I - NOX Technologies Inc.)	Mitsui, Hiroshi	045, 095, 119, 155, 301, 739, 832
Medzhitov, Ruslan	594	Miyachi, Yoshiki	049, 336, 566
Meephansan, Jitlada	007	Miyagaki, Tomomitsu	478, 486
Mehta, Jayesh	825	Miyagawa, Fumi	036, 579
Mehta, Nehal N.	211, 490	Miyamoto, Shoko	751
Mehta, Rahul	069, 071 (E - SkinMedica)	Miyoshi, Ken	272
Mehta, Sourabh D.	522 (E - Adarza BioSystems)	Mizuno, Hideaki	269
Meier, Friedegund	766	Mizutani, Hitoshi	585
Meingassner, Josef G.	179, 480	Mlitz, Veronika	355
Meldrum, Helen	500, 790 (E - Unilever)	Mo, Jonathan L.	118
Melton-Kreft, Racheal	636	Modi, Badri	097, 147
Meltzer, Paul	126	Modlin, Robert L.	031, 626, 635, 650
Mendini, Amanda	333	Mohan, Chandra	494
Meng, T. C.	652 (E - Graceway Pharmaceuticals)	Mokrohisky, Stefan	259
Menier, Severine	606	Molnar, Maria J.	033
Menon, Gopinathan K.	185, 288, 296, 309	Montalvan, M.	426
Menter, Alan	024, 215, 493 (G, H, A, B - Abbott; G, I - Allergan; G, H, A, B - Amgen; G, H, A, B - Astellas)	Montoya, Dennis	626, 650
Menu, Franck	788	Moochhala, Shabbir M.	810
Merad, Miriam	777	Moore, Kate	196
Mercier, Michel	190	Moore, Patrick S.	165
Merghoub, Taha	777	Moquete, Rachel	567, 568
Merk, Hans F.	278, 305, 308, 578	Morasso, Maria I.	010, 266
Merle, Chloe	190	Morelli, Adrian E.	582, 741
Merlino, Glenn	098	Morelli, Joseph	259
Merriman, Barry	175	Moreno, Zaida	662
Mertz, F.	775 (P - skin cancer detection system)	Moretti, Francesca	115
Mertz, Kirsten D.	726	Morgan, Bruce A.	462
Mesnard, Laurent	752	Morishita, Rika	189
Messingham, Kelly A.	043	Morita, Akimichi	678, 754
Messmer, Karina	186	Morizane, Shin	058, 622
Metzger, Todd C.	601	Moroi, Yoichi	328
Meyer, Imke	815 (E - Symrise)	Morré, D. J.	284
Meyer, Laurence J.	070	Morré, Dorothy M.	284 (E, F - NOX Technologies)
Meyrignac, Celine	437, 438	Morrisey, Edward	449
Mi, Qing-Sheng	076, 344	Morrison, L.	775
Michael, Lowell E.	169	Morrow, Gary R.	536
Michaelson, Jennifer	003 (E - Biogen Idec)	Moss, Joel	786, 805
Michel, Beno	082	Mostow, Eliot	636
Michelet, Jean Francois	831	Motegi, Sei-ichiro	177
Michelon, Melissa	504	Motoyama, Akira	325, 751
Mildner, Michael	300, 630	Moulder, J. E.	827
Milla, Laura	704	Mountz, John	141
Millar, Sarah	449, 457	Msika, Philippe	274, 276, 280, 481, 788
Miller, Benjamin L.	522 (F - Adarza BioSystems)	Muccio, Donald	074
Miller, D.	735	Mudde-Boer, Liesbeth	458
Miller, Duanne D.	077	Muehleisen, Beda	631
Miller, Jeremiah	613 (G, I - Amgen)	Mueller, Christopher G.	016
Miller, Lloyd	618, 624	Mueller, Eliane J.	352
Mills, Kyle C.	527	Mueller, Ralf S.	413
Milner, Yoram	082, 689	Muizzuddin, Neelam	648
Milstone, Leonard M.	382, 408, 421, 424, 426	Mukherjee, Pranab K.	683
Mineau, Geraldine	228	Mukherjee, Surajit	307
Miner, Jeffrey	350	Mukhopadhyay, Anandaroop	448, 461
Ming, L.	738	Mukhtar, Hasan	139, 283
Ming, Mei	086, 657	Müller, Stephanie	816
Ming, Michael E.	224	Mungillo, Michael V.	522 (E - Adarza BioSystems)
Minocha, Julia	482	Munier, Severine	605
Minondo, Anne Marie	831	Munk, Roni	628
		Mur, Ludivine	185, 287, 288, 297, 438
		Murakami, M.	410

Murase, Kana	189
Muro, Yoshinao	281
Murphy, Christopher J.	803
Murphy, G. F.	640
Murphy, George F.	576, 768
Murphy, Robert C.	688
Murray, Patrick R.	638
Murrell, Dédée F.	371
Musiek, A.	433
Muto, Jun	800
Myung, Peggy	472

N

Na, So-young	498
Nagao, Keisuke	269, 277
Nagarajan, Priyadharsini	316
Nagata, Koh-ichi	189
Nagle, Ray	767, 773
Naif, A.	760
Naik, Haley B.	236
Nair, Rajan P.	013, 019, 157, 376, 390
Nakagawa, Yukinobu	558
Nakajima, Kimiko	029
Nakajima, Saeko	566
Nakama, Takekuni	380
Nakamura, Motoki	754
Nakamura, Motonobu	627
Nakamura, Yasushi	130
Nakanishi, Takehisa	585
Nakano, Hajime	417
Nakatsuji, Teruaki	506, 614, 621
Nakayamada, Shingo	556
Nakib, Sarah	032
Namkung, Jung-Hyun	384
Nandi, Tina R.	227
Napolitano, Luca	612
Narbutt, Joanna	660, 661
Nardone, Beatrice	765
Nash, Kevin T.	143, 715
Nassar, Dany	789
Nasti, Tahaseen	149, 769
Navab, Mohamad	031
Navarini, Alexander	596
Navi, Daniel	540
Navid, Fatemeh	565, 570
Naylor, Mark	503
Ndiaye, Mary	758
Nedorost, Susan T.	529 (G, I - GOJO Industries)
Negro, Christopher	668
Nehrenheim, Katja	815 (G - Symrise)
Neill, G. W.	116
Nekrasova, Oxana	182
Nelson, Amanda M.	646
Nelson, Emily	036
Nelson, Kelly C.	714, 737
Nelson, Stanley	175
Nelson-Williams, Carol	382
Nestle, Frank O.	006, 394, 612
Netchiporuk, Elena	628
Neuburg, M.	108
Neugebauer, Romain	258
Newton, Micheal	770
Nghiem, Paul	547
Ngoc Duong, Tu	682
Nguyen, M. N.	735

Nguyen, Thuyen	725
Ni, Xiao	484 (G - Therakos, Inc.)
Nica, Alexandra C.	394
Nickoloff, Brian J.	006
Nicolas, Jean-François	588
Nicolaý, Jean-François	666
Niessen, Carien M.	339, 340
Niessen, Michaela T.	340
Niglio, Scot	716
Nihal, Minakshi	137, 758
Niki, Yoko	711, 718
Nikolovski, Janeta	655 (E - Johnson & Johnson)
Nimmerjahn, Falk	053
Nisbet, James	394
Nishida, Emi	678
Nishida, Hiroyuko	140, 457
Nishida-Fukuda, Hisayo	181
Nitoiu, D.	401
Noda, Shinji	012
Noertersheuser, Peter	553 (E - Abbott)
Nograles, Kristine	475
Noh, Ji Y.	577
Noh, Seongmin	577
Nold, Marcel F.	608
Nold-Petry, Claudia A.	608
Nomura, Toshifumi	397
Nopper, Amy	382
Nordling-David, Mirjam M.	082
Norris, D.	250
Norris, David A.	042, 509, 743, 764, 779 (G - NIAMS)
Nouri, Keyvan	101
Nousbeck, Janna	365, 368
Novitskaya, Inna	045, 067
Nugent, Jaime	465
Nystrand, Glenn	454

O

Obermoser, Gerlinde	024
Oberto, Gilles	292, 297, 488
Oberyszyn, Tatiana M.	120, 692
Ochoa, Maria Teresa	626
Ochotny, Rachel	490
Ockene, Judith	209
O'Connor, Brian	175
Oda, Yuko	290
Offutt, Carlos D.	432
Ogawa, Yasushi	281
Ogawa, Youichi	619
Oh, Dennis H.	153
Oh, Julia	638
Oh, Myoung Jin	015, 485
Oh, Sang H.	577
Ohata, Miho	221
Ohmatsu, Hanako	478, 486
Ohtsuki, Mamitaro	007, 273
Ohyama, Manabu	277
Okamoto, Takashi	560
Okano, Junko	266
Okawa, Joyce	242, 477, 514
Olasz, E. B.	108, 827
Olayinka, Babajide	510 (E - Merz Pharmaceuticals LLC)
O'Leary, Jaime	500
Oleinick, Nancy L.	667, 683 (P - Fluence Therapeutics Inc.)
Olerud, John	184
Olive, Christian	831

Oliviero, Margaret	742 (H, SB - 3Gen; G, I - Lucid; G, I - MELA Sciences; G, I - SciBase; G, I - DermTech; G, I - Spectral Image)	Park, Dong Hee	353
Olsen, Elise	503	Parnes, H.	773
Olson, Eric	449	Parsi, Kory	212
O'Neill, Jenna L.	234, 251, 501	Parson, Walther	468
Ong, S.	709, 710 (E - Tocotrienol Manufacturer)	Parts, Leopold	394
Ono, Fumitake	047	Partyka, Katie A.	509, 764
Opperman, Matthew	576	Parvataneni, R.	256
Oriolo, Andrea S.	744	Pascual, Virginia	024
Orlow, S. J.	722	Pashenkov, Mikhail	726
Orlow, Seth J.	241, 720	Paslin, D.	064
Oro, Anthony E.	088	Pastorekova, Silvia	734
Orringer, Jeffrey S.	521	Patel, Daxesh	568
Orso, Evelyn	309	Patel, Girish K.	148
Ortner, Daniela	584, 594	Patel, Milan	050
Osborn, Mark	354, 535	Patel, Sapna	215
Osei, Joyce	042	Patel, Vishal	176
O'Shea, Charlene	195	Patton, Timothy J.	168
O'Shea, John J.	556	Patton, Timothy	226
Oster, Michele	814	Patvardhan, Eshan	061
O'Toole, Edel A	196	Paul, Kotol	787
Otsuka, Fujio	005	Paulson, Kelly	547
Ott, Hagen	578	Paulson, Susan	553 (E - Abbott)
Ottaviani, M.	331	Paus, Ralf	431 (G - Giuliani S.p.A.)
Oyama, Noritaka	415	Pavletic, Steven Z.	017
Ozato, Keiko	579	Pavlovsky, Mor	365
Ozdoganlar, B.	388	Paw, Jonathan	041
		Pawliczak, Rafal	660
		Payne, Aimee S.	048, 202, 545
		Paz-Cristobal, M. Pablo	703
		Peakman, Mark	612
		Pear, Warren	457
		Pearce, Daniel	251, 527
		Pease, Camilla	308
		Pejler, Gunnar	035
		Pellacani, Giovanni	737
		Pelle, Edward	348
		Pelling, J. C.	138
		Peltonen, Juha	150
		Peng, Han	372
		Peng, Lisan S.	104
		Pennypacker, Sally	173
		Peno-Mazzarino, Laurent	190
		Pentland, Alice P.	333, 536
		Perea, Gayathri K.	006
		Peresics, Eroglu	519
		Perez, Eduardo	057, 567 (E, SH - Argyle Therapeutics; E, SH, P - Signum BoSciences)
		Pernodet, N.	738
		Pernodet, Nadine	348
		Pero, Joanna	143, 169
		Perrin, Armelle	437, 438
		Perrin-Bioulet, Laurent	239
		Petrachi, Tiziana	270, 306
		Petukhova, L.	250, 419
		Petukhova, Lynn	418, 598
		Pfeiffer, Roland	308
		Pfender, Nikolai	607
		Pfisterer, Karin	580
		Philip, Anie	001
		Philippe, Virginie	615
		Phillips, Brett T.	476
		Phillips, C.	064
		Phillips, Courtney	782
		Phillips, Kevin	412, 423
		Phillips, Marjorie A.	342
		Philpott, M. P.	116
		Philpott, Michael	431

P

Page, Brigitte	525		
Pageon, Herve	781		
Paik, Seung Hwan	230		
Paladini, Rudolph D.	183 (E - Halozyme Therapeutics)		
Palazzo, Elisabetta	270, 306		
Palecek, Sean	811		
Paller, Amy S.	111, 215, 315, 382, 383, 798, pp. 20, 38		
Palmer, E.	371		
Palmer, Tara J.	772 (E, SH - DermTech International)		
Pan, Michael	777		
Pandya, Amit	503		
Pangburn, Heather A.	416		
Panicker, Sreejith P.	079, 172, 460, 835		
Panoutsopoulou, Ioanna G.	663		
Panteleyev, Andrey A.	087, 262, 263		
Papazoglou, Elisabeth	544		
Papoiu, Alexandru D.	546		
Pappas, Apostolos	441, 658 (E - Johnson & Johnson)		
Pappert, Eric J.	510, 511, 512 (E - Merz Pharmaceuticals LLC)		
Paraskevas, Steven	628		
Pardos, Carlos	245		
Park, Byung Soon	518		
Park, Chang O.	577		
Park, Chi-Hyun	680		
Park, Chun Wook	231		
Park, Geon Tae	384		
Park, Hwa-Young	302, 799		
Park, Jong Y.	089		
Park, Kui-Young	572		
Park, Kyoung-Chan	728, 795		
Park, Kyungho	289, 290, 295, 801		
Park, Moonhee	193		
Park, So-Hee	728		
Park, Yong-Doo	385		
Park, Yoonkyung	639		

Picardo, M.	331, 756
Pichert, Gabriella	175
Pichler, Bernd J.	135
Pickard, Chris	684
Picksley, Steven M.	469
Pier, Eric	721
Pierson, Katherine C.	067
Pierson, Katherine	045
Piette, Evan W.	477, 514
Pihlajaniemi, Taina	150
Pillingen, Manuela	179
Pina, R.	775 (P - skin cancer detection system)
Pinacolo, Sandrine	671
Pincelli, Carlo	270, 306
Pinetti, Valentina	115
Pironon, Nathalie	374
Pirzado, Muhammad S.	116
Pittelkow, Mark R.	013, 062, 507
Plagnol, V.	400
Plaza, Chrystelle	185, 287, 288
Plichta, Jennifer K.	834
Plikus, Maksim	797
Ploegh, Hidde L.	656
Pohler, Elizabeth	375
Poligone, Brian	599
Pollack, Brian P.	091, 569
Pomerantz, Rebecca G.	165, 168
Pomozi, Viola	701
Ponnampерuma, Roshini M.	154
Pons, Jennifer	422
Poon, Annie	422
Poppas, Dix P.	118
Porcu, Pierluigi	083, 609
Porter, Chris	509
Porter, Rebecca M.	516
Portolan, Frederique	671
Postethwaite, A.	735
Postlethwaite, Arnold E.	077
Potaracke, Autumn	670
Poterlowicz, Krzysztof	334, 456
Potter, Christopher S.	406, 413, 643
Potter, Simon	394
Pourciau, Crystal	247
Pourreyron, Celine	397
Pouzet, Cedric	292, 294
Pradhan, Sanjay	784
Prasad, Madhu	157
Prausnitz, Mark R.	414 (
Prens, Errol P.	013
Presland, Richard B.	300
Prevarskaya, Natalia	314
Price, V.	250
Price, Vera	042 (G - NIAMS)
Prignon, Aurelie	752
Prisayanh, Phillip	080
Proksch, Ehrhardt	618
Proksch, Peter	682
Prost, C.	410
Prost, Catherine	374
Protacio, Angeline	373
Prouheze, Pascale	666
Prouty, Stephen M.	820
Prox, Johannes	340
Ptchelintsev, Dmitri	370
Pujari, P.	523
Pujari, Prasad	548
Puri, Puja	737

Purwar, R.	595
Purwar, Rahul	602
Putterman, Chaim	003 (G - Biogen Idec)
Puzo, Jose	245

Q

Qamar, Raheel	376
Qaqish, Bahjat	080
Qi, Rui-Qun	076, 344
Qiao, Hongjiang	561
Qiao, Jianjun	369
Qiao, Shuxi	705
Qin, Haixia	363
Qin, Zhaoping	198, 403, 693
Qu, Di	736
Qu, Kun	129, 813
Qu, Le	344
Quan, Taihao	198, 403, 693
Quintana, Elsa	143

Qureshi, Abrar A.

032, 213, 216, 220, 223, 236, 238, 243, 244, 257, 707, 733 (H, C - Novartis; H, G - Amgen; H, G - Pfizer; H, G - Merck)

R

Rabbani, Piul	472
Rabinovitz, Harold S.	742 (H, SB - 3Gen; H, SB - Lucid; H, SB - MELA Sciences; G, I - SciBase; G, I - DermTech; G, I - Spectral Image)
Radakovic, Sonja	495
Radek, Katherine A.	293, 311, 651, 834
Rademaker, Alfred	215
Rafailovich, Miriam	476
Raffeld, Mark	740
Rahman, M. M.	116
Raja, Ghazala K.	376
Rajesh, Sangeetha	786, 805
Ramaswamy, Sridhar	726
Ramos, Romela I.	624
Ramot, Yuval	431
Rand, Hugh	065, 068 (E, SH - Amgen)
Randall, Valerie A.	469, 471
Randhawa, Manpreet	447 (E - Avon Products)
Rangwala, Sophia	479
Rani, Rajni	020
Rao, Soumya	242
Rao, Vasanth	829
Raper, Anna	490
Rapp, Stephen R.	234
Ratz, Sandrine	437, 438
Rausch, Matthew P.	601
Raymond, Amanda	737
Rea, Thomas H.	650
Reardon, Christopher	356
Rebeck, T.	248
Reddy, Vemuri B.	038, 040
Regan, Suzanne	104
Rehal, Balvinder Renu	823
Reininger, Baerbel	063
Reizis, Boris	629
Reuland, Steven N.	764
Reutemann, Bethany	826

Revillo, M. Jose	703	Rostaher, Ana	413
Reyes, Eduardo	495, 662 (E, H - IFC)	Roth, Justin	149
Reynolds, Della	036	Rouzard, Karl	057 (E, SH - Argyle Therapeutics; E, SH - Signum BioSciences)
Rezaee, Elham	719		
Rezung, Antonio	703	Rowe, Kerry	228
Rezvani, Hamid R.	114, 303	Rowles, Diane	482
Rhea, Lindsey	392	Roy, Edwige	814
Rheinwald, James G.	100 (C - Organogenesis)	Rubenstein, David	117, 192, pp. 20, 64 (H, SB - Amgen; H, SB - Abbott; H, A, B - Biogen)
Riblett, MaryBeth L.	018, 027, 617, 633		
Ricci, M.	187	Rubin, Adam	p. 38
Ricci, Stacey	154	Rubin, Cory J.	617, 633
Rice, Robert H.	321, 342, 418	Rudemiller, Kyle	149
Riddle, Megan J.	535	Ruegg, Curtis L.	326
Rieß, Olaf	144	Ruge, Fiona S.	516
Rieux, Elodie	831	Rugg, Elizabeth L.	291
Riggenbach, Judith A.	120, 692	Rungsimanond, Nicha	774
Riihilä, Pilvi	150	Rupa, Maddala	829
Ring, Sabine	587, 634	Ruppert, Lisa	482
Rinn, John	396, 813	Rushing, E.	760
Ríos, Luis	677	Russell, Chris B.	065, 068 (E, SH, P - Amgen)
Riss, Yosef	134	Russell, Meghan	359, 550 (E - Johnson & Johnson)
Ritté, Laure	157, 521	Russo, Veronica A.	237
Rivarola, Viviana	704	Ruvolo, Eduardo	346 (E - Johnson & Johnson)
Rivera, Angel	149	Ruwiedel, Karsten	308
Rivitti, Evandro	080	Ruzicka, Thomas	002
Roberts, Scott	641	Ryan, Caitriona	024, 493 (O - Abbott; H, A, B - Galderma)
Robertson, D.	087, 262, 263	Ryan, Julie L.	536
Robin, A.	410	Ryscavage, Andrew	134
Robins, Douglas N.	251	Ryu, Sunhyo	639
Robinson, Amanda H.	524		
Robinson, Caroline	215		
Robinson, June K.	765		
Robinson, Steven	743		
Robinson, William A.	743		
Robinson, William H.	050		
Rocke, David	806		
Röcken, Martin	132, 135, 144, 700, 766		
Roden, Richard	591 (I, P - L2 technologies)		
Rodero, Mathieu	812		
Rodriguez, Karien	268, 317 (E - Johnson & Johnson)		
Rodriguez, Myriam E.	044		
Rodriguez, Rosa	443		
Rodriguez-Martin, Marina	191, 311, 315		
Rodriguez-Menocal, Luis	843, 844		
Roelandt, Truus	280		
Rogers, Faye A.	421		
Rogowski-Tylman, Michal	660, 661		
Roh, Joo-young	498		
Rokunohe, Daiki	417		
Romano, Rose-Anne	124		
Ronagh, Arash	056		
Rondeau, Eric	752		
Rook, Alain H.	503, 520		
Roop, Dennis R.	159, 336, 416, 420, 466, 794		
Roques, Stephanie	615		
Rorke, Ellen A.	425		
Roseeuw, Diane	280		
Rosenbaum, Lara E.	753		
Rosenberg, Stephen A.	716		
Rosenberg, Steven A.	555		
Rosenblum, Michael	041		
Rosenjack, Julie	072, 075		
Rosmarin, David	656		
Rossberg, Maila	282		
Rossetti, Dianne	712 (E, G - Johnson & Johnson)		
Rossi, C.	187		
Rossiter, Heidi	304		

S

Saalbach, Anja	094
Sabate, Jm	239
Saboda, Kathlynn	767, 773
Saboury, Babak	490
Sachs, D.	489
Sachs, Dana L.	521
Sadeghi, Mohamad	719
Saenger, Yvonne	777
Saftig, Paul	340
Sagerman, Paul	773
Sagiv, Yuval	625 (E, SH, I - HealOr Ltd.)
Sagransky, Matthew J.	501
Sahn, Rachel E.	252
Sahu, D.	828
Sahu, Ravi P.	163, 687
Saito, Chiyo	678
Saito, Nao	561
Saito, Norimitsu	783
Sakaguchi, Masakiyo	751
Sakaguchi, Sachiko	047, 380
Sakai, Yasuo	266
Sakata, Mie	497
Salgado, Marcela	843, 844
Saliou, Claude	550 (E - Johnson & Johnson)
Samrao, Aman	253, 492
Samuelov-Kinori, Liat	367
Samuels, Yardena	p. 23
Sanchez, Margaret I.	742, 744
Sánchez, Virginia	677
Sanchez-Elsner, Tilman	684
Sanchez-Mateos, Juan Luis	320
Sandilands, Aileen	300, 375
Sangüeza, Omar P.	527
Sanmartin, Rosalia	245

Sano, Shigetoshi	011, 013, 029, 093, 099, 272	Schwarz, Agatha	565, 570
Sans, B.	410	Schwarz, Thomas	565, 570
Santhanam, Uma	447 (E - Avon Products)	Scimeca, John V.	736
Sanyal, Amartya	373	Secrest, Aaron	226
Sanz-Rodríguez, Francisco	704	Seeliger, Stephan	260
Sapkota, Bishu	569	Segre, Julia A.	638, 817
Sarig, Ofer	365, 367, 368	Seiberg, Miri	712 (E - Johnson & Johnson)
Sarno, Euzenir N.	650	Seidman, M.	408
Saruwatari, Keishi	265	Seiffert-Sinha, Kristina	048, 050
Sasman, Amy	798	Seishima, Mariko	189
Sasseville, Denis	001	Sekhon, Ashley	061
Sato, Shinichi	008, 012, 273, 478, 486	Sekowska, Magdalena	394
Sauer, Brian	227	Seldon, Paul M.	090
Savignac, Magali	398	Selim, Angelica	737
Savoy, Leonard	552	Selim, Maria A.	714
Sawada, Yu	627	Sells, Ryan	727
Sawamura, Daisuke	417	Selvam, Panneer	183 (E - Halozyme Therapeutics)
Sayama, Koji	181	Selvin, Elizabeth	204
Sayar, Beyza	352	Selway, Joanne L.	090
Sayo, Tetsuya	265	Seminara, Nicole	206, 211
Sayre, Robert M.	698	Sen, Subrata	466
Schäkel, Knut	052, 055	Seneschal, Julien	589, 592, 602
Schachner, Lawrence A.	436, 443, 445	Senior, Robert	193
Schaefer, Carole	228	Seo, Inseok	346 (E - Johnson & Johnson)
Schafer, Peter	531 (E, SH - Celgene)	Seo, Jong Bum	353
Schaffer, Julie V.	241	Seo, Seong-Jun	573
Scharadin, Tiffany	361	Seo, Sung Jun	231, 572
Scharffetter-Kochanek, Karin	700	Seo, Young-Joon	096, 575, 731
Scharnweber, Dieter	816	Seppanen, Elke J.	812
Schatton, Tobias	576, 733	Seraszek, Agnieszka	009
Scheffler, Michael	515	Serre, Catherine	287
Schellenbacher, Christina	591 (P - L1-L2 VLP)	Setaluri, Vijayasarakadhi	770, 811
Schenften, Dominik	594	Settin, Ahmad	386
Scherz, Jennifer	468, 630	Seybold, K.	775 (P - skin cancer detection system)
Schick, Jonathan	120, 692	Seykora, John	140, 457
Schierl, Michael	567, 568	Shafi, Rubina	538
Schikowski, Tamara	229, 399	Shafti-Keramat, Saeed	591
Schmid, Andreas	135	Shah, Amishi	526
Schmidt, Enno	053	Shah, Kejal R.	095, 119
Schmidt, Linda A.	070	Shah, Nihar	803
Schmidt, Talkea	607	Shah, Parth	633
Schmitz, Annika	339	Shah, Shaily	777
Schmitz, Gerd	309	Shaikh, W. R.	217
Schmotzer, Brian	548	Shaiq, Pakiza A.	376
Schmuls, Chrysalyne D.	073, 210, 632, 644	Shalita, Alan R.	004
Schmuth, Matthias	300, 586	Shao, Yuan	664, 691
Schnabelrauch, Matthias	816	Shapiro, Jerry	023, 105, 107
Schneider, Nicole	110	Shapiro, Lawrence S.	409
Schnittger, Steve	648	Sharma, Meena R.	694
Schock, A.	827	Sharma, Pankaj	020
Schoefmann, Nicole	458	Sharma, Rohit R.	724
Schopf, Rudolf	519, 539	Sharma, V. K.	020
Schoubben, A.	187	Sharov, Andrey	131, 334, 456, 762, 774
Schrama, David	547	Sharova, Tatyana	456, 762, 774
Schuepbach-Mallepell, Sonia	615	Sharpe, David T.	471
Schuermann, Bianca A.	696	Shattock, Robin	605
Schultz, Leonard	406	Shea, Christopher R.	086, 657
Schulz, Martin M.	186	Shea, S.	760
Schulze, Katja	352	Shellman, Yiqun G.	509, 764
Schupp, Clayton	212	Shemer, Avner	475
Schurgers, Leon J.	532	Shepard, H. Michael	183 (E - Halozyme Therapeutics)
Schuster, Christopher	571	Shi, Vivian Y.	021
Schutte, Brian C.	392	Shibagaki, Naotaka	560
Schwanbeck, Ralf	340	Shiga, Takeo	099
Schwartz, George B.	772 (E, SH - DermTech International)	Shimada, Shinji	555, 560, 619
Schwartz, M. E.	429	Shimba, Shigeki	324
Schwartz, Mary E.	402	Shimizu, Hiroshi	343, 561

Shimomura, Yutaka	059, 418, 440	Solima, P.	775
Shin, D. B.	207	Solomon, James A.	251
Shin, Daniel B.	206, 211, 224	Solt, D. B.	138
Shin, Jung-Min	731	Soltani, Keyoumars	086, 657
Shin, Morizane	787	Soma, Tsutomu	791
Shin, Seung-Shick	716	Sommer, Pascal	335
Shirafuji, Yoshinori	058	Sondhi, Rachna	004
Shirakata, Yuji	181	Song, Peter I.	639
Shiue, Lisa	484	Sonti, Sujatha	069, 071 (E - SkinMedica)
Showe, Louise C.	520	Soroka, Yoram	689
Shroot, Braham	057 (E, SH - Argyle Therapeutics; E, SH - Signum BioSciences)	Sorrell, Jennifer	315
Shufesky, William	582, 741	Soto, Brenda	597 E - Stratatech)
Shunichi, S.	710	Soto Hopkin, Amelia	161, 395
Siciliano, Ilario	148	South, A.	387
Siconolfi, Lisa	743	South, Andrew P.	176, 397
Siddiqui, Shoib S.	186	Southall, Michael D.	268, 317 (E - Johnson & Johnson)
Siegel, D.	427	Spallone, Giulia	115
Siegel, Dawn	428	Sparwasser, Tim	565
Silva, Kathleen A.	319, 406, 413, 643 (G - Proctor & Gamble)	Spaunhurst, Katrina M.	209
Silverberg, Jonathan I.	214	Speacker, Tycho J.	414
Silverberg, Michael J.	554	Speaker, Tycho J.	389
Silverberg, Nanette B.	214	Specht, Lisa	413
Silverstein, Roy L.	075	Speer, Kelsey	785
Sim, Ji Hoon	575	Sperling, Leonard	786
Simon, Jan C.	037, 094, 816	Spitler, Ryan	414
Simon, Jessica	436	Spoerri, Iris	404
Simon, Marina	398	Spraker, Mary K.	252
Simon, Scott I.	808	Spratt, Margaret L.	252
Simpson, Andrew	146	Spratt, Maureen	649 (E - Mattek)
Simpson, Eric	246, 492	Sprecher, Eli	343, 365, 367, 368
Simpson, Matthew J.	483	Sriram, Rashmi	522
Singer, A.	838	Srivastava, Bhaskar	610
Singer, Adam J.	818, 837	Sriwiriyanon, Penkanok	470
Singh, Archana	020	Stachelshied, Heike	339
Singh, Lotika	526, 540, 542	Stamatas, Georgios N.	655, 708 (E - Johnson & Johnson)
Singh, Pallavi	059, 060, 533	Stanley, John R.	545
Singh, Tripti	152, 672, 713	Stefanick, Marcia L.	208, 209
Sinha, Animesh A.	048, 050, 237	Steinberg, Seth M.	017
Sinha, N.	349	Steinbrink, Kerstin	607
Sinha, Satrajit	124, 316, 449	Steinemann, J. M.	433
Siprashvili, Zurab	396	Steiner, Georg	p. 64
Siu, Sophia	701	Steinhoff, Martin	260
Sivamani, Raja	823	Stepp, Mary Ann	785
Skabytska, Yuliya	642	Stewart, Arlene	175
Skalli, Omar	822	Stewart, Paul M.	541
Skazik, Claudia	278, 578, 681	Stichenwirth, Martin	304
Skobowiat, Cezary	698	Stiegmann, Regan	259
Skowera, Ania	612	Stine, M.	760
Skryma, Roman	314	Stingl, Georg	063, 571, 726, 763
Sleigh, James E.	167, 171, 203	Stock, Jeffry B.	057 (SH, F - Argyle Therapeutics; SH, F - Signum BioSciences)
Slominski, A.	735	Stock, Maxwell	057, 567 (SH, F - Argyle Therapeutics; SH, F - Signum BioSciences)
Slominski, Andrzej	077, 698, 755	Stocker, Claire J.	201
Small, Kerrin	394	Stockfleth, Eggert	103
Smith, Catherine H.	006	Stoddard, A.	427
Smith, Frances J.	402	Stoddard, Greg	227, 232
Smith, N.	489	Stohl, Lori L.	030
Smith, Samantha	415	Stojadinovic, Olivera	101, 430
Smith, Shilo	509, 764	Stokes, Nicole	261
Smith-Norowitz, Tamar	214	Stoll, Stefan W.	034, 157
Smola, Hans	802 (E - Paul Hartmann AG)	Stolper, Gina	841
Smyth, Padhraic	473	Stone, Gary	126
Snitkin, Evan S.	817	Stone, Hongran	326
Sobiesiak, Malgorzata	590	Storm, Kathleen	743
Sogame, Ryosuke	047, 380	Stottlemeyer, J.	699
Sohn, Kyung Cheol	096, 267, 575, 750	Strachan, Lauren R.	824
Sohn, Taesik	264		

Stratton, Steven P.	530	Takada, Yoshikazu	121
Streilein, Robert D.	056	Takahagi, Shunsuke	826
Striemer, Christopher C.	522 (E - Adarza BioSystems)	Takahara, Masakazu	328
Strober, Bruce	493, 503 (H, C, G, SB - Amgen; H, C, G - Abbott; H, C, G - Centocor; H, C - Pfizer; H, C - Celgene; H, C - Novartis)	Takahashi, Hayato	556
Stromer, Tracy D.	143	Takahashi, Kenzo	336
Strunk, Dirk	580	Takaishi, Mikiro	093, 272
Stuart, Philip E.	157, 376, 390	Takamatsu, Hyota	558
Stuart, S.	256	Takamori, Kenji	178
Stuchlik, Peter	458	Takashima, Akira	563, 620, 624
Stuetz, Anton	179, 458, 480	Takeda, Junji	029, 093
Stutz, Nathalie	112	Takeda, Y.	595
Suárez-Fariñas, Mayte	022, 045, 095, 119, 155, 301, 475, 832	Takeichi, Takuya	281
Sudo, Kaori	189	Takekoshi, Tomonori	559, 727
Suga, Hiraku	478, 486	Takeo, Makoto	472
Sugawara, Koji	431	Taketo, Mark	472
Sugaya, Makoto	012, 478, 486	Takeuchi, Satoshi	328
Sugiri, Dorothee	229, 399	Takigawa, Masahiro	453
Sugiura, Kazumitsu	281	Takiyoshi, Noriko	417
Sugiyama, Yoshinori	265	Talpur, Rakhsundra	526
Sullivan, Erin M.	153	Tamai, Katsuto	535
Sullivan, Keith	p. 37	Tamaki, Kunihiko	273
Sullivan, Michael	648	Tamura, Deborah	126, 378
Sullivan, Nicholas J.	120, 692	Tamura, Kyoichi	564, 724
Sumigray, Kaelyn	279	Tan, A. U.	722
Sumpter, Tina L.	582	Tan, Aik Choon	416, 509
Sun, Chiao-Wang	391	Tan, Mui Hong	810
Sun, Hong-Wei	045	Tan, Xiao Hui	126
Sun, Richard	321	Tanese, Keiji	092
Sun, Ying	317 (E - Johnson & Johnson)	Tanew, Adrian	495
Sun, Youping	038, 040	Tang, Jean Y.	208, 209, 549
Sundberg, John P.	319, 342, 406, 413, 598, 643 (G - Proctor & Gamble)	Tang, Xiuwei	133
Sundram, Uma	540	Tangrea, J.	773
Sunkari, Chetana	544	Tao, Jianning	416
Supp, Dorothy M.	470	Tapia, Chris	845
Surapaneni, Sekhar	531 (E, SH - Celgene)	Tarutani, Masahito	099, 272
Surdulescu, Gabriela	394	Tattersall, Daniel	176
Susa, Joe	653	Taube, Janis	732
Suter, Maja M.	352	Taube, Klaus	499
Sutherland, Katherine	520	Tavazoie, Masoud	322
Suzuki, Ayumi	380	Tawa, Marianne	534, 593
Swanzey, Emily E.	412, 423	Taylor, Kristen R.	312
Sweatman, T.	735	Taylor, Marisa	487
Sweeney, D. M.	138	Taylor, Ted B.	070
Swerlick, Robert A.	645	Tchervenkov, Jean	628
Swetter, Susan	773	Tcheung, Janet Y.	714, 737
Swindell, William R.	013, 019	Teague, Jessica E.	073, 543, 632, 644
Syed, Deeba N.	139, 283	Tegeder, Andrew	547
Sysa-Jedrzejowska, Anna	660, 661	Teichert, Arnaud	446
Szabó, P.	701	Tejasvi, Trilokraj	390
Szabo, Sandra	468, 630	Teles, Rosane	626, 650
Szepietowski, Jacek	499	Telgenhoff, Dale	842
Szeverenyi, Ildiko	175	Tembhre, Manoj K.	020

T

Tacheau, Charlotte	831	Teng, Joyce	811
Tada, Akihiro	221	Tenhave, Thomas R.	477
Tada, Yayoi	008, 012, 478	Tennenbaum, Tamar	625 (SH, F - HealOr Ltd.)
Tagaya, Yutaka	579	Teo, V.	709, 710 (E - Tocotrienol Manufacturer)
Taguchi, Osamu	754	Terao, Mika	029
Tai, Nicole	107	Terrell, Anne	449
Taieb, Alain	114, 303	Terzian, Tamara	259
Takada, Yoko K.	121	Tessarollo, Lino	785
		Tey, Ethian	299
		Tey, Hong L.	527
		Thach, Thai	326
		Thangapazham, Rajesh	786, 805
		Tharaux, Pierre-Louis	789
		Tharp, Michael D.	158
		Thazhathveetil, A.	408

Thibodeau, Alain	491 (E, I - Innovacos)	Tsai, Donald E.	545
Thiboutot, Diane M.	646	Tsai, Kathleen J.	545
Thiyagarajan, Saravanan	174	Tsai, Kenneth Y.	136
Thng, Steven T.	810	Tsai, Ren-Yeu	439
Thomas, Fridtjof	209	Tsai, Tsen-Fang	381
Thomas, Nancy E.	776	Tsai, Tsung-Hua	452
Thompson, Aiden	690	Tsao, Hensin	p. 19
Thompson, Trellis B.	136	Tschachler, Erwin	304, 355, 468, 630
Thomson, James	811	Tsen, F.	828
Tian, John R.	021	Tseng, Lin-chiang	494
Tian, Kegui	349	Tsruta, Yuko	149
Tian, Tian	602, 640	Tsuboi, Ryoji	325, 751
Tiede, Stephan	431	Tsuda, Hidetoshi	007, 273
Tiganescu, Ana	541	Tsuda, Kenshiro	585
Tigelaar, Robert E.	620	Tsuji, Gaku	328
Tigges, Julia	305, 308, 679	Tsuruta, Daisuke	047, 380
Timares, Laura	149, 769	Tu, Chia-Ling	180, 379
Timour, Martin	065, 068 (E, SH - Amgen)	Tubo, Noah	581, 602
Tintle, Suzanne	475	Tucat, G.	239
Titeux, Matthias	374	Tuchinda, Papapit	652
Tkacheva, Olga	582, 741	Tucker-Samaras, Samantha	359, 550 (E - Johnson & Johnson)
Tlougan, Brook E.	241	Tuckey, R. C.	735
Tober, Kathleen L.	120, 692	Tuckey, Robert C.	698
Tobin, Desmond J.	471	Turczynski, Sandrina	374
Tobis, Scott	522	Turgeman, Dina	689
Todorovic, V.	138	Turner, A.	371
Todorovic, Viktor	199, 200	Turner, Maria L.	638
Tohyama, Mikiko	181	Turner, Mathew J.	690
Toida, Kazunori	791	Tuttle, Marie S.	636, 792
Tokura, Yoshiaki	453, 627	Twitty, George	149
Tolar, Jakub	354, 535	Tyagi, Sameer	050
Toledo-Bahena, Mirna	505 (G - Anacor Pharmaceuticals)	Tyler, Douglas	737 (C, G - Adherex Technologies Inc.; C, G - Bayer; C, G - Genomic Health Inc.; C, G - Novartis; C, G - Schering-Plough)
Tom, Wynnies	215, 537	Tzenova Bell, Jordana	394
Tomic-Canic, Marjana	101, 430		
Tominaga, Mitsutoshi	178		
Tominaga, Shin-ichi	007		
Tonel, Giulia	596		
Tonnensen, M.	838		
Tonnesen, Marcia G.	818, 837 (O - NeoMatrix Formulations)		
Toosi, Siavash	720	U	
Topalian, Suzanne	732	Ubalde, Eduardo	245
Torchia, Enrique	259, 466	Uchi, Hiroshi	328
Torigian, Drew A.	490	Uchida, Noriko	265
Torii, Kan	678	Uchida, Yoshikazu	289, 290, 295, 350, 379, 801
Torres, J.	256	Uchugonova, Aisada	783
Torrie, Leah	397	Udey, Mark C.	010, 177
Torriglia, Alicia	630	Ueda, Takahiro	126, 378
Toth, Balasz	431	Uezato, Hiroshi	336
Toth, Sandi	599	Uitto, Jouni	343, 415, 532, 544, 701, 826, 830
Touloukian, Christopher	687	Underwood, Robert	184
Towne, Jennifer	068 (E, SH - Amgen)	Ungewickell, Alex	129
Townes, Tim M.	391	Urrutia, Raul	146
Toyoda, Hidekazu	508 (E - Nu Skin)	Usui, Marcia	184
Toyozawa, Seiko	130	Utsumi, Daisuke	336
Tran, K.	371		
Travers, Jeffrey B.	687, 688, 690	V	
Travers, Jeffrey T.	690	Vachon, Hortense	016
Travers, Mary	394	Vaculik, Christine	571, 580
Trivedi, Sohum	449	Vahlquist, Anders	402
Tron, E.	410	Vaid, Mudit	672
Tron, Elodi	374	Valdes, Jose	819 (G, I - Waterjel Technologies)
Troxel, A. B.	207	Valenti, Lionel	666
Troxel, Andrea B.	206, 211	Van Acker, Monica M.	237, 706
Truchuelo, Mayte	677	Van den Bergh, Francoise	046
Trullas, Carles	191, 311 (E - ISDIN)	van den Driesche, Sander	734
Truong, Brian	253	van der Hoeven, Harald	840
Truzzi, Francesca	270, 306		

van Geel, Michel	315	Walker, Robert	126
van Steensel, Maurice	315	Walli, Rehab	682
Van Voorhees, A. S.	207 (C, A, B - Leo Pharma; C - Amgen)	Walsh, Jessica	227
Van Voorhees, Abby	490 (C, H, G - Amgen; C, H - Abbott; C, H - Genentech; G, I - Roche; G, I - Astellas; C, H - Warner Chilcott; C, H - Connetics; C, H, G - Bristol Myers Squibb; C, H - Centocor; C, H - IDEC, VGX, Xtrc Leo; SH - Merck)	Walsh, Jessie	232
VanBuskirk, JoAnne	333	Walston, Steven	346 (E - Johnson & Johnson)
Vandenbergh, Matthieu	314	Wan, J.	207, 433
Vander Lugt, Bryan	581	Wan, Jerry	746, 747
Vander Wal Jillon, S.	237	Wan, Yinseng	746, 747
Vander Zanden, Marie	597 (E - Stratatech Corporation)	Wang, Amanda	649 (E - Mattek)
Vanderover, G.	685 (E - Estee Lauder)	Wang, Andrew C.	504
Vanderweil, Stefan	459	Wang, Claire Q.	119, 155
Vañó, Eliseo	677	Wang, Dan	316
Vano-Galvan, Sergio	677	Wang, Eddy H.	023
Varani, James	025	Wang, F.	218, 489
Várdi, A.	701	Wang, Frank	026
Varki, Ajit	800	Wang, Grace Y.	125
Varley, Cara D.	517	Wang, Jennifer Y.	633
Vass, J. K.	263	Wang, Ji-an	786, 805
Vavatsikou, Eirini	684	Wang, Jianyou	369
Vega, Robert	517	Wang, Joy	125
Velayuthan Chellammal, P.	785	Wang, Kevin C.	373
Veledar, Emir	482	Wang, Linda	543
Vellekoop, Michael J.	734	Wang, Lynn	125
Venturini, Marina	495	Wang, Qi	464, 467
Vera-Alvarez, J.	704	Wang, Richard C.	113, 653
Verhaegen, Monique E.	143, 715	Wang, Shuguang	697
Verma, Chandra	175	Wang, X.	039, 387
Verneuil, Hubert D.	114	Wang, Xiao-Qi	111, 383
Verney, Zoe	074	Wang, Yun	412, 423, 740
Verri, Waldiceu A.	664	Wang, Zhe	406
Verrier, Bernard	605, 606	Wang, Zhenping	616
Verzi, Michael	725	Ward, Nicole L.	013, 025, 027, 792
Vicentini, Fabiana T.	664	Wargent, Edward T.	201
Vierkoetter, Andrea	229, 399	Warneke, James	530
Vijayaraghavan, Mahima	798	Warshawski, Larry	105
Villanueva, Eneida C.	617, 633	Warton, E. Margaret	258, 554
Vishwanath, Archana	081	Wassmann, Karl	743
Vitolins, Mara Z.	208	Watanabe, Rei	073, 534, 543, 593, 632, 644
Vittorio, C. C.	433	Watanabe, Shinichi	008
Vleugels, F. R.	761, 836	Wattendorf, Daniel	126
Vleugels, R. A.	707	Weaver, Casey	p. 81
Vogt, Annika	606	Weber, Silvio	340
Volf, Eva	061	Webster, Daniel	129, 396, 813
Volz, Thomas	590	Wei, Erin X.	213
Voorhees, John J.	013, 018, 019, 027, 197, 198, 218, 376, 390, 403, 489, 521, 691, 693	Wei, Ge	183 (E - Halozyme Therapeutics Inc.)
Voronkov, Michael V.	057 (E, SH - Argyle Therapeutics; E, SH - Signum Biosciences)	Wei, Maria L.	725
Voutsalath, Melissa	143	Wei, Yongjie	113
		Wei, Yuan	157
		Weick, Jack	143
		Weighardt, Heike	275, 629
		Weinberg, Wendy C.	154
		Weinstock, Martin A.	205, 217
		Weir, L.	087, 263
		Weir, Lynda	262
		Welcher, Andrew A.	065, 068 (E, SH, O - Amgen Inc.)
		Welsh, Catherine	166
		Wen, Jing	003
		Wen, Yu	716
		Wende, Sabina	053
		Wendelschafer-Crabb, Gwen	663
		Weng, Wen-Kai	129, 540
		Weng, Zhiping	152, 164
		Weninger, Wolfgang	151
		Werb, Zena	035
		Werth, Victoria P.	242, 477, 514, 545, 694, p. 37
		West, Dennis	482, 765
		Westermann, Jürgen	053

W

Wachsman, William	772 (C - DerTech International)		
Wactawski-Wende, Jean	209		
Wagner, Christine	726		
Wagner, John E.	354, 535		
Wagner, Stephan N.	726		
Waibel, Jill	843, 844		
Wajid, Muhammad	418		
Walker, Barry	503 (E - Yaupon Therapeutics)		
Walker, Elizabeth A.	541		
Walker, Graeme	752		

Westra, W.	760
Whalen, Faith	210
Whang, Kyu Uang	575
Wharton, David	031
White, Kellie J.	645
Whittaker, Sean	175
Whittington, Adam	798
Wickliffe, Jeffrey	697
Widelitz, Randy	474
Widlund, Hans	100
Wieder, Thomas	132
Wigger-Alberti, Walter	345
Wikramanayake, Tongyu C.	435, 436, 443, 445
Wilbert, Dawn	169
Wilcox, George L.	663
Wilford, P.	299
Wilke, Charlene	383
Wilkerson, Michael	697
Wille, John	089
Willenberg, Anja	094
Williams, Jacqueline	536
Williams, Kirsten	017
Williams, Lisa L.	501
Williams, Mary	382
Williford, Philip	251, 527
Willmes, Cristoff	547
Wilson, Brian J.	733, 759
Wilson, Neil J.	402
Wingerath, Britta	275
Winn, John	394
Winston, Jason	002
Winterfield, L. S.	836
Winthrop, Kevin L.	517
Wipf, P.	699
Witarski, Wojciech	734
Wodz-Naskiewicz, Karolina	660
Wohn, Christian	013
Wolchok, Jedd	777
Wolf, B.	738
Wolf, Ronald	002
Wolff-Winiski, Barbara	458
Won, Chong Hyun	231, 330, 518
Wondrak, Georg T.	705, 780
Wong, Bob	227
Wong, Henry	083, 609
Wong, S.	108
Wong, Yc	709
Wood, Ashley A.	501
Wood, Brittany L.	803
Wood, Gary S.	112, 122, 137, 503, 758
Wood, Gavin	397
Wood, Steve M.	341, 508 (E - Nu Skin Enterprises)
Woodcock, Jamie	227, 232
Woodland, Andrew	397
Woodley, D.	039, 145, 194, 387, 828
Woodley, David	535
Woodward, David F.	469
Workman, Benjamin	552
Wright, Lisa N.	134
Wu, Anfan	515 (E, SH - Celgene)
Wu, Di	676
Wu, Hong	503
Wu, Jianqiang	122
Wu, June-Tai	439
Wu, Li-Chen	391
Wu, Wen H.	577
Wu, Wen Hao	574

Wu, Xiaoyang	261
Wyatt, Paul	397
Wyborski, Russell	364, 370
Wysocka, Joanna	373
Wysocka, Maria	520

X

Xi, Ning	048
Xia, Wei	197, 691
Xia, Yumin	003
Xiao, S.	595
Xiao, Tony Z.	146, 174
Xie, Xiaohui	362
Xie, Zhongjian	173
Xing, Luzhou	060, 533
Xing, Xiangying	026
Xing, Xianying	013, 018, 019, 027
Xiong, M.	217
Xu, Aie	746, 747
Xu, George	210
Xu, Haiying	732
Xu, Hui	141
Xu, Jianmin	156
Xu, Shan-Mei	725
Xu, Yiru	664
Xu, Zhengbin	163

Y

Yadav, Amrita R.	522
Yaghmaie, Pouya	246
Yahav, Jonathan	809
Yalavarthi, Srilakshmi	617, 633
Yamada, Taketo	269
Yamamoto, Mami	325, 751
Yamamoto, Masayuki	460
Yamamoto, Mayuko	011
Yamamoto, Yuki	130
Yamanaka, Kei-ichi	585
Yamanishi, Haruyo	791
Yamasaki, Kenshi	622, 623
Yamasaki, Osamu	058
Yamazaki, Kazuhiro	221
Yancey, Kim B.	653, p. 38
Yang, C.	426
Yang, Hee Seung	384
Yang, Hsin-ya	806
Yang, James C.	555
Yang, Jun-Mo	384, 385
Yang, Liuyan	235
Yang, Ruiguo	048
Yang, Shi	106
Yang, Xiaoping	140, 457
Yang, Yul W.	373
Yaniv, Shimrat	504
Yano, Shoichiro	007
Yap, Wn	709, 710 (E - Tocotrienol Manufacturer)
Yap, Yl	709, 710 (E - Tocotrienol Manufacturer)
Yarosh, D.	738
Yarosh, Daniel	348, 711, 718
Yasuda, Masahito	336
Yasukawa, Fumiko	328
Yeh, Peter E.	611
Yentzer, Brad A.	501
Yeung, Celestine	422

Yockey, Laura J.	817	Zhao, Ge Alice	184
Yokogawa, Maki	093, 099	Zhao, Liang	140, 457
Yokouchi, Mariko	277	Zhao, Ming	783
Yoon, Cheonjae	264	Zhao, Qiping	183 (E - Halozyme Therapeutics Inc.)
Yoon, Jimi	730	Zhao, Xinyi	449
Yoon, Juyong	485	Zhao, Yuming	652
Yoon, Na Young	028	Zheng, Dan	383, 798
Yoon, Tae Jin	267, 730, 731, 750	Zheng, Qian	370
Yoshida, Kazue	277	Zheng, Yuxiang	310
Yoshida, Masaki	711	Zhou, Bingrong	665, 673, 674, 675, 676
Yoshida, Takeshi	271, 637	Zhou, Jing	382
Yoshikawa, Harumi	265	Zhou, Jun	759
Yoshioka, Naoya	561	Zhou, Li	076, 344
Yoshioka, Tohru	497	Zhou, Qing	291
Yosipovitch, Gil	234, 299, 527, 546	Zhou, Wunan	818
You, Michael	180	Zhou, Xiaolong	378
Youm, Jong-Kyung	311, 320, 801	Zhou, Xin	776
Youn, Sung Hwan	085	Zhou, Youwen	107
Young, Andrew B.	044	Zhu, Rui	021
Young, Chen	552	Zhu, Yucui	133, 170
Young, Gregory	120, 692	Zhu, Zhao	326
Young, Howard A.	036	Zillikens, Detlef	053, 345, 686
Yousefi, Behnaz	482	Zimprich, Alexander	337
Yu, Benjamin D.	448, 461, 614	Zimprich, Friedrich	337
Yu, Mei	105	Zippin, Jonathan	081, 748
Yu, YiDing	490	Zirato, J.	775
Yue, Lili	824	Zitron, Christopher C.	461
Yun, Joung Yun	051 (E - LegoChemBioScience Co.)	Zjawiony, J.	735
Yuspa, Stuart H.	098, 123, 134, 266, 785	Zloty, David	105, 107
Yusuf, Nabiba	141, 149, 654, 769	Zmijewski, M. A.	735

Z

Zaghi, Daniel	227	Zöller, Nadja	282
Zaibi, Mohamed S.	201	Zone, John J.	062, 070
Zaidi, Raza	098	Zouboulis, Christos C.	327, 329, 331
Zakhary, Lisa	225	Zucchi, Helene	781
Zalewski, Chris	126	Zurawski, Gerard	584
Zalupski, M.	489	Zurawski, Sandra M.	584
Zambrano, H.	408, 426	Zvulunov, A.	401
Zane, Lee T.	505 (E - Anacor Pharmaceuticals)	Zwadlo-Klarwasser, Gabriele	681
Zedayko, Tara	550 (E - Johnson & Johnson)		
Zehnder, Ashley	396		
Zeitany, Alex	527		
Zeitouni, Nathalie C.	208, 209		
Zembowicz, Artur	459		
Zeng, Huiqing	444		
Zhai, Yongjiao	298, 379		
Zhan, Qian	768		
Zhan, Quian	576		
Zhang, Chuansen	783		
Zhang, Chunlei	479 (G, I - Allos Therapeutics)		
Zhang, Guofeng	266		
Zhang, Hong	579		
Zhang, Huayi	021		
Zhang, Jennifer	829		
Zhang, Jie	712 (G, E - Johnson & Johnson)		
Zhang, Jiyi	388		
Zhang, Lei	416, 466, 783		
Zhang, Li	441, 658 (E - Johnson & Johnson)		
Zhang, Mingfeng	223, 733		
Zhang, Qinghong	416		
Zhang, Tian	787		
Zhang, Xiang	479		
Zhang, Yu	068 (E, SH - Amgen)		
Zhang, Zhanyang	483		

SID GOVERNANCE

Abstract Reviewers

The SID is grateful to the following individuals for review of abstracts.

Committee on Scientific Programs

James T. Elder, MD/PhD, Co-Chair
Michael Girardi, MD, Co-Chair
Jack Arbiser, MD/PhD
Mitchell Denning, PhD
Anthony Gaspari, MD
Kathleen Green, PhD, *ex officio*
Russell P. Hall, MD, *ex officio*
Tom Hornyak, MD/PhD
My Mahoney, PhD
David Margolis, MD/PhD
Anthony Oro, MD/PhD
Julie Segre, PhD
Robert A. Swerlick, MD, *ex officio*

Ad Hoc Reviewers

Daniel Bikle, MD/PhD
Angela Christiano, PhD
Rachael Clark, MD/PhD
Jeffrey Davidson, PhD
Anna DiNardo, MD/PhD
Richard Eckert, PhD
Anand Ganesan, MD/PhD
Joel Gelfand, MD
Spiro Getsios, PhD
Valerie Horsley, PhD
Daniel Kaplan, MD/PhD
Santash Katiyar, PhD
Stuart Lessin, MD
Michelle Lowes, MD/PhD
Tom McCormick, PhD
Sarah Millar, PhD
Lloyd Miller, MD/PhD
Alice Pentland, MD
Brian Pollack, MD/PhD
Abrar Qureshi, MD/PhD
Michael Rendl, MD
Thomas Ruenger, MD/PhD
Eli Sprecher, MD/PhD
Maria Wei, MD/PhD
Victoria Werth, MD

Governance

Officers and Directors

Kathleen Green, PhD
President
Victoria Werth, MD
Vice President
Kim B. Yancey, MD
President-elect
Robert Modlin, MD
Vice President-elect
Richard Clark, MD
Immediate Past President

Robert A. Swerlick, MD
Secretary-Treasurer

Russell P. Hall, MD
Assistant Secretary-Treasurer

Paul Bergstresser, MD
JID Editor
Lowell Goldsmith, MD MPH
SID Senior Medical & Scientific Advisor

Directors

Angela Christiano, PhD
Lisa Beck, MD
Todd Becker, MD/PhD
Richard Eckert, PhD
Richard Gallo, MD/PhD
Jodi Johnson, PhD
Alexa Kimball, MD MPH
Andrew Kowalczyk, PhD
Brian Nickoloff, MD
Joyce Rico, MD
David Rubenstein, MD/PhD
Mark Udey, MD/PhD

Staff

Robyn Cipolletti
Director, Association Services

Tracy Martin
Manager, Membership and Association Services

Rebecca Minnillo, DM/MPA
Executive Director, Chief Program and Development Officer

Jim Rumsey
Executive Director, Chief Operating Officer

Carolyn Slade
Director, Meetings and Educational Programs

Journal Editors

Paul Bergstresser, MD
Editor-in-Chief

Angela Christiano, PhD
Deputy Editor

John McGrath, MD
Deputy Editor

Elizabeth Nelson Blalock
Managing Editor

Section Editors

Masayuki Amagai

Stefan Beissert

Andrew Blauvelt

Richard Clark

Meenhard Herlyn

Thomas Krieg

Ralf Paus

Thomas Schwarz

Robert A. Swerlick

Jouni Uitto
Martin Weinstock
Hywel Williams
Stuart Yuspa

Associate Editors

Rhoda Alani
Jack Arbiser
Boris Bastian
Lisa Beck
Jurgen Becker
Mark Berneburg
Luca Borradori
Vladimir Botchkarev
Joke Bouwstra
Paul Bowden
Jan Buer
Suephy Chen
Mary-Margaret Chren
Cheng-Ming Chuong
George Cotsarelis
Jeffrey Davidson
Robert Dellavalle
Mitchell Denning
Andrzej Dlugosz
Richard Eckert
James Elder
Kenneth Feingold
David Fisher
Gary Fisher
Lars French
Robert Fuhlbrigge
Anthony Gaspari
Neil Gibbs
Michel Gillet
Michael Girardi
Adam Glick
Kathleen Green
Christopher Griffiths
Gary Halliday
Michael Hertl
Sam Hwang
Rivkah Isseroff
Kenji Kabashima
Veli-Matti Kahari
Sarolta Karpati
Kenneth Katz
David Kelsell
Reinhart Kirnbauer
Robert Kirsner
Martin Kluger
Andrew Kowalczyk
Kenneth Kraemer
Gerald Krueger
Robert Lavker
Philip LeBoit
My Mahoney
David Margolis
Alain Mauviel
Estela Medrano
Maria Morasso
Luigi Naldi
Julia Newton Bishop
Tamar Nijsten

Amy Paller
Vincent Piguet
Ehrhardt Proksch
Jonathan Rees
Gabriele Richard
Martin Roecken
Axel Roers
Thomas Runger
Lynn Sakai
Stefan Schneider
Glynis Scott
Julia Segre
Hiroshi Shimizu
Braham Shroot
Jan Simon
Eli Sprecher
Martin Steinhoff
Robert Stern
John Sundberg
Akira Takashima
Marjana Tomic-Canic
Erwin Tschachler
Wendy Weinberg
Giovanna Zambruno
Xuejun Zhang

Standing Committees

Auditing Committee

Victoria Werth, MD, Chair, *ex officio*
Richard Eckert, MD
Richard Granstein, MD
Robert Modlin, MD, *ex officio*
George Stricklin, MD/PhD
Jim Rumsey, *Staff Liaison*

Committee on Education

Hensin Tsao, MD/PhD, Chair
Rachael Clark, MD/PhD
Spiro Getsios, PhD
Heidi Jacobe, MD
Jodi Johnson, PhD
Alan Moshell, MD
Carolyn Slade, *Staff Liaison*

Executive Committee

Paul Bergstresser, MD, *ex officio*
Angela Christiano, PhD
Richard Clark, MD
Lowell Goldsmith, MD MPH
Kathleen Green, PhD
Russell P. Hall, MD
Robert A. Swerlick, MD
Kim B. Yancey, MD
Rebecca Minnillo, *ex officio*
Jim Rumsey, *ex officio*

Former Members of the Board				
J. Anhalt	H. Baden	R. Baer	T. Fitzpatrick	1959
H. Beerman	R. Baer	I. Blank	H. Blank	1960
P. Bergstresser	E. Bauer	E. Van Scott	S. Epstein	1961
I. Bernstein	E. Bauer	E. Farber	H. Mescon	1962
D. Bickers	S. Becker, Sr.	A. Lerner	A. Kligman	1963
I. Blank	S. Becker, Sr.	W. Lever	I. Blank	1964
H. Blank	H. Beerman	W. Montagna	E. Van Scott	1965
J. Bolognia	P. Bergstresser	R. Winkelmann	E. Farber	1966
I. Braverman	I. Bernstein	G. Hambrick, Jr.	R. Stoughton	1967
R. Briggaman	D. Bickers	R. Goltz	W. Lever	1968
J. Callaway	I. Blank	R. Stoughton	W. Montagna	1969
D. Carter	H. Blank	C. Wheeler, Jr.	R. Winkelmann	1970
S. W. Caughman	J. Bolognia	J. Strauss	G. Hambrick, Jr.	1971
K. Cooper	I. Braverman	R. Dobson	N. Kanof	1972
T. Cornbleet	R. Briggaman	A. Kligman	A. Lorincz	1973
L. Cornelius	J. Callaway	G. Odland	I. Bernstein	1974
R. Crounse	D. Carter	J. Smith, Jr.	F. Daniels	1975
P. Cruz	S. W. Caughman	W. Sams, Jr.	A. Rostenberg	1976
B. Dale	K. Cooper	I. Freedberg	F. Hu	1977
L. Diaz	T. Cornbleet	L. Harber	R. Suskind	1978
C. Dillaha	L. Cornelius	R. Freinkel	F. Malkinson	1979
R. Dobson	R. Crounse	W. Epstein	J. Epstein	1980
M. Duvic	P. Cruz	D. Carter	K. Hashimoto	1981
W. Eaglstein	B. Dale	K. Wuepper	W. Quevedo	1982
A. Eisen	F. Daniels, Jr.	J. McGuire	L. Miller	1983
C. Dillaha	L. Diaz	A. Eisen	M. Karasek	1984
R. Dobson	C. Dillaha	H. Baden	P. Weary	1985
M. Duvic	R. Dobson	I. Gigli	M. Pathak	1986
W. Eaglstein	M. Duvic	E. Epstein, Jr.	P. Pochi	1987
A. Eisen	W. Eaglstein	I. Braverman	K. Fukuyama	1988
F. Ellis	A. Eisen	S. Katz	A. Moshell	1989
W. Epstein	F. Ellis	L. Goldsmith	R. Fleischmajer	1990
H. Foerster, Sr.	W. Epstein	E. Bauer	G. Weinstein	1991
C. Frazier	H. Foerster, Sr.	J. Voorhees	J. Kenney	1992
I. Freedberg	C. Frazier	G. Lazarus	T. Provost	1993
R. Freinkel	I. Freedberg	D. Norris	R. Jordon	1994
B. Gilchrest	R. Freinkel	B. Gilchrest	M. Dahl	1995
K. Fukuyama	B. Gilchrest	L. Diaz	J. Hanifin	1996
R. Geronomus	K. Fukuyama	J. Utto	N. Soter	1997
I. Gigli	R. Geronomus	D. Bickers	L. King, Jr.	1998
B. Gilchrest	I. Gigli	D. Roop	A. Briggaman	1999
J. Gilliam	B. Gilchrest	K. Cooper	B. Wintrob	2000
L. Goldman	J. Gilliam	J. Stanley	B. Jegasothy	2001
L. Goldsmith	L. Goldman	A. Pentland	K. Holbrook	2002
R. Goltz	L. Goldsmith	A. Paller	W. Weston	2003
R. Granstein	R. Goltz	T. Lawley	J. Bolognia	2004
K. Green	R. Granstein	R. Clark	J. Olerud	2005
R. Hall	K. Green		M. Tharp	2006
K. Halprin	R. Hall	Former Vice Presidents	A. Lane	2007
G. Hambrick	K. Halprin	J. Klauder	B. Shroot	2008
J. Hanifin	G. Hambrick	E. Abramowitz	M. Duvic	2009
L. Harber	J. Hanifin	H. Montgomery	G. Stricklin	2010
	L. Harber	E. Netherton		
		C. Finnerud		
		H. Foerster, Sr.		
		H. Beerman		
		H. Templeton		
		J. Lamb		
		M. Sullivan		
		G. Andrews		
		N. Anderson		
		J. Haserick		
		W. Lobitz, Jr.		
		F. Lynch		
		J. Wilson		
		S. Johnson		
		R. Baer		
Former Secretaries-Treasurers				
J. Hearndon	J. Hearndon	S. Becker, Sr.	1938-1939	K. Holbrook
K. Holbrook	J. Hopkins	J. Hopkins	1939-1947	J. Hopkins
J. Hopkins	S. Peck	S. Peck	1947-1949	R. Isseroff
R. Isseroff	H. Beerman	H. Beerman	1949-1964	G. Jansen
G. Jansen	G. Hambrick	G. Hambrick	1964-1969	B. Jegasothy
B. Jegasothy	J. Strauss	J. Strauss	1969-1974	S. Johnson
S. Johnson	W. Sams, Jr.	W. Sams, Jr.	1974-1979	H. Jones
H. Jones	K. Wuepper	K. Wuepper	1979-1984	R. Jordon
R. Jordon	E. Epstein, Jr.	E. Epstein, Jr.	1984-1989	S. Kang
S. Kang	D. Bickers	D. Bickers	1989-1999	S. Katz
S. Katz	P. Bergstresser	P. Bergstresser	1999-2004	J. Kenney
J. Kenney	S. W. Caughman	S. W. Caughman	2003-2008	L. King
L. King	A. Kligman			

J. Knox
 A. Kopf
 G. Krueger
 T. Kupper
 R. Lavker
 T. Lawley
 G. Lazarus
 L. Lee
 A. Lerner
 W. Lever
 G. Lewis
 W. Lobitz, Jr.
 A. Lorincz
 D. Lowy
 F. Lynch
 F. Malkinson
 J. McGuire
 R. Modlin
 W. Montagna
 H. Montgomery
 T. Nigra
 J. Nordlund
 G. Odland
 A. Paller
 F. Parker
 A. Pentland
 L. Peterson
 D. Pillsbury
 S. Pinnell
 P. Pochi
 T. Provost
 W. Quevedo
 T. Rea
 R. Reisner
 D. Roop
 A. Rostenberg, Jr.
 S. Rothman
 W. Shelley
 B. Shroot
 J. Smith, Jr.
 J. Stanley
 K. Stenn
 T. Sternberg
 J. Stokes
 R. Stoughton
 G. Stricklin
 A. Stuetz
 J. Strauss
 M. Sulzberger
 T.-T. Sun
 R. Suskind
 H. Templeton
 R. Tigelaar
 J. Uitto
 F. Urbach
 E. Van Scott
 J. Voorhees
 S. Way
 P. Weary
 G. Weinstein
 W. Weston
 C. Wheeler, Jr.
 J. Wilson
 R. Winkelmann
 B. Wintroub
 D. Woodley
 K. Wueller
 A. Zelickson

Former Resident/Post-Doctoral Fellow Directors
 J. Arbiser
 J. Bernhard
 M. Buxman
 S. Caughman
 K. Choate
 D. Chu
 J. Dechard
 J. Fenik
 R. Gallo
 J. Gelfand
 M. Goldyne
 R. Hall
 G. Herron
 D. Hurwitz
 S. Jamal
 J. Lee
 K. Lu
 M. P. Marinkovich
 J. McCarty
 T. Nguyen
 S. Orlow
 A. Oro
 B. Randazzo
 C. Robinson
 L. Sibrack
 R. Sontheimer
 F. Tausk
 R. S. Taylor
 P. Walker
 K. Yancey

Former Editors of the JID
 M. Sulzberger 1938-1948
 N. Kanof 1948-1967
 R. Stoughton 1967-1972
 I. Freedberg 1972-1977
 R. Freinkel 1977-1982
 H. Baden 1982-1987
 D. Norris 1987-1992
 E. O'Keefe 1992-1997
 C. Hauser 1997-2002
 L. Goldsmith 2002-2007

Association Members
Honorary Members
 H. Baden
 E. Beutner
 O. Braun-Falco
 I. Braverman
 A. Breathnach
 R. A. Briggaman
 W. Bullough
 H. D. Chen
 L. H. Chiung
 E. Christophers
 R. Degos
 R. Dobson
 R. Eady
 A. Eisen
 A. ElMofty
 J. Fernandez
 I. Freedberg
 R. Freinkel
 I. Gigli
 L. Goldsmith

R. Goltz
 M. Greaves
 H. Green
 G. Hambrick, Jr.
 F. Hu
 Y. Ishibashi
 S. Jablonska
 R. Jordon
 A. Kligman
 A. Kukita
 C. Lapierre
 G. Lazarus
 A. Lerner
 J. Leyden
 W. Lobitz, Jr.
 I. Magnus
 Y. Mishima
 T. Nishikawa
 S. Ofuji
 H. Ogawa
 M. Prunieras
 W. Quevedo, Jr.
 H. Rorsman
 W. Shelley
 S. Shuster
 F. Snyder
 D. Stevanovic
 J. Strauss
 H. Tagami
 N. Thyresson
 E. Van Scott
 P. Weary
 G. Weinstein
 C. Wheeler, Jr.
 K. Wolff
 K. L. Yang

1991 Robert Goltz
 1992 Irwin Freedberg
 1993 Arthur Eisen
 1994 Ruth Freinkel
 1995 Howard Baden
 1996 Irma Gigli
 1997 Stephen Katz
 1998 Klaus Wolff
 1999 Lowell Goldsmith
 2000 Richard Dobson
 2001 Robert Briggaman
 2002 Eugene Bauer
 2003 Georg Stingl
 2004 Stuart Yuspa
 2005 John Voorhees
 2006 Thomas Lawley
 2007 Barbara Gilchrest
 2009 Luis Diaz
 2010 Dennis Roop

Naomi M. Kanof Clinical Investigator Award
This award is given to enlighten present and future workers about the importance of clinical investigation. It honors an individual who has made significant contributions to our understanding of clinical medicine.

1993 Alvan Feinstein
 1994 R. Michael Blaese
 1995 Judah Folkman
 1996 Jean Wilson
 1997 C. Garrison Fathman
 1998 Jeffrey Bluestone
 1999 Brian Strom
 2000 William Kelley
 2001 James Ostell
 2002 Leena Peltonen
 2003 Judith Campisi
 2004 Brian Druker
 2005 Joseph Nadeau
 2006 John Schiller
 2007 Thomas Pearson
 2009 Mahlon DeLong
 2010 Douglas Lowy

SID Awards
Stephen Rothman Memorial Award Recipients
Presented for distinguished service to investigative cutaneous medicine.

1967 Marion Sulzberger
 1968 Donald Pillsbury
 1969 Harvey Blank
 1970 Thomas Fitzpatrick
 1971 Aaron Lerner
 1972 William Montagna
 1973 Rudolf Baer
 1974 Hermann Pinkus
 1975 Eugene Van Scott
 1976 Albert Kligman
 1977 Irvin Blank
 1978 George Odland
 1979 Clayton Wheeler, Jr.
 1980 Clarence Livingood
 1981 Isadore Bernstein
 1982 J. Lamar Callaway
 1983 Richard Stoughton
 1984 A Gedeon Matoltsy
 1985 Herman Beerman
 1986 Otto Braun-Falco
 1987 Walter Shelley
 1988 John Strauss
 1989 Walter Lobitz, Jr.
 1990 Walter Lever

1999 Eli Gilboa
 1999 Stephen Johnston
 1999 Jeffrey Trent
 2000 Nigel Bennett
 2000 Ronald Crystal
 2000 Ralph Steinman
 2001 Roland Martin
 2002 Gerald Crabtree
 2004 Adrian Hayday
 2005 Polly Matzinger
 2006 Alexander Rudensky
 2007 Donald Y.M. Leung
 2009 Jamey Marth
 2010 Rafi Ahmed

Julius Stone Lectureship
This award is intended to promote the advancement of knowledge in immunology as it relates to the skin and skin disease.

William Montagna Lectureship		1980	Phil Leder
<i>This annual award is intended to honor and reward young active investigators. Primary emphasis is given to researchers in skin biology.</i>		1981	Pedro Cuatrecasas
1975	Kenneth Halprin	1982	Frank Ruddle
1976	Frank Parker	1983	Lawrence Lichtenstein
1977	Arthur Eisen	1984	Robert Gallo
1978	Irma Gigli	1985	Thomas Waldmann
1979	Marvin Karasek	1986	Torsten Wiesel
1980	Irwin Freedberg	1987	Leroy Hood
1981	Stephen Katz	1988	Joseph Goldstein
1982	John Parrish	1989	Pierre Chambon
1983	Douglas Lowy	1990	Ronald Herberman
1984	Gerald Lazarus	1991	K. Frank Austen
1985	Eugene Bauer	1992	Bert Vogelstein
1986	Georg Stingl	1993	Charles Janeway, Jr.
1987	Jouni Uitto	1994	Solomon Snyder
1988	Stuart Yuspa	1995	Eric Lander
1989	Tung-Tien Sun	1996	Irving Weissman
1990	Karen Holbrook	1997	Michael Karin
1991	Luis Diaz	1998	Günter Blobel
1992	Dennis Roop	1999	Philippa Marrack
1993	Ervin Epstein, Jr.	2000	Robert Langer
1994	John Stanley	2001	William Haseltine
1995	Elaine Fuchs	2002	Ronald DePinho
1996	Thomas Kupper	2003	Thomas Jessell
1997	Barbara Gilchrest	2004	Robert Weinberg
1998	Robert Modlin	2005	Timothy Ley
1999	Fiona Watt	2006	Amita Sehgal
2000	Thomas Luger	2007	Stuart Schreiber
2001	Peter Elias	2009	Daniel Kastner
2002	Kathleen Green	2010	Raymond Schinazi
2003	Masayuki Amagai	Eugene M. Farber Psoriasis Research Award	
2004	Akira Takashima	2003	David Jones
2005	Paul Khavari	2004	Thomas McCormick
2006	Richard Gallo	2005	Edmund Lee
2007	George Cotsarelis	2006	Michael Allen
2008	Pierre Coulombe	2007	Curdin Conrad
2009	Angela Christiano	2008	Shigetoshi Sano
2010	W. H. Irwin McLean	2009	Helen Young
Herman Beerman Lectureship		2009	Amos Gilhar
<i>This lecture is given by a distinguished medical scholar, traditionally from fields other than dermatology.</i>		2007	Rajan Nair
1961	Rene Dubos	2008	Enno Christophers
1962	Hans Selye	2009	James T. Elder
1963	Rupert Billingham	2010	James Krueger
1964	Curt Stern	Albert M. Kligman / Phillip Frost Leadership Lecture & Award	
1965	Albert Szent-Gyorgyi	2008	Jouni Uitto
1966	Jerome Gross	2009	Stephen Katz
1967	G.J.V. Nossal	2010	John R. Stanley
1968	John Buettner-Janusch	SID/Galderma Acne Research Award	
1969	Henry Kunkel	2002	Diane Thiboutot
1970	Norman Wessells	2003	Jenny Kim
1971	Aiden Breathnach	2004	Michaela Downie
1972	Frank Dixon	2005	Andrzej Dlugosz
1973	H. Hugh Fudenberg	2006	Sewon Kang
1974	Charles Cochran	2007	Philip Liu
1975	David Katz	SID/Galderma Rosacea Research Award	
1976	Bert O'Malley	2009	Kenshi Yamasaki
1977	Russell Ross		
1978	Hilary Koprowski		
1979	Michael Brown		



NOTES

Notes

NOTES



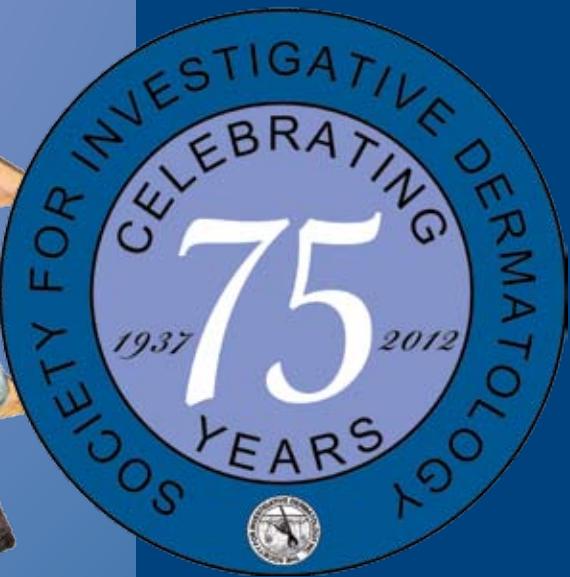
Society for
Investigative
Dermatology

Join us in Raleigh, North Carolina
for the
2012 SID Annual Meeting

&

Celebration of the SID's
75th Anniversary

May 9 - 12, 2012
Raleigh Convention Center



CE.R.I.E.S. RESEARCH AWARD

The Epidermal and Sensory Research and Investigation Center, the CE.R.I.E.S., is the healthy skin research center of Chanel Research and Technology based in Paris, France. It aims to better understand the structure and function of healthy skin through clinical studies carried out at its laboratories and fundamental research projects performed in collaboration with leading researchers worldwide.



The CE.R.I.E.S. Research Award of 40,000 € is intended to honour a scientific researcher with a proven track record in fundamental or clinical research work, for a one year period, on the subject of:

PHYSIOLOGY OR BIOLOGY OF HEALTHY SKIN AND/OR ITS REACTIONS TO ENVIRONMENTAL FACTORS

The awardee will be selected by an international jury consisting of the members of the Scientific Advisory Board of the CE.R.I.E.S.

Previous CE.R.I.E.S. Research Award Winners:

2011	To be determined
2010	Howard Y. Chang, M.D., Ph.D., Stanford, USA
2009	Sabine Werner, Ph.D., Zurich, Switzerland
2008	Paul A. Khavari, M.D., Ph.D., Stanford, USA
2007	Richard L. Gallo, M.D., Ph.D., San Diego, USA
2006	Irwin Mc Lean, Ph.D., DSc, FRSE, Dundee, Scotland, UK
2005	Masayuki Amagai, M.D., Ph.D. Tokyo, Japan
2004	Thomas Schwarz, M.D. Kiel, Germany
2003	Angela M. Christiano, Ph.D., New York, USA
2002	Dennis R. Roop, Ph.D., Houston, USA
2001	Fiona M. Watt, D. Phil., London, UK
2000	Michael Karin, Ph.D., San Diego, USA
1999	Jonathan Rees, M.D., Edinburgh, UK
1998	Jean Krutmann, M.D., Düsseldorf, Germany
1997	Jens-Michael Schröder, Ph.D., Kiel, Germany
1996	Akira Takashima, M.D., Ph.D., Dallas, USA

Deadline for applications: June 3rd, 2011

Requests for application forms must be addressed to:
www.ceries.com