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ACKNOWLEDGEMENTS
The organizers of the 2019 SID Annual Meeting gratefully acknowledge the sponsors, exhibitors, and participants whose attendance has helped to make this meeting possible.
Welcome to Chicago

I’d like to personally welcome each of you to the Society for Investigative Dermatology (SID) Annual Meeting. This year marks our 77th meeting in our 81st year. Chicago is a fitting place for our global community to convene. Chicago has been central to the growth and history of the United States. It’s central location upon waterways and connecting railroads propelled its economic growth. It bridges the eastern part of the US with the western half. Furthermore, events in Chicago have bridged our earlier history with contemporary events. One of Illinois most famous citizens, Abraham Lincoln was nominated as a candidate for President in 1860 at the Republican Convention hosted in Chicago, initially ushering in a transformational process of emancipation and inclusion, still a work in process today.

Like Chicago, the SID also serves as a connector and bridge. The SID is a central knowledge hub for interested in the study of skin health and disease, connecting basic researchers, clinicians, and trainees. The global community catalyzed by the SID continues to grow and evolve and the SID maintains its commitment to serve as the premier forum for the exchange of knowledge, advancing the cutting edge of the science cutaneous biology and skin therapeutics.

We anticipate a record number of attendees and presenters, hailing from nearly 30 countries, and representing specialties and disciplines ranging from Dermatology and Immunology, to Biomedical Engineering, Cell Biology and Genetics. We remain committed to nurturing a diverse community of skin biologists who can exchange information during our educational sessions in order to accelerate discovery. As we complete the second decade of the 21st Century, we look to our host city to inspire us to cultivate a culture of collegiality, inclusion and maintain our collective spirit of inquiry. I am so thrilled that you are here.

Robert A. Swerlick, MD
SID President
Meeting-At-A-Glance

TUESDAY, MAY 7, 2019
12:00 PM — 7:30 PM
Satellite Symposium on Skin Epigenetics
CONTINENTAL BALLROOM A

4:00 PM — 7:00 PM
Resident/PhD Retreat Sessions: By Invitation Only
MARQUETTE ROOM

WEDNESDAY, MAY 8, 2019
6:45 AM — 7:30 AM
Resident/PhD Retreat Breakfast: By Invitation Only
JOLIET ROOM

7:30 AM — 12:00 PM
Resident Retreat Program: By Invitation Only
MARQUETTE ROOM

7:30 AM — 12:00 PM
PhD Retreat Program: By Invitation Only
ASTORIA ROOM

11:00 AM — 7:00 PM
On-Site Registration
8TH ST. S. REGISTRATION AREA

2:00 PM — 4:30 PM
Translational Science Symposium: Single Cell Analysis:
Insights into Disease
INTERNATIONAL BALLROOM NORTH

2:00 PM — 4:30 PM
Advancing Innovation in Dermatology:
Translational Research and Academic - Industry Partnership
INTERNATIONAL BALLROOM SOUTH

4:30 PM — 5:30 PM
Clinical/Outcomes Scholars: Diving Skin-Deep into
Databases and Inflammation
INTERNATIONAL BALLROOM NORTH

5:30 PM — 5:45 PM
President’s Welcome
ROBERT A. SWERLICK, MD
INTERNATIONAL BALLROOM NORTH

5:45 PM — 6:15 PM
Naomi M. Kanof Lecture: The Significance of
Dermatology Outcomes Research – Beyond the
H-Index and Impact Factor
SUEPHY CHEN, MD/MS
INTERNATIONAL BALLROOM NORTH

6:30 PM — 8:30 PM
Welcome Reception
NORMANDIE LOUNGE

THURSDAY, MAY 9, 2019
7:00 AM — 6:00 PM
On-Site Registration
8TH ST. S. REGISTRATION AREA

7:30 AM — 8:30 AM
Irvin H. Blank Forum I:
Extracellular Vesicles in Cutaneous Homeostasis and Disease
INTERNATIONAL BALLROOM NORTH
Meeting-At-A-Glance

FRIDAY, MAY 10, 2019

7:00 AM — 7:00 PM
On-Site Registration
8TH ST. S. REGISTRATION AREA

7:30 AM — 8:30 AM
Irvin H. Blank Forum II: Modern Genetic Analysis Applied to Cutaneous Cancer
INTERNATIONAL BALLROOM NORTH

8:45 AM — 9:00 AM
American Skin Association (ASA) Awards
INTERNATIONAL BALLROOM NORTH

9:00 AM — 9:30 AM
Business Meeting for Members
INTERNATIONAL BALLROOM NORTH

9:30 AM — 9:45 AM
Stephen Rothman Memorial Award
RICHARD EDELSON, MD
INTERNATIONAL BALLROOM NORTH

9:45 AM — 10:45 AM
Plenary Session II
INTERNATIONAL BALLROOM NORTH

10:45 AM — 11:45 AM
Selected ePoster Discussions II
SEE PAGES 80-84 FOR ROOM LISTINGS

11:15 AM — 1:15 PM
Poster Session II/Coffee Break
STEVENS SALONS B/C/D
SEE PAGE 13 FOR POSTER NUMBER LISTINGS

11:45 AM — 1:15 PM
AbbVie Sponsored Symposium Hidradenitis Suppurativa: Translating Mechanisms and Basic Science into Improved Therapies
INTERNATIONAL BALLROOM NORTH

11:45 AM — 12:45 PM
Selected ePoster Discussions III
SEE PAGES 86-90 FOR ROOM LISTINGS

1:30 PM — 2:00 PM
Herman Beerman Lecture: Understanding People
ALEX PENTLAND, PHD
INTERNATIONAL BALLROOM NORTH

2:00 PM — 2:30 PM
Eugene M. Farber Lecture: Towards Precision Therapeutics: A Systems Approach to Understanding Psoriasis Plaque Resolution and Endotype Analysis
NICK REYNOLDS, MD
INTERNATIONAL BALLROOM NORTH

2:45 PM — 5:15 PM
Concurrent Minisymposium 7: Carcinogenesis and Cancer Genetics
CONTINENTAL BALLROOM A

2:45 PM — 5:15 PM
Concurrent Minisymposium 8: Epidemiology
INTERNATIONAL BALLROOM NORTH

2:45 PM — 5:15 PM
Concurrent Minisymposium 9: Epidermal Structure and Barrier Function
INTERNATIONAL BALLROOM SOUTH

2:45 PM — 5:15 PM
Concurrent Minisymposium 10: Neuro-Cutaneous Biology and Inflammation
CONTINENTAL BALLROOM C

2:45 PM — 5:15 PM
Concurrent Minisymposium 11: Pharmacology and Drug Development
CONTINENTAL BALLROOM B

2:45 PM — 5:15 PM
Concurrent Minisymposium 12: Skin of Color
WALDORF ROOM

5:45 PM — 6:15 PM
State-of-the-Art Plenary Lecture III: Skin Microbiome: Opposing Roles in Barrier Function, Inflammation and Repair
ELIZABETH GRICE, PHD
INTERNATIONAL BALLROOM NORTH

6:15 PM — 6:45 PM
State-of-the-Art Plenary Lecture IV: Mining Nature’s Chemistry: Ethnobotany and Drug Discovery for Dermatologic Applications
CASSANDRA QUAVE, PHD
INTERNATIONAL BALLROOM NORTH

7:00 PM — 9:00 PM
Young Investigator Collegiality Reception: Ticketed Event
PRE-REGISTRATION REQUIRED
JOLIET & MARQUETTE

SATURDAY, MAY 11, 2019

7:00 AM — 12:00 PM
On-Site Registration
8TH ST. S. REGISTRATION AREA

8:00 AM — 8:30 AM
Albert M. Kligman/Phillip Frost Leadership Lecture: 25 Years of Riding the Hair Wave
GEORGE COTSARELIS, MD
INTERNATIONAL BALLROOM NORTH

8:30 AM — 9:30 AM
Plenary Session III
INTERNATIONAL BALLROOM NORTH

9:30 AM — 10:00 AM
Diversity and Inclusion Session
INTERNATIONAL BALLROOM NORTH

10:00 AM — 12:30 PM
Concurrent Minisymposium 13: Innate Immunity, Microbiology, Microbiome
INTERNATIONAL BALLROOM NORTH

10:00 AM — 12:30 PM
Concurrent Minisymposium 14: Pigmentation and Melanoma
INTERNATIONAL BALLROOM SOUTH

10:00 AM — 12:30 PM
Concurrent Minisymposium 15: Skin, Appendages, and Stem Cell Biology
CONTINENTAL BALLROOM B

10:00 AM — 12:30 PM
Concurrent Minisymposium 16: Tissue Regeneration and Wound Healing
CONTINENTAL BALLROOM C

10:00 AM — 12:30 PM
Concurrent Minisymposium 17: Translational Studies
CONTINENTAL BALLROOM A

12:45 PM — 2:45 PM
Poster Session III/Coffee Break
STEVENS SALONS B/C/D
SEE PAGE 13 FOR POSTER NUMBER LISTINGS
Associate Groups: Meeting-At-A-Glance

TUESDAY, MAY 7, 2019

12:00 PM – 5:30 PM
International Pachyonychia Congenita Consortium (IPCC)
IPCC Symposium
CONTINENTAL BALLROOM B

12:00 PM – 7:30 PM
Satellite Symposium on Skin Epigenetics
CONTINENTAL BALLROOM A

WEDNESDAY, MAY 8, 2019

7:30 AM – 2:00 PM
International Pachyonychia Congenita Consortium (IPCC)
IPCC Symposium
CONTINENTAL BALLROOM B

9:00 AM – 1:00 PM
International Psoriasis Council (IPC)
Cardiovascular Disease in Psoriasis: a Changing Paradigm
CONTINENTAL BALLROOM A

9:00 AM – 12:00 PM
International Society for Cutaneous Lymphomas (ISCL)
ISCL Cutaneous T Cell Lymphoma Symposium
INTERNATIONAL BALLROOM SOUTH

10:00 AM – 2:00 PM
American Acne & Rosacea Society (AARS)
8th Annual AARS Scientific Luncheon Symposium
WALDORF ROOM

11:00 AM – 2:00 PM
International Eczema Council (IEC)
International Eczema Council Symposium
CONTINENTAL BALLROOM C

THURSDAY, MAY 9, 2019

7:00 AM – 8:30 AM
Journal of Dermatological Science
JDS Editorial Board Meeting
MCCORMICK BOARDDROOM

7:00 AM – 8:30 AM
University of Washington School of Medicine
Photobiology Symposium
CONTINENTAL BALLROOM A

7:00 AM – 8:30 AM
Medical Dermatology Society (MDS)
MDS Symposium
CONTINENTAL BALLROOM B

5:30 PM – 6:30 PM
American Dermato-Epidemiology Network (ADEN)
BOULEVARD BALLROOM B

5:30 PM – 6:30 PM
International Eczema Council Industry Liaisons Meeting
BOULEVARD BALLROOM C

5:30 PM – 6:30 PM
International Immunosuppression & Transplant Skin Cancer Collaborative: Transplant Dermatology Symposium
CONTINENTAL BALLROOM C

5:30 PM – 6:30 PM
National Psoriasis Foundation
National Psoriasis Foundation Reception
ASTORIA ROOM

FRIDAY, MAY 10, 2019

7:00 AM – 8:30 AM
Society for Pediatric Dermatology/PeDRA
Pediatric Dermatology at SID
CONTINENTAL BALLROOM B

7:00 AM – 8:30 AM
Women’s Dermatologic Society
WDS Networking Breakfast & Panel Discussion
CONTINENTAL BALLROOM A

7:00 AM – 10:00 PM
Research in Cutaneous Surgery (RCS)
Research in Cutaneous Surgery Symposium
CONTINENTAL BALLROOM C

7:00 PM – 10:00 PM
debra of America
debra of America’s EB Symposium
CONTINENTAL BALLROOM C

7:00 PM – 10:00 PM
American Hair Research Society
American Hair Research Society Scientific Meeting & Annual General Meeting
INTERNATIONAL BALLROOM NORTH

SATURDAY, MAY 11, 2019

7:00 AM – 9:00 AM
National Alopecia Areata Foundation
NAAF Research Advisory Council Meeting
PDR ROOM 4

1:00 PM – 4:00 PM
Chinese Society for Investigative Dermatology
Research Forum
WALDORF ROOM
Notable Annual Meeting Programming

**Translational Science Symposium**
Wednesday, May 8, 2019  2:00 PM – 4:30 PM
INTERNATIONAL BALLROOM NORTH

The SID will feature the “Translational Science Symposium on Single Cell Analysis: Insights into Disease”. This dynamic session will feature novel methods employed by researchers to gain insight into wound healing, epidermal cell development, blood immune cells, the follicular stem cell niche, and tumor-specific T cells.

**Clinical/Outcomes Scholars**
Wednesday, May 8, 2019  4:30 PM – 5:30 PM
INTERNATIONAL BALLROOM NORTH

The Clinical/Outcomes Scholars, “Diving Skin-Deep into Databases, Inflammation, and Immunity”, will feature presentations on how to leverage large data sets, under-researched diseases such as Hidradenitis Suppurativa, and the relationship between glucose transport and metabolism and serious skin diseases.

**Selected ePoster Discussions**
Thursday, May 9, 2019  11:15 AM – 12:15 PM
Friday, May 10, 2019  10:45 AM – 11:45 AM & 11:45 AM – 12:45 PM

See room listings in individual daily tabs

In an effort to further increase participation and visibility of abstracts submitted, selected ePoster Discussions will take place during Poster Sessions at iPad terminals located inside various session rooms. The discussions will be thematic tours of selected electronic posters accompanied by a presenting author.

**Social Event – Museum of Science and Industry (MSI)**
Thursday, May 9, 2019  7:00 PM – 10:30 PM

This is a ticketed event and space is limited. Buses begin departures to MSI starting at 6:30 PM.

The 2019 Annual Meeting’s Social Event will take place at the Museum of Science & Industry, Chicago. One of the largest science museums in the world—it is home to more than 400,000 square feet of hands-on exhibits designed to spark scientific inquiry and creativity. Explore, dance and socialize with your fellow scientists while enjoying Taste of Chicago food stations and beer and wine.

**Young Investigator Collegiality Reception**
Friday, May 10, 2019  7:00 PM – 9:00 PM
Joliet and Marquette Rooms, Hilton Chicago

This is a ticketed event and space is limited.

The organizers of the 2019 SID Annual Meeting have arranged for a private reception for those registered as Resident’s, Post-Doc’s, and Students. The evening will feature food, drink, and the opportunity to informally network with your peers.
Going Mobile

Navigate the 2019 SID Annual Meeting from your mobile device! In partnership with Cadmium CD, the SID is proud to present the 2019 Annual Meeting mobile event app.

This year’s app will make it easy for attendees, exhibitors, and speakers to connect. Attendees can access their personal schedules right from the palm of their hand.

Download the 2019 SID Annual Meeting Mobile app from the Apple iTunes and the Google Play Stores.

The event app can be found by searching for “MyItinerary by ScholarOne”. Download the app and then select SID 2019 from the event list. Select Download to open the event.
CME Statement and Objectives

The University of Rochester School of Medicine and Dentistry presents:

COMMERCIAL SUPPORT STATEMENT
Commercial Support Acknowledgment: This CME activity is supported by educational grants. A complete list of supporters will be published in the course syllabus.

STATEMENT OF NEED
The educational Programming of the 2019 SID MEETING is designed to develop, maintain, and/or increase the abilities, skills, and professional performance of its target audiences. 2019 SID MEETING 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 of skin disease.

TARGET AUDIENCE
The primary target audiences for 2019 SID MEETING 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.

LEARNING OBJECTIVES
At the conclusion of this activity, participants should be able to:
• Identify which disease states require new or additional research
• Evaluate state-of-the-art information relating to basic skin biology research
• Describe how newly discovered, evidence-based scientific information may or may not be applied to the current practice of investigative or clinical dermatology
• Apply strategies to structure and design successful research proposals, abstracts, and manuscripts
• Facilitate interdisciplinary and/or collaborative investigation in clinical dermatology and skin biology to improve research hypotheses, processes and/or techniques
• Incorporate knowledge gained from interactions between basic scientists and clinicians into daily decision-making

FACULTY LISTING
Activity Medical Director: Alice P. Pentland, MD Chair, Department of Dermatology University of Rochester

SUMMARY OF FACULTY DISCLOSURE/CONFLICT RESOLUTION
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 University of Rochester School of Medicine and Dentistry will implement 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.

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The University of Rochester 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.

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. To access the Program evaluation, claim CME credits, or print your certificate, please go to www.cme.urmc.edu and select “My Certificate.” From the course listing, please find the course you attended.

ACCREDITATION STATEMENT
This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the University of Rochester School of Medicine and Dentistry and the Society for Investigative Dermatology. The University of Rochester School of Medicine and Dentistry is accredited by the ACCME to provide continuing medical education for physicians.

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Erle Dang, Ph.D., Grant/Research Support: National Natural Science Foundation of China, tatsuya dokoshi, Ph.D., Grant/Research Support: NIH

Lawrence F. Eichenfield, MD, Grant/Research Support: LEO Pharma; Sanofi/Regeneron, Consultant, Allergan; Anacor/Pfizer; Dermavant; Dermira; DS Biopharma; Forte; Galderma Incyte; LEO Pharma; Lilly, Matrisys, Medistremis/Otsuka; Menlo; Novan; Novartis; Regeneron; Sanofi/Genzyme; TopMD; Ortho Dermatologics, Speakers’ Bureau, Regeneron; Sanofi/Genzyme, Marlys Fassett, MD, PhD, Consultant, Regeneron, Other Financial or Material Support, Sanofi, Michael Fessing, PhD, Grant/Research Support: Unilever UK,

*Spiro Getios, PhD, Major Stockholder: GlaxoSmithKline, Axis Biosystems Elizabeth Grice, PhD, Consultant, Unilever, Emma Guttman, MD, PhD, Grant/Research Support: AbbVie, Asana Bioscience, Celgene, DBV, Dermavant, DS Biopharma, Galderma, Glenmark, Innovaderm, Janssen Biotech, LEO Pharmaceuticals, Lilly, Novan, Novartis, Ralexar, Regeneron, Pfizer, Union Therapeutics, Consultant, AbbVie, Amgen, Allergan, Asana Bioscience, Celgene, Concert, Dermira, DS Biopharma, Escalier, Galderma, Glenmark, Kyowa Kirin, LEO Pharmaceuticals, Lilly, Mitsubishi Tanabe, Novartis, Pfizer, Regeneron, Sanofi, Union Therapeutics, Board membership: Allergan, Anasa Bioscience, Celgene, DBV, Dermavant, Dermira, Escalier, Galderma, Glenmark, Kyowa Kirin, LEO Pharma, Lilly, Novartis, Pfizer, Regeneron, Sanofi

Nikolas Haass, MD, PhD, Grant/Research Support: Scientific Research Fund Project Grant “Improving Immune Checkpoint Therapy of Melanoma” (CIA N.K. Haass), Australasian College of Dermatologists, 1/9/2018-3/8/2019 (AU$ 25,000) Project Grant APP1165618 “Induction of endoplasmic reticulum stress to potentiate immunogenic cell death to improve melanoma therapy” (CIA N.K. Haass), Cancer Council Queensland, 1/1/2019-12/31/2020 (AU$ 200,000 for two years), n/a, n/a, n/a, Other Financial or Material Support, n/a, n/a

*Tiss Hata, MD, Grant/Research Support: Dermira, Colgate, Galderma, Janssen,Eli Lilly, Glaxosmithkline, Vanda, Pfizer, Bristol Meyers Squibb; Consultant: AbbVie

Hisato Iriki, Research associate, Grant/Research Support: LEO Pharma Research Foundation,

*Daniel Kaplan, MD, PhD, Consultant: DMSB Hapten Pharmaceuticals, Consultant Eli Lilly Brian Kim, MD, MTR, Grant/Research Support: LEO Pharma Research Grant, Consultant, AbbVie, Cara, Menlo, Pfizer, and Regeneron, Major Stock Shareholder, LEO Pharma, Founder and Chief Scientific Officer of Nurogen Pharma Joanna Kreitinger, PhD, Grant/Research Support: Partially supported by NIH NINDS Grant Number: 2R44AR069416, *Ethan A. Lerner, MD, PhD, Grant/Research Support Derma, Pfizer; Consultant Merck; Major Stock Shareholder Lerner Medical Devices; Scientific Advisory Board: Escent, Sienna Biopharmaceuticals Tomoko Maeda-Chubachi, MD, PhD, Grant/Research Support: The research was funded by Novan, Inc, Other (please identify), Employee of Novan, Inc Kayleigh Mason, MD, PhD, Grant/Research Support: The British Association of Dermatologists Biologics and Immunomodulators Register (BADBIR) is coordinated by the University of Manchester and funded by the British Association of Dermatologists (BAD). The BAD receives income from by AbbVie, Almirall, Celgene, Eli Lilly, Hexal AG, Janssen Cilag, Novartis, Pfizer, and Samsung Bioepis for providing pharmacovigilance services. This income finances a separate contract between the BAD and the University of Manchester who coordinate BADBIR. All decisions concerning analysis, interpretation, and publication are made independently of any industrial contribution, *Speakers’ Bureau, I (Kayleigh Mason) have received honoraria from Eli Lilly and Janssen Cilag.

Zamaneh Mihak, MD, Other Financial or Material Support, Employee of Kiniksa Pharmaceuticals,

*Lloyd Miller, MD, PhD, Grant/Research Support: MedImmune, Boehringer Ingelheim, Pfizer, Regeneron Pharmaceuticals, Moderna Therapeutics; Major Stock Shareholder: Novocea Biotherapeutics: Scientific Advisory Board: Integrated Biotherapeutics Cassandra Quave, PhD, Grant/Research Support: NatureX iHealth The Coca Cola Company Alira Health, Consultant, The Coca Cola Company, Other (please identify), PhytoTEK LLC (CEO of startup company Vijay Ramani, PhD, VA, Maiko Sasaki, M.S., Grant/Research Support: National Institute of Health, Tiffany Scharschmidt, M.D., Other Financial or Material Support, Speaker honoraria: Nestle Skin Health SHIELD and Sanofi Regeneron, Takashi Shimbo, PhD, Other Financial or Material Support, StemRIM Shionogi, Jonathan Silverberg, MD, PhD, MPH, Grant/Research Support: Galderma, Pfizer, Research, Consultant, Abbvie, AnapitsBio, Asana, Arena, Boehringer-Ingelheim, Dermavant, Eli Lilly, Galderma, GlaxoSmithKline, Glenmark, Incyte, Kiniksa, Leo, Menlo, Novartis, Pfizer, Regeneron-Sanofi, Realm, Speakers’ Bureau, Regeneron-Sanofi, Junko Takeshita, MD PhD MSCE, Grant/Research Support: Pfizer Inc (to the Trustees of the University of Pennsylvania), Viktor Todorovic, PhD, Grant/Research Support: AbbVie, Inc, *Marjana Tomic-Conic, PhD, Grant/Research Support: MV Tissues, Osiris; Consultant: Molinlycke

*Kenneth Y. Tsai, MD, PhD, Consultant: Skincential, Inc., NFlection Therapeutics, Inc., Merck Sharp & Dohme, Inc.

Matthew Vesely, MD, PhD, Other (please identify), Spouse is an employee at Regeneron Pharmaceuticals

Nicole Ward, PhD, Consultant, Thync, Other Financial or Material Support, Eli Lilly, Amgen, Victoria Werth, MD, Grant/Research Support: Corbus Pharmaceuticals,

Vijay Ramani, PhD, VA, Maiko Sasaki, M.S., Grant/Research Support: National Institute of Health, Tiffany Scharschmidt, M.D., Other Financial or Material Support, Speaker honoraria: Nestle Skin Health SHIELD and Sanofi Regeneron, Takashi Shimbo, PhD, Other Financial or Material Support, StemRIM Shionogi, Jonathan Silverberg, MD, PhD, MPH, Grant/Research Support: Galderma, Pfizer, Research, Consultant, Abbvie, AnapitsBio, Asana, Arena, Boehringer-Ingelheim, Dermavant, Eli Lilly, Galderma, GlaxoSmithKline, Glenmark, Incyte, Kiniksa, Leo, Menlo, Novartis, Pfizer, Regeneron-Sanofi, Realm, Speakers’ Bureau, Regeneron-Sanofi, Junko Takeshita, MD PhD MSCE, Grant/Research Support: Pfizer Inc (to the Trustees of the University of Pennsylvania), Viktor Todorovic, PhD, Grant/Research Support: AbbVie, Inc, *Marjana Tomic-Conic, PhD, Grant/Research Support: MV Tissues, Osiris; Consultant: Molinlycke

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Nicole Ward, PhD, Consultant, Thync, Other Financial or Material Support, Eli Lilly, Amgen, Victoria Werth, MD, Grant/Research Support: Corbus Pharmaceuticals,
SID Retreat Attendees & Travel Awardees

2019 ALBERT M. KLIGMAN/SID TRAVEL FELLOWSHIP Awardees

Sarah Ahmed
Allison Billi, MD/PhD
Morgan Brown
Laura Cau, PhD
Srita Chakka
Yiyin Chen, MD/PhD
Raj Chovatiya, MD/PhD
Jonathan Cohen
Megan Cole, PhD
Michael Cross
Yan-Hong Cui, PhD
K. Sanjana Devi, PhD
Nicole Diette, PhD
Danni Dong
Robert Dorschner, MD
Amarachi Eseonu, MD
Victoria Fang, PhD
Michelle Ferreira
Ruben Ferrer, MD/PhD
Khalid Garman, MD/PhD
Soha Ghanian
Adam Gilmore
Amrita Goyal, MD
Linna Guan
Rupali Gund, PhD
Chelsea Handfield
Natasha Hill, PhD
Alexander Hinbest, MSc/BSc
Toshiro Hirai, PhD
Daniel Hlavaty
Allen Ho, MD/PhD
Anna Jussila, PhD
Masaoki Kawasumi, MD/PhD
Dongwon Kim, PhD
Matthew Brewer, PhD
Jeff Gehlhausen, MD/PhD
Aayushi Uberoi, PhD
Rosa Ventrella, PhD
Ha Linh Vu, MD/PhD
Frances Walocko, MD
Eric Wier, PhD
Erik Williams, MD
Benedict Wu, DO/PhD
Jennifer Yeh, MD/PhD
Chang Zeng, PhD
Abigail Zieman, PhD

Darci Phillips, MD/PhD
Muthukumar Ramanathan, MD/PhD
Vijay Ramani, PhD
Guillermo Rivera Gonzalez, PhD
Michelle Roberts, PhD
Katharina Rolles, MSc
Brigitte Salle, MD
Paulene Sapao
Sabine Schneider, MSc
Yevgeniy Semenov, MD
M Asif Sherwani, PhD
Zhenui Shi, MD
Joseph Shin
Wisoo Shin
William Shipman, PhD
Pu Song, MD/PhD
Sara Stahey, PhD
Tina Sumpter, MS/PhD
Jutamas Suwanpradit, PhD
Katherine Szigety
Amanda Truong
Nicole Urman
Wang Wang
Yi Wang
Mackenzie Wehner, MD/MPhil
Katherine Whang
Melodi Whitley, MD/PhD
Michael Williams, PhD
Julie Wu
Zhubiao Ye
Jinlei Yu
Dalong Zhi

Caitlin Haydek, MD
Edward Herman, MD/PhD
Noah Hornick, MD/PhD
Audrey Jacobsen, MD/MPH
Anna Kersh, MD/PhD
Manao Kinoshita, MD/PhD
Byron Knowles, MD/PhD
Keidai Komakura, MD
Nikifor K. Konstantinov, MD
Jessica Labadie, MD
Ernest Lee, PhD
Noah Levit, MD/PhD
Xiaoxiao Li, MD/PhD
Linsey Lindley, MD/PhD
Qi Liu, PhD
Anthony Mak, MD/PhD
Rabia Z. Mayer, MD/PhD
Emily Merkel, MD
Matilde Miranda, BS
Neera Nathan, MD/MSHS
Wenxiu Ning, PhD
Jack O’Brien, MD
Auke Otten, PhD
Saleh Rachidi, MD/PhD
Tova Rogers, MD/MFA
Alexandra Rosenberg, MD
Kristen Sanders, MS
Sara N. Stahley, PhD
Molly Stout, MD
Madeliene Stump, MD/PhD
Nicholas Theodosakis, MD/PhD
Aayushi Uberoi, PhD
Rosa Ventrella, PhD
Ha Linh Vu, MD/PhD
Frances Walocko, MD
Sheng-Pei Wang, MD
Melodi Javid Whitley, MD/PhD
Eric Wier, PhD
Erik Williams, MD
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Abigail Zieman, PhD

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The SID wishes to acknowledge the following for their support in providing travel grants to the 2019 SID Annual Meeting:

• Sloman Foundation
• Albert M. Kligman Foundation
Abstract Presentation Information

ORAL TYPE PRESENTATIONS
All oral presentations will take place at the Hilton Chicago.

Plenary And Concurrent Minisymposium
Oral presentations are scheduled at the rate of five (5) per hour. This allows for ten (10) minutes of presentation and two (2) minutes for discussion. In order to coordinate sessions, the time limit will be strictly adhered to, or you will be asked to terminate your presentation by the session moderator(s).

Selected ePoster Discussions. Each poster presenter will be asked to briefly describe their work (one slide only) for up to three (3) minutes, followed by a short group discussion of up to three (3) minutes in length. There will be a moderator to assist with the timing. If your poster has been selected for the ePoster Discussions, please join the assigned category group at the relevant ePoster kiosk. Please reference the daily schedule for dates, times, category, locations, featured posters, and moderators.

LCD Projectors will be available in each lecture room. There will be resources to display both IBM and Mac Based platforms and software. The computer technicians will be able to download zip and CD/DVD files. All Oral Presentations are also to be presented as Posters.

All presentations must be uploaded at least six (6) hours prior to your presentation and uploads are to be completed in the Buckingham Room (around the corner from the Meeting Registration Counters) on the main floor of the hotel. Technical support will be available.

CONFLICT OF INTEREST
Due to CME Guidelines, all oral presentations must include a disclosure slide at the beginning of your presentation. If there is a real or perceived conflict of interest pertaining to your work, an announcement must be made prior to your oral presentation and also displayed on your poster.

SPEAKER READY ROOM WILL BE LOCATED IN THE BUCKINGHAM ROOM, LOCATED ON MAIN FLOOR (NEAR THE MEETING REGISTRATION COUNTERS).

The room will be available to all presenters during the following hours:
- Wednesday, May 8, 2019 12:00 PM - 6:00 PM
- Thursday, May 9, 2019 7:00 AM - 5:30 PM
- Friday, May 10, 2019 7:00 AM - 6:30 PM
- Saturday, May 11, 2019 7:00 AM - 12:30 PM

POSTER PRESENTATIONS
All posters will be displayed until Saturday, May 11, 2019 at 2:45 PM in Stevens Salons B-D. Posters will be viewed in three (3) sessions as outlined below. Presenters should be at their posters for their entire discussion session and should not be removed early. The organizers of the 2019 Annual Meeting are not responsible for posters left unclaimed as of 3:00 PM on Saturday, May 11, 2019. Unclaimed posters will not be returned.

Install all Posters
Wednesday, May 8, 2019 2:00 PM – 6:00 PM

Poster Session I
Thursday, May 9, 2019 10:45 AM – 12:45 PM
Odd Poster #’s 351 - 697
Even Poster #’s 002 - 348
Even Late-Breaking Poster #’s LB 1046-1144

Poster Session II
Friday, May 10, 2019 11:15 AM – 1:15 PM
Odd Poster #’s 001 - 349
Even Poster #’s 698 - 1044
Odd Late-Breaking Poster #’s LB 1047-1143

Poster Session III
Saturday, May 11, 2019 12:45 PM – 2:45 PM
Odd Poster #’s 699 - 1045
Even Poster #’s 350 - 696

Dismantle All Posters
Saturday, May 11, 2019 2:45 PM – 3:00 PM
Sponsor and Exhibitor Information

2019 SID SPONSORS
(AS OF APRIL 9, 2019)
AbbVie
Aclaris Therapeutics
Bausch Health US
Mary Kay
Rodan & Fields
SILAB

EDUCATIONAL GRANTS-
RESIDENT RETREAT
National Institute of Arthritis and
Musculoskeletal and Skin Diseases
(NIAMS)
LEO Foundation

COMMERCIAL SUPPORT OF CME
SESSIONS
AS OF (APRIL 9, 2019)
AbbVie
Bausch Health US
Dermira
Janssen
LEO Pharma
Pfizer

TABLE TOP EXHIBITORS
Aclaris Therapeutics, Inc.
Canadian Dermatology Foundation
Coalition of Skin Diseases
Cutaneous Lymphoma Foundation
Dermatology Nurses’ Association
National Eczema Association
National Alopecia Areata Foundation (NAAF)
National Foundation for Ectodermal
Dysplasias (NFED)
International Pemphigus and Pemphigoid
Foundation (IPPF)
ITSAN
PC Project

TECHNICAL EXHIBITS
Exhibits will be staffed during the following
times in Southwest Hall, Salon D:

Thursday, May 9, 2019       10:30 AM-12:30 PM
Friday, May 10, 2019        11:15 AM-1:15 PM
Saturday, May 11, 2019      12:45 PM-2:45 PM

2019 SID WELCOMES EXHIBITORS
FROM THE FOLLOWING ORGANIZATIONS

Booth  Company
100    FIBROTX
101    ZenBio, Inc
102    INNOVADERM Recherches Inc.
103    Bioalternatives, Inc.
104    Gpower Inc.
106    Genoskin
109    Regeneron and Sanofi Genzyme
111    Imabiotec
112    Genemarkers
113    MatTek Corporation
114    Lipotype GmbH
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 2019 SID Annual Meeting without written permission is strictly prohibited. Failure to comply with this rule may lead to removal of your meeting credentials.

BADGES
Badges for both pre- and on-site registration can be picked up at the Registration Counters in the 8th Street South Foyer area (on the main level of the Hilton Chicago). Meeting attendees are always required to wear their badges for entry into all sessions and meeting activities.

SPECIAL SERVICES FOR THE PHYSICALLY CHALLENGED
The Hilton Chicago is fully accessible to the physically challenged. Should you have any special needs, please stop at the Registration Counters and notify available staff.

WI-FI
Wi-Fi will be available in all the Meeting spaces.

NURSING MOTHERS
As a part of a family-friendly meeting experience, the SID supports breastfeeding mothers by accommodating the mother who wishes to express breast milk during her meeting participation when separated from her newborn child. Nursing mothers wishing to use this space must request/reserve the room by contacting SID Staff at the Registration Counter.

ON-SITE REGISTRATION
On-site registration will take place at the Meeting Registration Counters in the 8th Street South Foyer area (on the main level of the Hilton Chicago) during the following hours:

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
</tr>
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<tbody>
<tr>
<td>Wednesday, May 8, 2019</td>
<td>11:00 AM – 7:00 PM</td>
</tr>
<tr>
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Hilton Map – Second Floor
Hilton Map – Third Floor
Tuesday Sessions

<table>
<thead>
<tr>
<th>PAGE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>Satellite Symposium on Skin Epigenetics</td>
</tr>
<tr>
<td>24</td>
<td>International Pachyonychia Congenita Consortium (IPCC) Symposium</td>
</tr>
</tbody>
</table>
Future SID Annual/ISID Meetings

2020 Annual Meeting
May 13-16, 2020
The Westin Kierland Resort & Spa
Scottsdale, Arizona

2021 Annual Meeting
May 5-8, 2021
Hilton Chicago
Chicago, Illinois

2022 Annual Meeting
May 18-21, 2022
Oregon Convention Center
Portland, Oregon

ISID 2023
May 10-13, 2023
Keio Plaza Hotel
Tokyo, Japan
# Satellite Symposium on Skin Epigenetics

**TUESDAY, MAY 7, 2019**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>12:00 PM – 1:00 PM</td>
<td>POSTERS + LUNCH</td>
</tr>
</tbody>
</table>
| 1:00 PM – 1:05 PM  | INTRODUCTORY REMARKS
Sarah Millar, SID Vice-President Elect    |
| 1:05 PM – 1:35 PM  | KEYNOTE LECTURE
Ali Shilatifard (Northwestern Univ)
“Principles of Epigenetics and Chromatin in Development and Human Disease” |
| 1:35 PM – 1:55 PM  | SHORT TALK 1
Paul Khavari (Stanford)
“Single-cell epigenomic profiling of combinatorial transcription factor knockouts in epidermal differentiation” |
| 1:55 PM – 2:15 PM  | SHORT TALK 2
Chen-Ming Chuong (Univ Southern California)
“Epigenetic regulation of keratin gene clusters orchestrate skin regional specificity” |
| 2:15 PM – 2:35 PM  | SHORT TALK 3
Bogi Andersen (UC Irvine)
“Grhl3-epigenetic interactions in wound healing” |
| 2:35 PM – 2:55 PM  | SHORT TALK 4
Tudorita Tumbar (Cornell)
“Histone H3 methyl arks in adult hair cycle and wound healing” |
| 2:55 PM – 3:15 PM  | SHORT TALK 5
Elena Ezhkova (Mount Sinai)
“Polycomb complexes in skin development and skin stem cell control” |
| 3:15 PM – 3:35 PM  | SHORT TALK 6
Sarah Millar (Mount Sinai)
“HDAC functions in epidermal development and disease” |
| 3:35 PM – 4:00 PM  | COFFEE BREAK                                                      |
| 4:00 PM – 4:25 PM  | YOUNG INVESTIGATOR LECTURE
Ed Chuong (UColorado)
“Genome regulatory landscapes shaped by transposable elements” |
| 4:25 PM – 4:40 PM  | SHORT TALK 7
Andrey Sharov (Boston Univ)
“Does epigenetic regulation of transposable elements prevent complex disorders of the epidermis?” |
| 4:40 PM – 4:55 PM  | SHORT TALK 8
George Sen (UCSD)
“Regulation of epidermal stem and progenitor cell self-renewal through HNRNPK” |
| 4:55 PM – 5:15 PM  | SHORT TALK 9
Tony Oro (Stanford)
“Chromatin dynamic transcription networks during skin development” |
| 5:15 PM – 5:30 PM  | SHORT TALK 10
Kevin Wang (Stanford)
“Modulation of 3D chromosomal architecture as an epigenetic reProgramming strategy” |
| 5:30 PM – 5:45 PM  | SHORT TALK 11
Cristina de Guzman-Strong (Washington Univ)
“In vivo enhancer deletion in the EDC results in decreased proximal gene expression associated with less chromatin accessibility” |
| 5:45 PM – 6:00 PM  | SHORT TALK 12
Brian Capell (UPenn)
“Enhancing the barrier: Epigenetic enhancer regulation in epidermal development and carcinogenesis” |
| 6:00 PM – 6:15 PM  | GENERAL DISCUSSION/CLOSING REMARKS
(Vladimir/Elena/Sarah) |
| 6:15 PM – 7:30 PM  | POSTERS + DRINKS                                                      |
International Pachyonychia Congenita Consortium (IPCC) Symposium

TUESDAY, MAY 7, 2019 12:00 PM - 5:00 PM CONTINENTAL BALLROOM B

12:00 PM
LUNCH, PC PROJECT WELCOME & OVERVIEW
Janice Schwartz, Executive Director, PC Project

SESSION ONE: BUILDING THE FOUNDATION FOR SUCCESSFUL PC STUDIES

Session Chair:
Edel O’Toole, MD/PhD/FRCP, Queen Mary University of London

12:30 PM
Integrating the Keratinopathies
E. Birgitte Lane, PhD/FRSE/FMedSci, Skin Research Institute of Singapore

1:00 PM
Novel roles for keratin in epidermal homeostasis and their significance for PC pathophysiology
Pierre A. Coulombe, PhD, University of Michigan

1:25 PM
Keratin 1/10 A11 heterotetramer crystal structures provide a molecular basis for a novel knob-pocket mechanism governing intermediate filament assembly
Christopher G. Bunick, MD/PhD, Yale University

1:50 PM
Toward a compound-based approach for treatment of dominant keratin disorders
Thomas M. Magin, PhD, University of Leipzig

2:15 PM
BREAK

2:30 PM
iRhom2 and the keratinocyte stress response
David P. Kelsell, PhD, Queen Mary University of London

2:55 PM
Next generation ASOs for treatment of PC
Robyn P. Hickerson, PhD, University of Dundee

3:15 PM
Opening a window into skin structure and function
Michael Conneely, PhD, University of Dundee

3:30 PM
Revisiting pachyonychia congenita: a case cohort study in 815 patients
Liat Samuelov, MD, Tel-Aviv Medical Center

3:50 PM
Pain mechanisms in palmoplantar keratodermas
Michael J. Caterina, MD/PhD, Johns Hopkins

4:15 PM
Quantifying plantar pain
Edel O’Toole, MD/PhD/FRCP, Queen Mary University of London

4:35 PM
PERP, a novel gene causing Olmsted Syndrome
Alain Hovnanian, MD/PhD, Imagine Institute, Necker Hospital

5:00 PM
MEETING ADJOURNED
### Wednesday Sessions

<table>
<thead>
<tr>
<th>PAGE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>Meeting-At-A-Glance</td>
</tr>
<tr>
<td>30</td>
<td>International Pachyonychia Congenita Consortium (IPCC) Symposium</td>
</tr>
<tr>
<td>31</td>
<td>Cardiovascular Disease in Psoriasis: A Changing Paradigm</td>
</tr>
<tr>
<td>32</td>
<td>ISCL Cutaneous T Cell Lymphoma Symposium</td>
</tr>
<tr>
<td>33</td>
<td>8th Annual AARS Scientific Symposium Agenda</td>
</tr>
<tr>
<td>34</td>
<td>International Eczema Council at the SID Meeting</td>
</tr>
<tr>
<td>35</td>
<td>Translational Science Symposium</td>
</tr>
<tr>
<td>36</td>
<td>Advancing Innovation in Dermatology</td>
</tr>
<tr>
<td>37</td>
<td>Clinical/Outcomes Scholars</td>
</tr>
<tr>
<td>38</td>
<td>Naomi M. Kanof Lecture</td>
</tr>
</tbody>
</table>
Welcome Reception

WEDNESDAY, MAY 8, 2019  6:30 PM – 8:30 PM  NORMANDIE LOUNGE  (2ND FLOOR)

All registered 2019 Meeting Attendees are invited to come to the Welcome Reception to kick off the Annual Meeting. Gather with your colleagues following the Kanof Lecture.

Fun, food, and collegiality will be the order of the night.

This event is free of charge (beverage tokens can be found in your meeting registration materials). Companions are welcome to attend for a cost of $50 per person. Please purchase a companion ticket at the Meeting Registration Counter in advance of the reception.
Meeting-At-A-Glance

WEDNESDAY, MAY 8, 2019

6:45 AM — 7:30 AM
Resident/PhD Retreat Breakfast: By Invitation Only
JOLIET ROOM

7:30 AM — 12:00 PM
Resident Retreat Program: By Invitation Only
MARQUETTE ROOM

7:30 AM — 12:00 PM
PhD Retreat Program: By Invitation Only
ASTORIA ROOM

11:00 AM — 7:00 PM
On-Site Registration
8TH ST. S. REGISTRATION AREA

2:00 PM — 4:30 PM
Translational Science Symposium: Single Cell Analysis: Insights into Disease
INTERNATIONAL BALLROOM NORTH

2:00 PM — 4:30 PM
Advancing Innovation in Dermatology: Translational Research and Academic - Industry Partnership
INTERNATIONAL BALLROOM SOUTH

4:30 PM — 5:30 PM
Clinical/Outcomes Scholars: Diving Skin-Deep into Databases and Inflammation
INTERNATIONAL BALLROOM NORTH

5:30 PM — 5:45 PM
President’s Welcome
ROBERT A. SWERLICK, MD
INTERNATIONAL BALLROOM NORTH

5:45 PM — 6:15 PM
Naomi M. Kanof Lecture: The Significance of Dermatology Outcomes Research - Beyond the H-Index and Impact Factor
SUEPHY CHEN, MD/MS
INTERNATIONAL BALLROOM NORTH

6:30 PM — 8:30 PM
Welcome Reception
NORMANDIE LOUNGE

ASSOCIATE GROUP PROGRAMMING IS TAKING PLACE TODAY.
SEE PAGE 6 FOR DAILY SCHEDULE.
# International Pachyonychia Congenita Consortium (IPCC) Symposium

**WEDNESDAY, MAY 8, 2019**

**7:30 AM - 2:00 PM**

**CONTINENTAL BALLROOM B**

### 7:30 AM

**BREAKFAST**

### SESSION TWO: PC AND THE THERAPEUTIC HORIZON

Session Chair:
Amy Paller, MD/PhD, Northwestern University

#### 8:30 AM

An alternative method for delivering keratinocytes derived from patient-specific gene-edited iPSCs generated from patients with inherited epidermal fragility disorders

Dennis Roop, PhD, University of Colorado

#### 9:00 AM

*Topical application of DNA for dermatology*

David A. Giljohann, PhD, CEO, Exicure

#### 9:25 AM

*Developing mechanism-based therapies for rare skin diseases*

Mark P. de Souza, PhD, CEO, FIBRX Derm, Inc.

#### 9:50 AM

**BREAK**

#### 10:10 AM

*Update on PTX-022 (QTORINTM rapamycin formulation) for Pachyonychia Congenita*

Wesley Kaupinen, CEO, Palvella Therapeutics

#### 10:45 AM

*The Orphan Disease Business Model: One size does not fit all*

John D. Doux, MD, Palo Alto Investors

#### 11:15 AM

*Helping PCers: Can hope be turned into reality?*

Roger Kaspar, PhD, CEO, Ayni Therapeutics

#### 11:40 AM

**GROUP DISCUSSION: MOVING FORWARD**

C. David Hansen, MD, University of Utah

#### 12:30 PM

**CLOSE OF MEETING: BOX LUNCHES AVAILABLE FOR REGISTERED ATTENDEES**

#### 12:45 PM

**PC PROJECT MEDICAL AND SCIENTIFIC ADVISORY BOARD MEETING**
Cardiovascular Disease in Psoriasis: A Changing Paradigm

WEDNESDAY, MAY 8, 2019 9:00 AM - 1:00 PM CONTINENTAL BALLROOM A

AGENDA

PROGRAM OVERVIEW:
This symposium will explore recent advances in the understanding of the association of cardiovascular disease and psoriasis, with the aim to present evidence from mechanistic models, epidemiological data, imaging studies and immunointervention strategies of this complex scenario. Part 1 of this event will feature five faculty presentations with expert panel discussion. Part 2 will include a series of selected poster presentations that provide additional insights into disease mechanisms that contribute to psoriasis.

PROGRAM CHAIRS:
April Armstrong, MD/MPH - University of Southern California, Los Angeles, United States
Johann Gudjonsson, MD/PhD - University of Michigan, Michigan, United States
Nehal Mehta, MD/MSCE/FAHA - National Heart, Lung and Blood Institute, Maryland, United States

9:00 AM WELCOME AND OVERVIEW

PART I: LECTURES

9:05 AM Immunopathogenesis of atherosclerotic disease: where are we now?
Hafid Ait-Oufella, MD/PhD - European Georges Pompidou Hospital, Paris, France

9:30 AM Epidemiology of cardiovascular disease in psoriasis
April Armstrong, MD/MPH - University of Southern California, Los Angeles, United States

9:55 AM Is psoriasis an independent risk factor for cardiovascular ischemic disease?
Marlies Wakkee, MD/PhD - Erasmus MC University Medical Center, Rotterdam, Netherlands

10:00 AM BREAK

10:35 AM In vivo studies of cardiovascular disease in psoriasis: An update
Nehal Mehta, MD/MSCE/FAHA - National Heart, Lung and Blood Institute, Maryland, United States

11:00 AM Effect of psoriasis treatment on cardiovascular risk: Reconciling clinical trials and observational studies
Joel Gelfand, MD/MSCE - University of Pennsylvania, Philadelphia, United States

11:25 AM PANEL DISCUSSION AND SUMMARY

PART II: POSTERS

11:55 AM SELECTED POSTERS

12:55 PM CLOSING COMMENTS
# International Society for Cutaneous Lymphomas

## ISCL Cutaneous T Cell Lymphoma Symposium

**WEDNESDAY, MAY 8, 2019**  
9:00 AM - 12:00 PM  
INTERNATIONAL BALLROOM SOUTH

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>9:00 AM</td>
<td><strong>Welcome, ISCL Announcements &amp; Business Meeting, Board Awards</strong></td>
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<td></td>
<td>Joan Guitart</td>
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<td>9:15 AM</td>
<td><strong>The Future of CTCL Therapy: Challenges and Opportunities</strong></td>
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<td>Moderator: Joan Guitart</td>
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<tr>
<td>9:15 AM</td>
<td><strong>The Future of Personalized Therapies in CTCL</strong></td>
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<td></td>
<td>Larisa Geskin</td>
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<tr>
<td>9:30 AM</td>
<td><strong>Sequencing CTCL Where We Are and Where We Need To Go</strong></td>
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<td>Jae Choi</td>
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<td>9:45 AM</td>
<td><strong>The Future of Clinical Trial: What's in the Pipeline</strong></td>
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<td>Youn Kim</td>
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<td>10:00 AM</td>
<td><strong>High Throughput Sequencing of TCR in CTCL: Beyond Defining the Clone</strong></td>
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<td>Lanny Kirsch</td>
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<td>10:15 AM</td>
<td><strong>Q&amp;A</strong></td>
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<td>10:30 AM</td>
<td><strong>Coffee Break</strong></td>
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<td>11:00 AM</td>
<td><strong>Abstract Presentations</strong></td>
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<td>8 minutes for presentation + 2 minutes for Q&amp;A and change of speaker</td>
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Visit [www.cutaneouslymphoma.org](http://www.cutaneouslymphoma.org) for more information about the ISCL and membership!
8th Annual AARS Scientific Symposium Agenda

WEDNESDAY, MAY 8, 2019
10:00 AM - 2:00 PM
WALDORF ROOM

10:00 AM
Welcome
Mark Jackson, MD, AARS President

10:10 AM
Autophagy Regulates Lipid Production and Contributes to the Sebaceous Effect of Retinoic Acid in Human SZ95 Sebocytes, Sang Eun Lee, MD/PhD, Assistant Professor, Dermatology, Yonsei University College of Medicine, Seoul, Korea

10:20 AM
Distinguishing Type II from Type I Cutibacterium Acnes: An Efficient Method for Studying C. Acnes Interaction, Kelsey Ouyang, BS, Division of Dermatology, UCLA, Los Angeles, California, USA

10:30 AM
Mechanistic Investigations of Cutibacterium Acnes Community Remodeling in AcneRemission, William H. McCoy, IV, MD/PhD, Research Instructor in Medicine, Department of Medicine, Washington University School of Medicine, St. Louis, Missouri, USA

10:40 AM
Panel Q&A

10:50 AM
Measuring Activation of the NLRP Inflammasomes In Vitro Via Active Caspase-1 Release: Implications in Understanding Epidermal Inflammatory Responses, Vince Gruber, PhD, Director of New Technologies, Jeen International/BotanicalsPlus, Fairfield, New Jersey, USA

11:00 AM
Deciphering the Mechanism of Action of Isotretinoin in Acne Patients Using Next Gene Sequencing Technologies, Amanda Nelson, PhD, Assistant Professor, Department of Dermatology, Penn State College of Medicine, Hershey, Pennsylvania, USA

11:10 AM
Development and Validation of a Comprehensive Acne Grading System Linking Visual Acne Characteristics to Clinician Recommended Treatment Choices, Elena Bernardis, PhD, Dermatology, University of Pennsylvania, Philadelphia, USA

11:20 AM
Development and Characterization of a 3D In Vitro Model Mimicking Acneic Skin, Brigitte Closs, Saint Vianc, France

11:30 AM
Panel Q&A

11:40 AM
Characterization of International Oral Antibiotic Use for Acne, Chante Karimkhani, MD, Department of Dermatology, University of Colorado, Aurora, Colorado, USA

11:50 AM
Microbial Dysbiosis in the Skin and the Gastrointestinal Tract of Acne Patients, Anna L. Chien, MD, Associate Professor, Johns Hopkins Department of Dermatology, Baltimore, Maryland, USA

12:00 PM
Prevalence of Moderate-to-Severe Acne in Transgender Adults, Howa Yeung, MD, Assistant Professor of Dermatology, Emory University School of Medicine, Atlanta, Georgia, USA

12:10 PM
Variability in Skin Microbiota Between Smokers, Former Smokers, and Non-Smokers, Sewon Kang, MD, MPH, Johns Hopkins Department of Dermatology, Baltimore, Maryland, USA

12:20 PM
Panel Q&A

12:30 PM
Lunch Break

1:00 PM
Alterations of Gene Expression in Papulopustular Rosacea by Whole Transcriptome Analysis, Yi-Hsien Shih, MD, Dermatology, Stanford University School of Medicine, Redwood City, California, USA

1:10 PM
Human Cathelicidin LL37 Binds to Scavenger Receptors in Inflammatory Human Skin Diseases, Ryo Amagai, MD, Dermatology, Tohoku University Graduate School of Medicine, Sendai, Miyagi, Japan

1:20 PM
Comparison of the Skin Microbiota in Acne and Rosacea, Katherine G. Thompson, Research Trainee, Johns Hopkins Department of Dermatology, Baltimore, Maryland, USA

1:30 PM
Skin Microbiota Perturbations Are Clinical Severity-Dependent in Hidradenitis Suppurativa, Haley Naik, MD/MSc, Assistant Professor of Dermatology, University of California, San Francisco, California, USA

1:40 PM
Panel Q&A

1:55 PM
Closing Remarks, Diane Thiboutot, MD, AARS Past President

JOIN THE AARS MEMBERSHIP TODAY!
www.acneandrosacea.org
INTERNATIONAL ECZEMA COUNCIL AT THE SID MEETING

WEDNESDAY MAY 8, 2019
11:00 AM - 2:00 PM
CONTINENTAL BALLROOM C

11:00 AM
Welcome and Overview
Emma Guttman, New York, NY

11:05 AM
Program Overview
Amy Paller, Chicago, IL

11:10 AM
Basic structure of the epidermis
Akiharo Kubo, Tokyo, Japan

11:30 AM
Role of ephrins in tight junction function,
Bethany Perez-White, Chicago, IL

11:45 AM
Abstract Presentations: Part 1,
Moderator: Lisa Beck

Abstract #324:
A potential role of galectin-7 as a stabilizer for IL-4/IL-13-induced barrier disruption in atopic dermatitis. Takatoshi Shimauchi et al., Hamamatsu University School of Medicine, Hamamatsu, Japan

Abstract #565:
Improvement in skin inflammation and barrier function biomarkers with crisaborole treatment in atopic dermatitis (AD). E. Guttmann-Yassky, A.B. Pavel et al. Icahn School of Medicine at Mount Sinai, New York, United States

12:05 PM
Lunch

12:25 PM
Stratum corneum proteins, Matthias Schmuth, Innsbruck, Austria

12:45 PM
Epidermal proteases, Alain Hovnanian, Paris, France

1:05 PM
Abstract Presentations – Part 2, Moderator: Masa Amagai

Abstract #993:
Molecular abnormalities of early-onset pediatric atopic dermatitis are captured by tape strips; Aisleen Diaz et al. Icahn School of Medicine at Mount Sinai, New York, New York, United States

1:15 PM
Organization of epidermal lipids,
Jeroen van Smeden, Leiden, The Netherlands

1:35 PM
Measurement of barrier components and function,
Eric Simpson, Portland, OR

1:50 PM
Closing comments,
Kenji Kabashima, Kyoto, Japan

Program Co-Chairs:
Amy Paller, Lisa Beck, Masayuki Amagai, and Kenji Kabashima

Special thanks to the International Eczema Council for supporting this session
Translational Science Symposium

Single Cell Analysis: Insights into Disease

WEDNESDAY, MAY 8, 2019

2:00 PM – 4:30 PM

INTERNATIONAL BALLROOM NORTH

**2:00 PM**

**Welcome & Introduction**

Richard D. Granstein, MD, Professor and Chair, Department of Dermatology, Weill Cornell Medicine, New York

Dr. Granstein’s research interests center on the regulation of immunity within the skin and the relationship of the skin immune system to the development of skin cancers. He also has a special research interest in the regulation of the immune system by stress and the nervous system. His clinical interests include autoimmune disorders of the skin, skin cancer and psoriasis.

**2:10 PM**

**Samantha Riesenfeld, PhD, Postdoctoral Fellow, Broad Institute of MIT and Harvard, Cambridge, MA**

“Using topic models to analyze the transcriptional spectrum of ILCs in healthy and psoriatic skin”

Dr. Riesenfeld is a postdoctoral associate in the Regev lab at the Broad Institute and the Kuchroo lab at Brigham and Women’s Hospital and Harvard Medical School. Her research focuses on developing and using data science approaches to analyze single-cell transcriptomic data, with the goal of learning about the intra- and intercellular circuits that regulate gene expression and cellular function.

**2:35 PM**

**Ansuman Satpathy, MD/PhD, Assistant Professor, Department of Pathology, Stanford University, Stanford, CA**

“Dissection of the Cancer Immunotherapy Response with Single-Cell Genome Technologies”

Dr. Satpathy’s research focuses on developing single-cell and three-dimensional genome sequencing technologies to study immune system function and dysfunction directly in cancer patients. Dr. Satpathy completed M.D. and Ph.D. degrees at Washington University in St. Louis, clinical residency in pathology at Stanford Hospital and Clinics, and postdoctoral training in genetics at Stanford University.

**3:00 PM**

**Rui Yi, PhD, Associate Professor, Molecular, Cellular & Developmental Biology, University of Colorado Boulder, Boulder, CO**

“Single Cell Analysis of Transcriptome and Open Chromatin Reveals Distinct Regulatory Networks in Embryonic Skin and Adult Epithelial Stem Cells”

Dr. Rui Yi, PhD is the Principal Investigator at the Yi Laboratory at the University of Colorado Boulder where he is leading a group of passionate scientists to decode the fundamental mechanisms in gene expression regulation in mammals. He obtained his BSc at Peking University and his PhD at Duke University. At Duke, he studied RNA nuclear export for cellular and viral mRNAs as well as miRNA precursors in Bryan Cullen’s lab. During his postdoc training with Elaine Fuchs at the Rockefeller University, he began to investigate miRNAs and their functions in mammalian skin.

**3:25 PM**

**Michael Rendl, MD, Associate Professor, Cell, Developmental and Regenerative Biology, and Department of Dermatology, University of Miami, Miami, FL**

“Single Cell Resolution of Dermal Condensate Fate Specification”

Dr. Rendl is a stem cell researcher internationally recognized for his work on dermal papilla (DP) cell functions as instructive niche for hair follicle stem cells and progenitors. His laboratory pioneered cellular and molecular studies of the DP and Dermal Condensates, the embryonic DP precursor cells that orchestrate hair follicle morphogenesis. New mechanistic and functional insights continue to build a platform for developing future hair regenerative therapies.

**3:50 PM**

**Chloe Villani, PhD, Assistant Professor of Medicine, Mass General Hospital, Charlestown, MA**

“Single cell genomics—Using finer lenses to unravel features of human immunity”

The Villani Laboratory is developing and implementing single-cell ‘omics’ strategies and systems immunology approaches to further unravel the players and rules governing human immune response regulation as a foundation for deciphering human traits and diseases.

**4:15 PM**

**Q & A**
Advancing Innovation in Dermatology

Translational Research and Academic - Industry Partnership

WEDNESDAY, MAY 8, 2019
2:00 PM – 4:30 PM
INTERNATIONAL BALLROOM SOUTH

2:00 PM
Opening Remarks
William Ju, MD
William Ju, MD, FAAD is a board-certified dermatologist and has over 20 years of biopharmaceutical experience in a wide variety of therapeutic areas, including dermatology. He is president and a co-founding trustee of Advancing Innovation in Dermatology, Inc. Dr. Ju has been president and chief executive officer of Follica, Inc. and chief operating officer at PTC Therapeutics, Inc. (PTCT).

2:10 PM
Protecting the Commercial Potential of Innovation
Moderator: Lilit Garibyan, MD/PhD

2:10 PM
Intellectual Property: From a Researcher's Perspective
Lilit Garibyan, MD/PhD
Dr. Garibyan is currently an Assistant Professor at Harvard Medical School in Department of Dermatology at Massachusetts General Hospital (MGH) and at the Wellman Center for Photomedicine at MGH working in Dr. Rox Anderson’s laboratory as junior faculty. Her research focuses on innovative biomedical translational discoveries aimed at identifying novel treatments for dermatologic diseases and beyond.

2:30 PM
The Basics of Intellectual Property
Raymond Miller, JD
Mr. Miller is a partner and member of the Leadership Team of the Health Sciences Department of Pepper Hamilton LLP, resident in the Pittsburgh office. A registered patent attorney, Mr. Miller focuses his practice on identifying, protecting, securing and maximizing the value of clients’ intellectual property. Mr. Miller is a former member of the firm’s Executive Committee and was previously co-chair of the firm’s Intellectual Property Department.

2:45 PM
Aligning IP Strategy Between the University and Its Startups
Duke Leahey
Mr. Leahey is the Co-Founder and President of Nuogen Pharma, Inc. which is focused on the development of JAK inhibitors for the treatment of chronic pruritus. With over four decades of experience, he held increasingly responsible Program management positions in the USAF, Science Applications Inc., Emerson Electric, Washington University, and Monsanto, where he became President of G.D. Searle & Co IP Holding Company.

3:05 PM
Open Q&A

3:15 PM
Early Stage Funding for Academics: SBIRs, STTRs, and Industry Partnerships
Moderator: Steve Xu, MD

3:15 PM
Early Stage Funding: SBIRs, STTRs and Incubators
Steve Xu, MD
Dr. Xu is Medical Director, Center for Biointegrated Electronics at Northwestern University and Instructor, Department of Dermatology at Northwestern’s Feinberg School of Medicine. Dr. Xu has authored more than 70 peer-reviewed publications and listed as an inventor on 13 granted and pending patents. Dr. Xu, as both PI and co-investigator, has successfully won 7 SBIRs/STTRs including both Phase I and Phase II awards.

3:45 PM
Academia & Industry Collaborations During Early-Stage Product Development
Alex Costa
Mr. Costa is Principal Technology & Innovation Manager at the LEO Science & Tech Hub. At the hub he leads the innovation strategy and has a big focus on building innovation ecosystems around dermatology. He joined LEO Pharma in 2014 in Copenhagen and has worked in different functions within innovation and medical affairs. In the past he has worked with implementation of LEO’s open innovation platform.

4:00 PM
An Industry Perspective on Target Validation
Edward Hsia, PhD
Dr. Hsia is currently VP, External Research & Innovation at Almirall where he leads the identification and evaluation of early stage external innovation opportunities. Dr. Hsia is responsible for developing a network within academia, research institutions, biotech/pharma companies, and start-up firms that will ultimately help strengthen Almirall’s early stage pipeline.

4:15 PM – 4:25 PM
Open Q&A

4:25 – 4:30 PM
Concluding Remarks
**Clinical/Outcomes Scholars**

**Diving Skin-Deep into Databases and Inflammation**

**WEDNESDAY, MAY 8, 2019**

**4:30 PM – 5:30 PM**

**INTERNATIONAL BALLROOM NORTH**

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**4:30 PM**

**Welcome & Introduction**

**Heidi H. Kong, MD/MHSc**

Dr. Kong is Head of the Cutaneous Microbiome and Inflammation Section and Investigator, Dermatology Branch, NIAMS, NIH. Dr. Kong’s research on the human microbiome focuses on understanding host-microbial relationships, particularly of human skin.

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**4:35 PM**

**Robert A. Swerlick, MD, Professor and Chair, Department of Dermatology, Emory University**

“American Academy of Dermatology (AAD) Data-Derm™ Clinical Data Registry”

Dr. Swerlick is the current President of the SID and former Secretary Treasurer. He currently is Co-Chair of the Ad hoc Task Force for Data Collection of the American Academy of Dermatology (AAD) which has overseen the development and deployment the national dermatology patient data registry (DataDermTM). He is the Chair of the Data Governance Committee of the DataDerm registry. His current research interests focus on outcomes research and the development of standardized data collection tools which can be deployed in clinical practice.

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**4:50 PM**

**Haley B. Naik, MD /MHSc, Assistant Professor, Dermatology, Department of Dermatology, University of California San Francisco, San Francisco, CA**

“Hidradenitis Suppurativa Update”

Dr. Naik’s research focuses on understanding the role of the human microbiome in hidradenitis suppurativa (HS). She is also the principal investigator for HS PROGRESS, a multi-institutional prospective observational registry and biospecimen repository dedicated to improving understanding of HS clinical course and treatment outcomes and driving understanding of HS disease mechanisms. She established and directs the UCSF Hidradenitis Suppurativa Clinic and serves on the board of the Hidradenitis Suppurativa Foundation.

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**5:05 PM**

**Richard Wang, MD/PhD, Assistant Professor, Department of Dermatology, University of Texas Southwestern, Dallas, TX**

“Inhibiting Glucose Transport and Metabolism to Treat Inflammatory Skin Disease”

Dr. Wang completed his MD at Cornell Medical College and his PhD at the Rockefeller University. He returned to Texas to complete his Dermatology Residency at UT Southwestern Medical Center. After completing a postdoctoral fellowship, he started his own lab in the Department of Dermatology. His lab studies both DNA tumor viruses and glucose transport and metabolism, and how these factors contribute to the development of skin diseases, particularly non-melanoma skin cancer.

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**5:20 PM**

**Q & A**
NAOMI M. KANOF LECTURE

The Significance of Dermatology Outcomes Research – Beyond the H-Index and Impact Factor

WEDNESDAY, MAY 8, 2019  5:45 PM – 6:15 PM  INTERNATIONAL BALLROOM NORTH

Introduction by: Robert A. Swerlick, MD

Suephy Chen, MD/MS
Emory University
Atlanta, GA

Suephy C. Chen, MD/MS is Professor of Dermatology and Vice Chair at Emory University in Atlanta, GA and also serves as the Director of TeleDermatology at the Regional TeleHealth Services of the Veterans Integrated Service Network 7. Dr. Chen attended the Massachusetts Institute of Technology and Johns Hopkins University Medical School before completing her Dermatology Residency at Emory and Health Services Research training at Stanford. Dr. Chen was one of the first formally trained Health Services researchers in Dermatology. After joining the faculty at Emory University she created the Dermatology Center for Outcomes Research and Safety (which is focused on investigating the real-world impact of dermatologic intervention). She is committed to better quantifying the quality of life impact of skin conditions on patients by developing several widely-used instruments such as the ItchyQoL. Dr. Chen is also dedicated to investigating how technology and policy can be harnessed to help not only patients but dermatologists.

LECTURESHP HISTORY

Established in 1988, this award was established to honor the memory of Naomi M. Kanof, MD. The 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.
### Thursday Sessions

<table>
<thead>
<tr>
<th>PAGE</th>
<th>TITLE</th>
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<tbody>
<tr>
<td>43</td>
<td>Meeting-At-A-Glance</td>
</tr>
<tr>
<td>44</td>
<td>Photobiology Symposium</td>
</tr>
<tr>
<td>45</td>
<td>Medical Dermatology Society Mini Symposium</td>
</tr>
<tr>
<td>46</td>
<td>Irvin H. Blank Forum I</td>
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<tr>
<td>47</td>
<td>Plenary Session I</td>
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<tr>
<td>48</td>
<td>Julius Stone Lecture</td>
</tr>
<tr>
<td>49</td>
<td>William Montagna Lecture</td>
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<td>50</td>
<td>Aclaris Sponsored Symposium</td>
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<td>51-55</td>
<td>Selected ePoster Discussions I</td>
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<td>Patient Reported Outcomes</td>
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<tr>
<td>56</td>
<td>Concurrent Minisymposium 1: Adaptive and</td>
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<td>Auto-Immunity</td>
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<td>57</td>
<td>Concurrent Minisymposium 2: Genetic Disease,</td>
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<td>Gene Regulation, and Gene Therapy</td>
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<td>58</td>
<td>Concurrent Minisymposium 3: Growth Factors,</td>
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<td>Cell Adhesion, and Matrix Biology</td>
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<td>59</td>
<td>Concurrent Minisymposium 4: Interventional</td>
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<td>Studies, Clinical and Patient Reported</td>
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<td>60</td>
<td>Concurrent Minisymposium 5: Photobiology</td>
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<td>61</td>
<td>Concurrent Minisymposium 6: Interdisciplinary</td>
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<td></td>
<td>Spotlight: Disease Models</td>
</tr>
<tr>
<td>62</td>
<td>State-Of-The-Art Plenary Lectures in Recognition of Dr. Stephen I. Katz</td>
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<tr>
<td>63</td>
<td>LEO Foundation Award - 100,000 USD Region Americas</td>
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<tr>
<td>64</td>
<td>The International Immunosuppression &amp; Transplant Skin Cancer Collaborative (ITSCC)</td>
</tr>
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<td>65</td>
<td>American Dermato-Epidemiology Network (ADEN) Symposium</td>
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<td>66</td>
<td>National Psoriasis Foundation</td>
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</tbody>
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Social Event

THURSDAY, MAY 9, 2019
7:00 PM – 10:30 PM
MUSEUM OF SCIENCE AND INDUSTRY

Join us on Thursday, May 9, 2019 from 7:00 PM – 10:30 PM at the Museum of Science and Industry (MSI). One of the largest science museums in the world—it is home to more than 400,000 square feet of hands-on exhibits designed to spark scientific inquiry and creativity. Explore, dance and socialize with your fellow scientists while enjoying Taste of Chicago food stations and beer and wine.
THURSDAY, MAY 9, 2019

7:00 AM — 6:00 PM
On-Site Registration
8TH ST. S. REGISTRATION AREA

7:30 AM — 8:30 AM
Irvin H. Blank Forum I:
Extracellular Vesicles in Cutaneous Homeostasis and Disease
INTERNATIONAL BALLROOM NORTH

8:45 AM — 9:45 AM
Plenary Session I
INTERNATIONAL BALLROOM NORTH

9:45 AM — 10:45 AM
Julius Stone Lecture: Skin Microbiota in Tissue Immunity and Repair
YASMINE BELKAID, PHD
INTERNATIONAL BALLROOM NORTH

10:15 AM — 12:45 PM
Aclaris Sponsored Symposium: HiJAKing Topical Therapies for New Indications in Dermatology
INTERNATIONAL BALLROOM NORTH

11:15 AM — 12:45 PM
Selected ePoster Discussions I
SEES PAGE 51-55 FOR ROOM LISTINGS

1:30 PM — 4:00 PM
Concurrent Minisymposium 1: Adaptive and Auto-Immunity
INTERNATIONAL BALLROOM NORTH

1:30 PM — 4:00 PM
Concurrent Minisymposium 2: Genetic Disease, Gene Regulation and Gene Therapy
CONTINENTAL BALLROOM A

1:30 PM — 4:00 PM
Concurrent Minisymposium 3: Growth Factors, Cell Adhesion and Matrix Biology
CONTINENTAL BALLROOM C

1:30 PM — 4:00 PM
Concurrent Minisymposium 4: Interventional Studies, Clinical and Patient Reported Outcomes
INTERNATIONAL BALLROOM SOUTH

1:30 PM — 4:00 PM
Concurrent Minisymposium 5: Photobiology
CONTINENTAL BALLROOM B

4:15 PM — 4:45 PM
State-of-the-Art Plenary Lecture I:
Large-Scale Regeneration in the Skin
MAKSIM PLIKUS, PHD
INTERNATIONAL BALLROOM NORTH

4:45 PM — 5:15 PM
State-of-the-Art Plenary Lecture II:
Immune Regulation of Skin Inflammation and Itch
BRIAN KIM, MD/MTR
INTERNATIONAL BALLROOM NORTH

5:15 PM — 5:30 PM
LEO Foundation Award
INTERNATIONAL BALLROOM NORTH

7:00 PM — 10:30 PM
Social Event
MUSEUM OF SCIENCE AND INDUSTRY

ASSOCIATE GROUP PROGRAMMING IS TAKING PLACE TODAY.
SEE PAGE 6 FOR DAILY SCHEDULE.
Photobiology Symposium

THURSDAY, MAY 9, 2019
7:00 AM – 8:30 AM
CONTINENTAL BALLROOM A

ORGANIZERS
Masaoki Kawasumi, MD/PhD, University of Washington, Seattle, WA
Yu-Ying He, PhD, University of Chicago, Chicago, IL

7:00 AM
Opening Remarks (Masaoki Kawasumi, MD, PhD)

7:03 AM
Kenneth H. Kraemer, MD, National Cancer Institute, Bethesda, MD
High frequency of xeroderma pigmentosum causing mutations in large databases

7:17 AM
Thomas M. Rünger, MD/PhD, Lahey Hospital & Medical Center, Burlington, MA
RNA – target and mediator of cellular responses to ultraviolet radiation

7:31 AM
Masaoki Kawasumi, MD/PhD, University of Washington, Seattle, WA
Targeting the DNA damage response to suppress UV-induced skin carcinogenesis

7:45 AM
Yu-Ying He, PhD, University of Chicago, Chicago, IL
Autophagy pathways in UV damage response and tumorigenesis

7:59 AM
Georg T. Wondrak, PhD, University of Arizona, Tucson, AZ
Redox-directed molecular interventions targeting cutaneous photodamage and carcinogenesis

8:13 AM
Akimichi Morita, MD/PhD, Nagoya City University, Nagoya, Japan
Dual wavelength photodynamic therapy using a flexible light-emitting diode unit

8:27 AM
Closing Remarks
Yu-Ying He, PhD

SPONSORS

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Members of the Medical Dermatology Society (MDS) represent the heart and soul of our specialty: Medical Dermatology. The MDS is made up of the thought leaders of clinical dermatology and the teachers of the next generation of practicing dermatologists. Our members include academicians, private practitioners, and resident physicians. We specialize in the care of patients with serious dermatologic diseases. Our mission is to improve the care of patients with these conditions.

Dermatologists are encouraged to pursue a career in medical dermatology by:

- Encouraging resident presentations at our Annual Meeting
- Developing Advanced Medical Dermatology Rotations for residents to work with experts in our field across the country
- Encouraging dermatology Programs to sponsor 5-year combined Internal Medicine/Dermatology training Programs
- Coordinating and providing lectures and sessions on medical dermatology topics at major dermatology meetings
- Providing lectures, discussions and case presentations at the annual Medical Dermatology Society Meeting

7:00 AM
Introduction and Welcome

7:05 AM
Abstract #480
The characteristics of patients with persistent HHV-6 infection after drug-induced hypersensitivity syndrome/drug reaction with eosinophilia and systemic symptoms (DIHS/DRESS)
Hideo Asada, Nara Medical University, Japan

7:17 AM
Abstract #057
Interleukin-6 regulates psoriasis-like dermatitis induced by blockade of Programmed cell death 1 signaling
Ryota Tanaka, University of Tsukuba, Japan

7:29 AM
Abstract #628
Magnetic resonance imaging for assessment of disease activity in morphea
Jack Christopher O’Brien, University of Texas, Southwestern

7:41 AM
Abstract #917
Frontal fibrosing alopecia scalp profiling links Th1/Th2 and JAK3 activation with fibrosis and loss of follicular stem cells
Ester Del Duca, MD, Laboratory of Inflammatory Skin Diseases at Mount Sinai

7:52 AM
Abstract #868
Histologic progression of hidradenitis suppurativa: Implications for future therapeutic intervention
Robert W. Dunstan, DVM, MS, DACVP, Senior Research Fellow, AbbVie, Chicago, Illinois

8:04 AM
Abstract #547
Effectiveness of etanercept in the treatment of toxic epidermal necrolysis
Biagio Didona, University Hospital Marburg, Germany

8:16 AM
Abstract #626
Assessing the incidence of skin and soft tissue infection in patients on biologics
Emily Nguyen, Massachusetts General Hospital, Harvard Medical School

8:28 AM
Discussion and Concluding Remarks
Irvin H. Blank Forum I

*Extracellular Vesicles in Cutaneous Homeostasis and Disease*

THURSDAY, MAY 9, 2019

7:30 AM – 8:30 AM

INTERNATIONAL BALLROOM NORTH

### 7:30 AM
**Welcome & Introduction**

Evangelos Badiavas, MD/PhD, Professor, Department of Dermatology and Cutaneous Surgery, University of Miami

Dr. Badiavas is a board certified dermatologist and dermatopathologist with specialized interest in wounds. He heads a federally-funded wound healing research laboratory focused on the role of bone marrow and stem cells in wound healing, regenerative medicine, and gene therapy.

### 7:35 AM

Mý Mahoney, PhD, Professor, Department of Dermatology and Cutaneous Biology, Thomas Jefferson University

"Extracellular Vesicle Biogenesis and Function in Squamous Cell Carcinomas"

The goal of Dr. Mahoney's research is to understand at the molecular and cellular level, signaling during normal skin development and pathogenic signaling during disease progression. Her work has identified the desmosomal cadherin, desmoglein 2 (Dsg2) as a novel marker that correlates with poor prognosis in various human cancers including basal and squamous cell carcinomas and melanomas.

### 7:55 AM

Jeffrey B. Travers, MD/PhD, Professor and Chair, Pharmacology & Toxicology Professor, Dermatology, Wright State University

"Keratinocyte Microvesicles as Effectors for Environmental Stressor Responses"

Jeffrey B. Travers MD/PhD, is a dermatologist-scientist who serves as Chairman of the Department of Pharmacology & Toxicology, Boonshoft School of Medicine at Wright State University in Dayton, Ohio. Dr. Travers has expertise in lipid biochemistry and pharmacology as it relates to skin disorders, in particular environmental stressors including UV light.

### 8:15 AM
**Q & A**
Plenary Session I

THURSDAY, MAY 9, 2019
8:45 AM – 9:45 AM
INTERNATIONAL BALLROOM NORTH

Presiders: Dan Kaplan, MD/PhD and Ethan Lerner, MD/PhD

8:45 AM
Abstract #589: Early baseline imaging is indicated in Merkel cell carcinoma, even for patients without clinically evident nodal involvement

N. Singh¹, K. Lachance¹, C. Lewis¹, S. Bhatia², P. T. Nghiem¹, K. Paulson²
¹Dermatology, UW, Seattle, Washington, United States, ²Fred Hutchinson Cancer Research Center, Seattle, Washington, United States

8:57 AM
Abstract #071: Single-cell transcriptome and epitope classification of atypical inflammatory diseases for therapeutic intervention

J. B. Cheng¹, ² J. Lee¹, ² P. Harirchian¹, ² J. Choi³ ⁴ R. Cho¹
¹Dermatology, University of California San Francisco, San Francisco, California, United States, ²Veterans Affairs Medical Center, San Francisco, California, United States, ³Dermatology, Northwestern University, Chicago, Illinois, United States, ⁴Biochemistry and Molecular Genetics, Northwestern University, Chicago, Illinois, United States

9:09 AM
Abstract #955: Altered expression of SPAG17, a cilia-related gene, in scleroderma and spontaneous skin fibrosis in Spag17 knockout mice suggests that scleroderma is a unique ciliopathy

P. A. Sapao¹, ⁴ B. Shi² E. Roberson³ J. Atkinson³ J. F. Strauss⁴ M. E. Teves⁴ J. Varga²
¹Chemistry, Virginia Commonwealth University, Richmond, Virginia, United States, ²Rheumatology, Northwestern University, Chicago, Illinois, United States, ³Division of Rheumatology, Washington University, St. Louis, Missouri, United States, ⁴Obstetrics and Gynecology, Virginia Commonwealth University, Richmond, Virginia, United States

9:21 AM
Abstract #472: Differential inflammatory responses induced by Cutibacterium acnes are not dependent on strain-types but are associated with the presence of a linear plasmid

A. ONeill, M. R. Williams, L. Tong, T. Hata, R. L. Gallo
Dermatology, University of California San Diego, San Diego, California, United States

9:33 AM
Abstract #448: Understanding commensal-host communication through genetic engineering of Staphylococcus epidermidis

Y. E. Chen¹ ² N. Bouladoux¹ Y. Belkaid¹ M. Fischbach¹
¹Bioengineering, Stanford University, San Francisco, California, United States, ²Dermatology, SF VA Medical Center, San Francisco, California, United States, ³National Institute of Allergy and Infectious Diseases, National Institutes of Health, Bethesda, Maryland, United States
**JULIUS STONE LECTURE**

*Skin Microbiota in Tissue Immunity and Repair*

THURSDAY, MAY 9, 2019  
9:45 AM – 10:15 AM  
INTERNATIONAL BALLROOM NORTH

Introduction By:  **Richard Gallo, MD/PhD**

**Yasmine Belkaid, PhD**  
National Institutes of Health (NIH)  
Bethesda, MD

Dr. Yasmine Belkaid obtained her PhD in 1996 from the Pasteur Institute in France. Following a postdoctoral fellowship at NIAID on immune regulation during infection, she joined the Children’s Hospital Research Foundation in Cincinnati. In 2005, she began work at the Laboratory of Parasitic Diseases at NIAID and was appointed Senior Investigator in 2008. Dr. Belkaid also holds an appointment at the University of Pennsylvania. She is currently the Director of the NIAID Microbiome Program and the Director of the NIH Center for Human Immunology. Her laboratory has defined fundamental mechanisms that regulate tissue homeostasis and host immune responses and uncovered key roles for the microbiota and dietary factors in the maintenance of tissue immunity and protection to pathogens. Dr. Belkaid published over 200 peer review manuscripts and is a member of the National Academy of Sciences.

**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.
WILLIAM MONTAGNA LECTURE

Regulatory T-Cells in Skin

THURSDAY, MAY 9, 2019  10:15 AM – 10:45 AM  INTERNATIONAL BALLROOM NORTH

Introduction by: Richard Granstein, MD

Michael D. Rosenblum, MD/PhD
University of California, San Francisco
San Francisco, CA

Dr. Rosenblum’s research focuses on understanding the fundamental mechanisms of how immune responses are regulated in peripheral tissues, and how this knowledge can be exploited to treat human disease. Using transgenic mouse model systems to mechanistically dissect how regulatory T cells (Tregs) function in tissues, Dr. Rosenblum has discovered that Tregs can differentiate into memory cells that utilize unique pathways for their establishment and long-term maintenance. In skin, these cells play major roles in wound healing and mediating tolerance to commensal microbes. Most recently, he has discovered that skin-resident Tregs augment the function of epithelial stem cells during both hair follicle regeneration and epidermal barrier repair. Dr. Rosenblum also functionally investigates Tregs in human tissues and has discovered that human skin contains a unique population of tissue-resident Tregs. He has found that these Tregs are dysfunctional in patients with psoriasis, scleroderma, and melanoma. He recently helped to generate and validate a novel therapeutic molecule that selectively activates human Tregs which is currently being tested in clinical trials in patients with autoimmune 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.
Aclaris Sponsored Symposium

HiJAKing Topical Therapies for New Indications in Dermatology

THURSDAY, MAY 9, 2019

11:15 AM – 12:45 PM

INTERNATIONAL BALLROOM NORTH

11:15 AM
Welcome and Overview
TBD

Part I: Building a Topical JAK Inhibitor by Design
Moderator: TBD

11:20 AM
Speaker 1: TBN JAK Chemistry Expert

11:35 AM
Speaker 2: TBN Topical Delivery Expert

Part II: New Indications for JAK Inhibitors
Moderator: TBD

12:00 PM
FINAL ID: 479
Janus kinase inhibition significantly reduces vaccinia virus infectivity of th2 stimulated keratinocytes
Lisa Beck Lab - Rochester

12:09 PM
FINAL ID: 147
Ruxolitinib reverses accelerated tumor growth of RDEB-cSCCs in a xenograft mouse model
Angela Christiano Lab – New York

12:18 PM
FINAL ID: 044
IFN-γ enhances cell-mediated cytotoxicity against keratinocytes via JAK2/STAT1 in lichen planus
Johann Gudjonsson Lab - Michigan

12:27 PM
FINAL ID: 958
TITLE: Pharmacological inhibition of JAK/STAT signaling by tofacitinib prevents organ fibrosis:
Novel therapy for scleroderma
John Varga Lab - Chicago

12:36 PM
FINAL ID: 667
Targeting the JAK/STAT pathway for CTCL therapy
Larisa Geskin Lab – New York
Selected ePoster Discussions I

Adaptive and Auto-Immunity

Studies of adaptive immune responses involving T and B lymphocytes, dendritic cells, other antigen presenting cells, and antigen processing and presentation; Basic and pre-clinical experimental studies focused on autoimmunity

THURSDAY, MAY 9, 2019

11:15 AM - 12:15 PM

STEVENS SALON D

Moderator: Michel Gilliet, MD

11:15 AM - 11:21 AM

Abstract #088: Skin delivery of modified vaccinia ankara (MVA) virus generates superior protective pulmonary immunity

Y. Pan, T. Tian, C. Park, C. A. Stingley, A. de Masson, T. Kupper
Dermatology, BWH/HMS, Boston, Massachusetts, United States

11:21 AM - 11:27 AM

Abstract #065: Microneedle arrays engineer the skin microenvironment to promote allergen tolerance

University of Pittsburgh, Pittsburgh, Pennsylvania, United States

11:27 AM - 11:33 AM

Abstract #018: Langerhans cells suppress CD8 T cells in situ during acute graft-versus-host disease-like autoimmune mucocutaneous disease

N. Kubota1, A. Saito1, R. Tanaka1, B. E. Clausen2, M. Fujimoto1, N. Okiyama1
1Department of Dermatology, Faculty of Medicine, University of Tsukuba, Tsukuba, Ibaraki, Japan, 2Institute for Molecular Medicine, University Medical Center of the Johannes Gutenberg-University Mainz, Mainz, Germany

11:33 AM - 11:39 AM

Abstract #064: Mucosal-associated invariant T (MAIT) cell-derived IL-17A and IL-17F production is IL-23-independent and biased towards IL-17F

S. Cole1, C. Simpson1, R. Okoye1, M. Griffiths1, D. Baeten2, S. Shaw3, A. Maroof2
1UCB Pharma, Slough, United Kingdom, 2UCB Pharma, Brussels, Belgium

11:39 AM - 11:45 AM

Abstract #068: MiRNA-21 overexpression promotes T follicular helper cells mediated autoimmune response in systemic lupus erythematosus

X. Gao, J. Wu, L. Liu, Y. Li, L. Yang, H. Wu, Q. Lu, M. Zhao
Department of Dermatology, the Second Xiangya Hospital of Central South University, Changsha, Hunan, China

11:45 AM - 11:51 AM

Abstract #092: Approaches to generating protective T cell vaccines to conserved influenza epitopes using Modified Vaccinia Ankara (MVA) vector vaccines delivered through skin

T. Tian, Y. Pan, C. A. Stingley, J. Zhao, T. Kupper
Dermatology, BWH/HMS, Boston, Massachusetts, United States

11:51 AM - 11:57 AM

Abstract #106: Investigating the role of integrins αβ6 and αβ8 in CD8+ resident memory T-Cell and langerhan cell migration

J. S. De La Cruz Diaz, D. H. Kaplan
Dermatology/Immunology, University of Pittsburgh, Pittsburgh, Pennsylvania, United States

11:57 AM - 12:03 PM

Abstract #090: IL-23 regulates cutaneous CD4 T cell responses to Candida albicans

S. K. Whitley1, 2, X. Geng1, D. H. Kaplan1, 2
1Dermatology, University of Pittsburgh, Pittsburgh, Pennsylvania, United States, 2Immunology, University of Pittsburgh, Pittsburgh, Pennsylvania, United States

12:03 PM - 12:09 PM

Abstract #057: Interleukin-6 regulates psoriasis-like dermatitis induced by blockade of Programmed cell death 1 signaling

R. Tanaka, M. Fujimoto, N. Okiyama
Department of Dermatology, Faculty of Medicine, University of Tsukuba, Tsukuba, Ibaraki, Japan

12:09 PM - 12:15 PM

Abstract #013: NETs generate structured antimicrobial peptide-nucleosome immune complexes with inter-DNA spacings optimal for TLR9 activation

1Dept. of Bioengineering, UCLA, Los Angeles, California, United States, 2UCLA-Caltech Medical Scientist Training Program, UCLA, Los Angeles, California, United States, 3Laboratoire de Physique des Solides, Université Paris Sud, Orsay, France, 4Department of Dermatology, Lausanne University Hospital, Lausanne, Switzerland, 5Beijing National Laboratory for Condensed Matter Physics & CAS Key Laboratory of Soft Matter Physics, Institute of Physics, Chinese Academy of Sciences, Beijing, China, 6Dept. of Physics, Institute for Advanced Studies in Basic Sciences, Zanjan, Iran (the Islamic Republic of), 7School of Biological Sciences, Nanyang Technological University, Singapore, Singapore
Selected ePoster Discussions I

Genetic Disease, Gene Regulation and Gene Therapy

Studies on cutaneous gene expression and genetic diseases including gene therapy

Moderator: Johann Gudjonsson, MD/PhD

THURSDAY, MAY 9, 2019

11:15 AM - 12:15 PM

CONTINENTAL BALLROOM A

11:15 AM - 11:21 AM
Abstract #386: Autocrine IFN-k restricts CRISPR-Cas9 keratinocyte transfection
M. K. Sarkar1, R. Uppala1, S. Shao1, M. Kahlenberg2, J. Gudjonsson1
1Dermatology, University of Michigan, Ann Arbor, Michigan, United States, 2Department of Internal Medicine, Division of Rheumatology, University of Michigan, Ann Arbor, Michigan, United States

11:21 AM - 11:27 AM
Abstract #371: The use of human skin equivalents to evaluate the effectivity of QR-313, an antisense oligonucleotide, in gel formulation
M. Hogervorst1, M. van Berkel2, C. Oort2, M. P. Marinkovich3, D. Keene1, T. Ritsema2, J. Swildens2, I. Haisma2
1Shiriners Hospital for Children, Portland, Oregon, United States, 2ProQR Therapeutics, Leiden, Netherlands, 3Stanford University School of Medicine, Stanford, California, United States

11:27 AM - 11:33 AM
Abstract #370: Genetically corrected autologous keratinocyte epidermal grafts improve wound healing and patient reported outcomes in patients with recessive dystrophic epidermolysis bullosa
S. Eichstadt1, M. Barriga1, C. Teng1, N. T. Nguyen1, E. Gorell1, Z. Siprashvili1, K. Loutit1, Y. Dutt-Singkh1, J. Nazaroff1, M. P. Marinkovich1, J. Tang1
1Dermatology, Stanford University, Stanford, California, United States, 2Dermatology, Veteran’s Affairs Hospital, Stanford, California, United States

11:33 AM - 11:39 AM
Abstract #384: First in human use of a novel in vivo gene therapy to successfully correct recessive dystrophic epidermolysis bullosa (RDEB) skin: Results of a phase 1/2 placebo controlled trial
M. P. Marinkovich1, K. Sridhar1, I. Gurevich1, A. Ponakala1, S. Boddu1, D. Keene1, S. Vinzant2, P. Agarwal1, S. Krishnan1
1Dermatology, Stanford University, Stanford, California, United States, 2Kristal Biotech, Inc, Pittsburgh, Pennsylvania, United States, 3Shiriners Hospital, Portland, Oregon, United States

11:39 AM - 11:45 AM
Abstract #380: KB104: an HSV-based gene therapy vector engineered to deliver functional SPINK5 for the treatment of Netherton Syndrome
M. Bustos, C. Freedman, A. Majumdar, P. Zhang, T. Parry, S. Coghlan, S. Krishnan, P. Agarwal
Kristal Biotech, Inc, Pittsburgh, Pennsylvania, United States

11:45 AM - 11:51 AM
Abstract #418: Population-specific calibration of the human skin barrier by recent evolution of eQTLs that modulate involucrin expression
E. A. Brettmann, Z. Goodwin, C. de Guzman Strong
Medicine, Washington University School of Medicine, St. Louis, Missouri, United States

11:51 AM - 11:57 AM
Abstract #398: Neutrophil extracellular trap-dependent Th17 polarization of memory T-cells requires monocyte-T-cell contact and stimulates cytokine gene expression in an Act1D10N-dependent manner
S. Lambert, L. Tsol, R. P. Nair, J. T. Elder
Dermatology, University of Michigan, Ann Arbor, Michigan, United States

11:57 AM - 12:03 PM
Abstract #392: Altered keratinocyte differentiation is an early driver of keratin mutation-based palmoplantar keratoderma lesions
A. G. Zielen2, B. G. Poli2, J. Ma1, P. A. Coulombe1,2
1Cell and Developmental Biology, University of Michigan, Ann Arbor, Michigan, United States, 2Biochemistry and Molecular Biology, Bloomberg School of Public Health Johns Hopkins University, Baltimore, Maryland, United States, 3Physiology, School of Medicine Johns Hopkins University, Baltimore, Maryland, United States

12:03 PM - 12:09 PM
Abstract #410: Pyrin-associated auto-Inflammation with neutrophilic dermatosis (PAAND): Novel autosomal recessive MEFV mutation and successful treatment with colchicine
1Rowan University School of Osteopathic Medicine, Stratford, New Jersey, United States, 2Dermatology and Cutaneous Biology, Thomas Jefferson University, Philadelphia, Pennsylvania, United States, 3Drexel University, Philadelphia, Pennsylvania, United States, 4Tehran University of Medical Sciences, Tehran, Iran (the Islamic Republic of), 5Pasteur Institute of Iran, Tehran, Iran (the Islamic Republic of)

12:09 PM - 12:15 PM
Abstract #390: Second-hit, post-zygotic PMVK and MVD mutations cause linear porokeratosis
L. Atzmony1, H. Khan1, Y. H. Lim2,3,4, A. S. Paller1, J. Levinsohn2,3,5, K. E. Holland1, F. Nadeem Mirza1, E. Yin1, C. Ko2,5, J. S. Leventhal1, K. A. Choe1,2,3,5
1Dermatology, Northwestern University, Chicago, Illinois, United States, 2Dermatology, Yale University, Orange, Connecticut, United States, 3Pathology, Yale University, New Haven, Connecticut, United States, 4Department of Dermatology, Medical College of Wisconsin, Milwaukee, Wisconsin, United States, 5Department of Genetics, Yale University, New Haven, Connecticut, United States
Growth Factors, Cell Adhesion and Matrix Biology

Studies on growth factors and the interactions of cells with their local cellular and extracellular environment that affect signaling, adhesion, migration and development

THURSDAY, MAY 9, 2019

Moderator: Martine Dunnwald, PhD

11:15 AM - 11:21 AM
Abstract #441: Targeting glycolysis metabolism prevents the onset of alopecia areata in C3H/HeJ mice
Z. Dai, W. Zeng, A. Christiano
Dermatology, Columbia University, New York, New York, United States

11:21 AM - 11:27 AM
Abstract #444: Interferon Regulatory Factor 6 is required for proper cell-cell junctions
A. Antiguas1, E. A. Sander2, S. Halberg2, M. Dunnwald1
1Anatomy and Cell Biology, The University of Iowa, Iowa City, Iowa, United States, 2Biomedical engineering, The University of Iowa, Iowa City, Iowa, United States

11:27 AM - 11:33 AM
Abstract #431: Desmosomes pattern cell mechanics to govern epidermal tissue form and function
J. A. Broussard1, 2, J. Koetsier1, K. Green1, 2
1Pathology, Northwestern University, Chicago, Illinois, United States, 2Dermatology, Northwestern University, Chicago, Illinois, United States

11:33 AM - 11:39 AM
Abstract #433: Pemphigus vulgaris patient disease severity correlates with in vitro assessments of desmosomal function
A. L. Caldara1, M. F. Warren1, A. Cho2, S. E. Zimmer2, R. J. Feldman2, R. Swerlick2, J. Wrammert2, A. P. Kowalczyk2
1Cell Biology Department, Emory University, Atlanta, Georgia, United States, 2Emory University, Atlanta, Georgia, United States

11:39 AM - 11:45 AM
Abstract #425: RNA-seq transcriptomic profiling of diffuse and limited cutaneous systemic sclerosis
S. Khattri1, H. He1, S. Noda1, 2, Y. Asano1, S. Sato1, J. Han1, A. B. Pavel1, J. G. Krueger1, E. Guttman-Yassky1, 2
1Icahn School of Medicine at Mount Sinai, New York, New York, United States, 2The Rockefeller University, New York, New York, United States, 3The University of Tokyo, Tokyo, Japan

11:45 AM - 11:51 AM
Abstract #442: Laminin alpha 5 in skin microvascular endothelial cell function and angiogenesis
J. Li, T. Cui
Dermatology, University of Miami, Miami, Florida, United States

11:51 AM - 11:57 AM
Abstract #421: Pemphigus vulgaris IgG autoantibodies directly inhibit heterophilic desmoglein 3-desmocollin 3 adhesion by steric hindrance
K. Ishii1, J. Yamagami1, M. Amagai1, J. R. Stanley3, A. Ishiko1
1Dermatology, Toho University, Tokyo, Japan, Japan, 2Dermatology, Keio University, Tokyo, Japan, 3Dermatology, University of Pennsylvania, Philadelphia, Pennsylvania, United States

11:57 AM - 12:03 PM
Abstract #443: Oxidative exposure elevates intracellular ROS through impairing ROS conversion/reduction
T. He, J. Voorhees, G. J. Fisher
Department of Dermatology, University of Michigan Medical School, Ann Arbor, Michigan, United States

12:03 PM - 12:09 PM
Abstract #434: Novel anti-ageing function discovered in skin for the long non coding RNA nc886
H. Chajra1, D. Garandeau1, C. Delluc1, K. Lee2, E. Jung2, M. Frechet1
1Clariant Active Ingredient, Toulouse, France, 2Biospectrum, Gyeonggi-do, Korea (the Democratic People’s Republic of)
Selected ePoster Discussions I

Interventional Studies, Clinical and Patient Reported Outcomes

Studies involving interventional trials, clinical outcomes and patient reported outcomes research

THURSDAY, MAY 9, 2019

11:15 AM – 12:15 PM

INTERNATIONAL BALLROOM SOUTH

Moderator: Eric Simpson, MD

11:15 AM - 11:21 AM

Abstract #565: Improvement in skin Inflammation and barrier function biomarkers with crisaborole treatment in atopic dermatitis (AD)

E. Guttman-Yassky1, A. B. Pavel1, A. Diaz2, J. L. Werth2, C. Zang2, I. Vranic2, V. S. Purohit4, M. A. Zielinski2, B. Vlahos2, Y. Estrada2, E. Saint-Cyr-Proulx3, W. C. Ports4, R. Bissonnette4

1Cahn School of Medicine at Mount Sinai, New York, New York, United States, 2Pfizer Inc., Collegeville, Pennsylvania, United States, 3Pfizer Inc., Walton Oaks, Surrey, United Kingdom, 4Pfizer Inc., Groton, Connecticut, United States, 5Innovaderm Research, Montreal, Quebec, Canada

11:21 AM - 11:27 AM

Abstract #632: Cutaneous immune-related adverse events in 1,857 patients treated with anti-PD-1 therapy at an academic center

T. Le1, S. Kaul1, L. Cappelli2, J. Naidoo3, S. G. Kwatra1

1Department of Dermatology, Johns Hopkins University, Baltimore, Maryland, United States, 2Department of Rheumatology, Johns Hopkins University, Baltimore, Maryland, United States, 3Department of Oncology, Johns Hopkins University, Baltimore, Maryland, United States

11:27 AM - 11:33 AM

Abstract #578: Addressing the missing components for appropriate surveillance of Merkel cell carcinoma patients: Detailed recurrence data and an integrated risk analysis approach

A. McEvoy4, K. Lachance4, K. L. Werth2, C. Zang2, I. Vranic2, V. S. Purohit4, M. A. Zielinski2, B. Vlahos2, Y. Estrada2, E. Saint-Cyr-Proulx3, W. C. Ports4, R. Bissonnette4

1Cahn School of Medicine at Mount Sinai, New York, New York, United States, 2Pfizer Inc., Collegeville, Pennsylvania, United States, 3Pfizer Inc., Walton Oaks, Surrey, United Kingdom, 4Pfizer Inc., Groton, Connecticut, United States, 5Innovaderm Research, Montreal, Quebec, Canada

11:33 AM - 11:39 AM

Abstract #620: Initial validation of the IGA x BSA in atopic dermatitis

C. Topham, D. Haynes, M. Brazil, E. L. Simpson

Dermatology, Oregon Health & Science University, Portland, Oregon, United States

11:39 AM - 11:45 AM

Abstract #621: Dupilumab in adolescents with moderate-to-severe atopic dermatitis and a history of inadequate response, or intolerance to cyclosporine: subgroup analysis from a pivotal 16-week trial

A. S. Paller1, E. L. Simpson2, M. de Bruin-Weller2, J. Weisman4, B. Lockshin5, T. Hultsch4, Z. Chen2, P. Mina-Osorio3, A. B. Rossi5, L. Eckert4, A. Gadkar1, A. Bansal1

1Department of Dermatology, Northwestern University Feinberg School of Medicine, Chicago, Illinois, United States, 2Oregon Health and Science University, Portland, Oregon, United States, 3Department of Dermatology & Allergology, University Medical Center Utrecht, Utrecht, Netherlands, 4Advanced Medical Research, PC, Atlanta, Georgia, United States, 5U.S. Dermatology Partners, Rockville, Maryland, United States

11:45 AM - 11:51 AM

Abstract #550: Efficacy and toxicity of hypofractionated adjuvant radiotherapy in Merkel cell carcinoma


1Dermatology, University of Washington, Seattle, Washington, United States, 2Radiation Oncology, University of Washington, Seattle, Washington, United States, 3Radiology, University of Washington, Seattle, Washington, United States, 4Medical Oncology, University of Washington, Seattle, Washington, United States

11:51 AM - 11:57 AM

Abstract #594: Gentamicin therapy induces functional laminin 332 and improves wound healing in junctional epidermolysis bullosa patients harboring nonsense mutations

A. Kwong, J. Cogan, Y. Hou, V. Lincoln, G. Kim, Q. Chen, D. Woodley, M. Chen

University of Southern California, Los Angeles, California, United States

11:57 AM - 12:03 PM

Abstract #532: Switching from calcineurin inhibitors to belatacept decreases keratinocyte carcinomas incidence rate in kidney transplant recipients

M. Wang1, A. Mittal1, O. Colegio2,1

1Dermatology, Yale School of Medicine, New Haven, Connecticut, United States, 2Dermatology, Roswell Park Comprehensive Cancer Center, Buffalo, New York, United States

12:03 PM - 12:09 PM

Abstract #574: Comparative analysis of quality of life impact in patients with autoimmune blistering disease

S. Alshamekhi2, T. M. DeGrasia1, S. C. Chen2, Y. Liu2, R. Feldman2

1Emory, Atlanta, Georgia, United States, 2Dermatology, Emory University, Atlanta, Georgia, United States

12:09 PM - 12:15 PM

Abstract #555: Association of aromatic antiepileptic drugs induced severe cutaneous adverse reactions and HLA allele or a new susceptibility gene, CGREF1

Y. Liang, L. Ma

Dermatology, Beijing Children's Hospital, Capital Medical University; National Center for Children's Health, Beijing, China
Selected ePoster Discussions I

Photobiology

Studies on biological, biochemical, and molecular responses to ultraviolet radiation in cells, animals and humans

Thursday, May 9, 2019

Moderator: Robert Knobler, MD

11:15 AM - 11:21 AM
770 CYP11A1-derived vitamin D3 hydroxyderivatives protect against UVB-induced skin inflammation through the modulation of NF-κB signaling pathway in human keratinocytes

A. Chaiprasongsuk\textsuperscript{a, b}, Z. Janjetovic\textsuperscript{c}, T. Kim\textsuperscript{a, c}, R. C. Tuckey\textsuperscript{a, c}, U. Panich\textsuperscript{d}, A. T. Slominski\textsuperscript{d, e}

\textsuperscript{a}Department of Pharmacology, Faculty of Medicine Siriraj Hospital, MU, Bangkok, Thailand, \textsuperscript{b}UWA, Crawley, Western Australia, Australia, \textsuperscript{c}Dermatology, UAB, Birmingham, Alabama, United States, \textsuperscript{d}VA, Birmingham, Alabama, United States

11:21 AM - 11:27 AM
Abstract #734: Exosome-mediated mir-4655-3p contributes to UV-radiation induced bystander effects by targeting E2F2

B. Zhou, D. Luo
Nanjing Medical University, Nanjing, China

11:27 AM - 11:33 AM
Abstract #765: UVB radiation induces abnormal epidermal proliferation, impaired differentiation, and tumorigenesis through the autophagy and p62 pathway

L. Qiang, Z. Yang, S. Yang, Y. He
University of Chicago, Chicago, Illinois, United States

11:33 AM - 11:39 AM
Abstract #767: Regulation of XPC by 7-dehydrocholesterol in keratinocytes and fibroblasts

T. K. Oberoi\textsuperscript{1, 2}, C. Wong\textsuperscript{1}, D. H. Oh\textsuperscript{1, 2}
\textsuperscript{1}San Francisco VA Health Care System, San Francisco, California, United States, \textsuperscript{2}Department of Dermatology, University of California, San Francisco, San Francisco, California, United States

11:39 AM - 11:45 AM
Abstract #760: Melanin may mediate visible light induced phototoxicity in darker skin types

H. Y. Lim, M. L. Kerns, S. Kang, A. L. Chien
Derm, Johns Hopkins Univ School of Med, Baltimore, Maryland, United States

11:45 AM - 11:51 AM
Abstract #733: Potent immunogenic cell death (ICD) caused by UVA-Activated 8-Methoxypsoralen (8-MOPA)

K. Tatsuno\textsuperscript{1}, D. Hanlon\textsuperscript{1}, T. Yamazaki\textsuperscript{2}, L. Galluzzi\textsuperscript{3, 4}, R. Edelson\textsuperscript{1}
\textsuperscript{1}Dermatology, Yale University, Hamden, Connecticut, United States, \textsuperscript{2}Radiation Oncology, Weill Cornell Medical College, New York, New York, United States, \textsuperscript{3}Sandra and Edward Meyer Cancer Center, New York, New York, United States

11:51 AM - 11:57 AM
Abstract #755: Effects of repeated visible light irradiation across skin types

S. Kim, I. D. Brown, F. Succaria, C. Dillen, S. Kang, A. L. Chien
Dermatology, Johns Hopkins University, Baltimore, Maryland, United States

11:57 AM - 12:03 PM
Abstract #730: Long-term effect of 222-nm ultraviolet lamp on mice highly susceptible to developing ultraviolet-induced skin tumors

N. Yamano\textsuperscript{1}, M. Kunisada\textsuperscript{1}, S. Kaizu\textsuperscript{2}, K. Sugihara\textsuperscript{3}, A. Nishiaki-Sawada\textsuperscript{1}, H. Ohashi\textsuperscript{2}, A. Yoshioka\textsuperscript{1}, T. Igarashi\textsuperscript{1}, M. Tanito\textsuperscript{2}, C. Nishigori\textsuperscript{3}
\textsuperscript{1}Kobe University Graduate School of Medicine, Kobe, Hyogo, Japan, \textsuperscript{2}Ophthalmology, Shimane University Graduate School of Medicine, Izumo, Shimane, Japan, \textsuperscript{3}USHIO INC., Chiyoda-ku, Tokyo, Japan

12:03 PM - 12:09 PM
Abstract #743: Serotonin level alterations after treatment with extracorporeal photopheresis

A. Cho, R. Knobler, C. Jantschitsch
Dermatology, Medical University of Vienna, Vienna, Austria

12:09 PM - 12:15 PM
Abstract #761: The impact of 308-nm excimer laser on human keratinocytes of organ cultured human skin

A. Okazaki, K. Sugawara, D. Tsuruta
Dermatology, Osaka City University Graduate School of Medicine, Osaka, Japan
Concurrent Minisymposium 1

Adaptive and Auto-Immunity

Studies of adaptive immune responses involving T and B lymphocytes, dendritic cells, other antigen presenting cells, and antigen processing and presentation; Basic and pre-clinical experimental studies focused on autoimmunity

THURSDAY, MAY 9, 2019 1:30 PM – 4:00 PM INTERNATIONAL BALLROOM NORTH

President(s): Thomas Kupper, MD and Alicia Mathers, PhD

1:30 PM - 1:42 PM

Abstract #030: Single-cell transcriptomic level reconstruction of human psoriatic skin

T. Kim1, 2, S. Kim2, Y. Hong1, J. Park3, J. Oh1, S. Song1, D. Kim2, W. Park4, H. Lee4, M. Lee2
1Microbiology and Immunology, Yonsei University College of Medicine, Seoul, Korea (the Republic of), 2Dermatology, Yonsei University College of Medicine, Seoul, Korea (the Republic of), 3Plastic Surgery, Yonsei University College of Medicine, Seoul, Korea (the Republic of), 4Samsung Genome Institute, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea (the Republic of)

1:42 PM - 1:54 PM

Abstract #047: Autoantigen Keratin 17 presented by keratinocytes directs T cell auto-reactivity in psoriasis

E. Dang, C. Xiao, G. Wang
Department of Dermatology, Xijing Hospital, Fourth Military Medical University, Xi’an, Shaanxi, China

1:54 PM - 2:06 PM

Abstract #076: IL-36 signaling is essential for psoriatic Inflammation through the augmentation of innate immune responses

K. Ohko, K. Nakajima, S. Kataoka, M. Takaishi, S. Sano
Department of Dermatology, Kochi Medical School, Kochi University, Nankoku, Kochi, Japan

2:06 PM - 2:18 PM

Abstract #101: CD1a tetramers identify bacterial phospholipid-specific T cells in human skin and blood

G. C. Monnot1, B. Sallee1, A. R. Abdelaziz1, C. H. Rohde2, L. A. Bordone1, A. de Jong1
1Dermatology, Columbia University, New York, New York, United States, 2Plastic Surgery, Columbia University, New York, New York, United States

2:18 PM - 2:30 PM

Abstract #070: Antimicrobial Th17CTL targeting both Gram-positive and Gram-negative bacteria.

Medicine, UCLA, Los Angeles, California, United States

2:30 PM - 2:42 PM

Abstract #104: CD8+CD69+CD103+- T cells in the tumor microenvironment and in the skin of memory-conditioned mice are expanded by anti-PD1

K. P. Devl1, T. Kim2, Y. Liu1, K. Pradhan2, N. Anandadasabapathy1
1Dermatology, Weill Cornell Medical Center, New York, New York, United States, 2Dermatology, Brigham and Women’s Hospital, Harvard Medical School, Boston, Massachusetts, United States

2:42 PM - 2:54 PM

Abstract #035: AIM2 regulates anti-tumor immunity from dendritic cell vaccination within the melanoma microenvironment

K. Fukuda1, R. Riding2, A. Khvorova2, K. Fitzgerald2, J. E. Harris1
1Dermatology, UMASS Medical School, Worcester, Massachusetts, United States, 2Molecular Medicine, UMASS Medical School, Worcester, Massachusetts, United States, 3Infectious Diseases and Immunology, UMASS Medical School, Worcester, Massachusetts, United States

2:54 PM - 3:06 PM

Abstract #043: Keratinocyte-mediated activation of TGFβ maintains skin-recirculating memory CD8+ T cells

T. Hirai1, Y. Zenke2, Y. Yang3, 4, L. Bartholin5, L. Beura6, D. Masopust7, D. H. Kaplan1
1Department of Dermatology and Immunology, University of Pittsburgh, Pittsburgh, Pennsylvania, United States, 2Department of Dermatology, St. Luke’s International Hospital, Tokyo, Japan, 3Department of Dermatology, Xiangya Hospital, Central South University, Changsha, Hunan, China, 4The Third Xiangya Hospital, Central South University, Changsha, Hunan, China, 5Centre de Recherche en Cancérologie de Lyon, Lyon, France, 6Departments of Microbiology and Immunology, Center for Immunology, University of Minnesota, Minneapolis, Minnesota, United States

3:06 PM - 3:18 PM

Abstract #063: The DC-HIL/syndecan-4 (SD4) pathway regulates trafficking of effector T-lymphocytes from blood to skin

V. Ramani1, J. Chung2, M. Kobayashi3, P. Cruz4, K. Aritizumi1
1UT Southwestern Medical Center, Dallas, Texas, United States, 2Dermatology, UT Southwestern Medical Center, Dallas, Texas, United States

3:18 PM - 3:30 PM

Abstract #087: Molecular and cellular mechanisms of tolerogenic signature induction in CD4+ T cells by apoptotic cells

A. Ho1, 2, 3, S. Xiao2, 3, A. Madi2, 3, N. Chihara2, 3, A. Regev1, V. Kuchroo1, 2
1Dermatology, Brigham and Women’s Hospital, Boston, Massachusetts, United States, 2Centre for Immunologic Diseases, Brigham and Women’s Hospital / Harvard Medical School, Boston, Massachusetts, United States, 3Broad Institute, Cambridge, Massachusetts, United States

3:30 PM - 3:42 PM

Abstract #010: IL-27 in macrophages mediates T cell survival and dermal cluster formation in allergic contact hypersensitivity

J. Suwanpradid1, K. S. Vasquez2, 1, M. L. Pauli1, M. Rosenblum1
1Department of Dermatology, Icahn School of Medicine at Mount Sinai, New York, New York, United States, 2SUNY Downstate Medical Center, Brooklyn, New York, United States

3:42 PM - 3:54 PM

Abstract #012: Dynamics of alpha-beta T cell accumulation in human fetal skin

M. O. Dhariwala1, C. S. Vasquez2, 1, M. L. Pauli1, M. Rosenblum1
1Department of Dermatology, Icahn School of Medicine at Mount Sinai, New York, New York, United States, 2SUNY Downstate Medical Center, Brooklyn, New York, United States
Concurrent Minisymposium 2
Genetic Disease, Gene Regulation, and Gene Therapy
Studies on cutaneous gene expression and genetic diseases including gene therapy

THURSDAY, MAY 9, 2019 1:30 PM - 4:00 PM

President(s): Brian Capell, MD/PhD and Kavita Sarin, MD/PhD

1:30 PM - 1:42 PM
Abstract #400 Transcription termination regulates keratinocyte proliferation and differentiation
X. Bao, X. Chen, S. Lloyd
Molecular Biosciences, Northwestern University, Evanston, Illinois, United States

1:42 PM - 1:54 PM
Abstract #397: Uncovering causative, noncoding genetic variants in cutaneous diseases
G. Wozniak, Y. Shen, A. Rubin, P. Neela, P. Khavari
Stanford University, Stanford, California, United States

1:54 PM - 2:06 PM
Abstract #365: Multivariant chromatin looping orchestrates cellular reProgramming for advanced gene therapy
K. Wang, D. Le
Dermatology, Stanford University, Stanford, California, United States

2:06 PM - 2:18 PM
Abstract #417: Combined RNA-based gene editing and reProgramming of iPSCs for the modeling and treatment of genetic diseases
P. S. McGrath1, 2, 3, K. Butterfield1, 2, 3, M. Pavlova1, 2, D. Roop1, 2, G. Bilousova1, 2, 3, I. Kogut1, 2, 3
1Dermatology, University of Colorado AMC, Aurora, Colorado, United States, 2Charles C. Gates Center for Regenerative Medicine, University of Colorado AMC, Aurora, Colorado, United States, 3Stem Cell Biobank and Disease Modeling Core, University of Colorado AMC, Aurora, Colorado, United States

2:18 PM - 2:30 PM
Abstract #374: CRISPR/Cas9-base editing mediated correction for recessive dystrophic epidermolysis bullosa M. Osborn1, G. Newby1, F. Knipping1, D. Liu1, J. Tolar1
1University of Minnesota, Minneapolis, Minnesota, United States, 2Broad Institute of MIT and Harvard and HHMI, Cambridge, Massachusetts, United States

2:30 PM - 2:42 PM
Abstract #363: NFI heterozygosity fosters de novo tumorigenesis but impairs malignant transformation
J. Brosseau1, C. Liao1, Y. Wang1, V. Ramani1, T. Vandergriff1, M. Lee1, A. Patel1, K. Arilzumi1, L. Le1, 2, 3
1Dermatology, UT Southwestern Medical Center, Dallas, Texas, United States, 2Simmons Comprehensive Cancer Center, UT Southwestern Medical Center, Dallas, Texas, United States, 3Hamon Center for Regenerative Science and Medicine, UT Southwestern Medical Center, Dallas, Texas, United States

2:42 PM - 2:54 PM
Abstract #420: Investigating new molecular pathways in skin vascular formation and disease
R. Mylaarapu1, M. Plehany1, N. Sobhani1, W. Stevens1, R. Flores1, J. Finlon2, N. Box1, F. Kiefer1, B. Tamburini1, T. Terzian1
1Dermatology, University of Colorado, Aurora, Colorado, United States, 2DOM division of Gastroenterology, University of Colorado, Aurora, Colorado, United States, 3European Institute for Molecular Imaging, University of Münster, Münster, Germany

2:54 PM - 3:06 PM
Abstract #382: Searching for targets to combat fibrosis in RDEB patients
I. Fuentes, T. Webster, A. South
Dermatology, Thomas Jefferson University, Philadelphia, Pennsylvania, United States

3:06 PM - 3:18 PM
Abstract #412: Differential chromatin accessibility in skin-homing vs. non-skin homing CD4+ T cells
Z. Zhang1, L. Tsoi1, R. P. Nair1, P. E. Stuart1, X. Wen2, J. T. Elder1
1Dermatology, Univ of Michigan, Ann Arbor, Michigan, United States, 2Biostatistics, Univ of Michigan, Ann Arbor, Michigan, United States

3:18 PM - 3:30 PM
Abstract #383: Preclinical safety and pharmacology of KB105, an HSV-based gene therapy vector for the treatment of autosomal recessive congenital ichthyosis (ARCI)
P. Zhang, A. Majumdar, C. Freedman, S. Yogesha, S. Ramasamy, S. Krishnan, P. Agarwal
Krystal Biotech, Inc, Pittsburgh, Pennsylvania, United States

3:30 PM - 3:42 PM
Abstract #405: Adenovirus-mediated ABCC6 gene therapy prevents ectopic mineralization in an Abcc6-/- mouse model of pseudoxanthoma elasticum
J. Huang1, A. Snook2, J. D. Jacobs1, J. Uttjo1, Q. Li1
1Dermatology and Cutaneous Biology, Thomas Jefferson University, Philadelphia, Pennsylvania, United States, 2Pharmacology and Experimental Therapeutics, Thomas Jefferson University, Philadelphia, Pennsylvania, United States

3:42 PM - 3:54 PM
Abstract #373: Comparative analysis of acne and rosacea transcriptomes identifies compounds that target distinct disease-specific signatures of pathogenic inflammation and lipid biosynthesis
R. Stone, M. Tomic-Canic, J. Keri
Department of Dermatology and Cutaneous Surgery, University of Miami Miller School of Medicine, Miami, Florida, United States
Concurrent Minisymposium 3
Growth Factors, Cell Adhesion, and Matrix Biology
Studies on growth factors and the interactions of cells with their local cellular and extracellular environment that affect signaling, adhesion, migration and development

THURSDAY, MAY 9, 2019
1:30 PM – 4:00 PM
CONTINENTAL BALLROOM C

Presider(s): Peter Koch, PhD and Cory Simpson, MD/PhD

1:30 PM - 1:42 PM
Abstract #422: Functional analysis of Collagen Type VII without exon 80 to evaluate the potential of antisense oligonucleotide therapy for RDEB
I. Haisma1, O. Bornert2, M. Schuijt1, T. Ritsema1, A. Nyström2
1ProQR Therapeutics, Leiden, Netherlands, 2Department of Molecular Dermatology, University of Freiburg, Freiburg, Germany

1:42 PM - 1:54 PM
Abstract #438: Pharmacological inhibition of leptin delays anagen in the murine hair cycle
E. Y. Lee1, A. Christiano2
1Columbia University Vagelos College of Physicians and Surgeons, New York, New York, United States, 2Dermatology, Columbia University, New York, New York, United States

1:54 PM - 2:06 PM
Abstract #427: Blockade of autophagy accelerates the development of alopecia areata
R. Gund1, S. O. Erjavec2, A. Christiano1
1Dermatology, Columbia University, New York, New York, United States, 2Genetics & Development, Columbia University, New York, New York, United States

2:06 PM - 2:18 PM
Abstract #429: mTORC1 feedback to AKT modulates MIT/TFE-driven lysosomal biogenesis and EGFR degradation
K. Asrani1, A. Sood2, S. Murali1, C. Na1, H. Kaur1, Z. Khan1, B. Lam1, P. Phatak1, M. Noë1, R. K. Anchoori1, C. C. Talbot Jr.1, B. Smith1, M. Skaro1, T. Lotan1
1Johns Hopkins Medicine, Baltimore, Maryland, United States, 2University of Maryland School of Medicine, Baltimore, Maryland, United States

2:18 PM - 2:30 PM
Abstract #436: The role of the endosomal trafficking complex, the retromer, in regulating desmoglein-1 localization
M. Hegazy1, O. Nekrasova1, J. Koetsier1, J. A. Broussard1, L. Godsel1, K. Green1, 2
1Department of Pathology, Northwestern University, Chicago, Illinois, United States, 2Department of Dermatology, Northwestern University, Chicago, Illinois, United States

2:30 PM - 2:42 PM
Abstract #440: Planar cell polarity-disrupting mutation alters Celsr1-mediated cell adhesion and dynamics
S. N. Stahley, D. Devenport
Princeton, Princeton, New Jersey, United States
Concurrent Minisymposium 4

Interventional Studies, Clinical and Patient Reported Outcomes

Studies involving interventional trials, clinical outcomes and patient reported outcomes research

THURSDAY, MAY 9, 2019

1:30 PM - 4:00 PM

INTERNATIONAL BALLROOM SOUTH

Presider(s): Joseph Merola, MD and Elizabeth Wallace, MD

1:30 PM - 1:42 PM

Abstract #544: Alopecia areata lesions show significant changes in immune and keratin biomarkers that correlate with clinical improvement with oral Janus kinase inhibitors PF-06651600 (JAK3) and PF-06700841 (TYK2/JAK1)
E. Guttman-Yassky1, A. B. Pavel1, K. Page1, A. Diaz1, A. Banerjee1, B. King1, W. Zhang1, L. Zhu2, C. Banfield1, L. A. Cox2, M. Vincent2, M. Dowty2, E. Peeva2
1Icahn School of Medicine, New York, New York, United States, 2Pfizer, Cambridge, Massachusetts, United States, 3Yale University School of Medicine, New Haven, Connecticut, United States

1:42 PM - 1:54 PM

Abstract #554: Effects on CD3, Treg and TH17 cell numbers in skin biopsies after 16-week mirikizumab treatment, evaluated by an epigenetic assay
R. Bissonnette1, J. Schmitz2, D. Patel1, R. E. Higgs1, H. H. Sonnengren1, K. H. Liu1, K. Reich1
1Eli Lilly and Company, Indianapolis, Indiana, United States, 2Innovederm Research, Montreal, Quebec, Canada, 3University Clinic Hamburg-Eppendorf, Hamburg, Germany

1:54 PM - 2:06 PM

Abstract #560: KPL-716, anti-Oncoostatin M receptor beta antibody, reduced pruritus in atopic dermatitis
Z. Mikhak1, R. Bissonnette2, D. Siri1, S. K. Tying1, E. Tessari1, R. Gandhi1, F. Fang1, J. F. Paolini1
1Kiniksa, Lexington, Massachusetts, United States, 2Innovederm, Montreal, Quebec, Canada, 3SWIA Research Center, Normal, Illinois, United States, 4University of Texas Health Science Center - Center for Clinical Studies, Houston, Texas, United States

2:06 PM - 2:18 PM

Abstract #566: Topical nitric oxide releasing therapy with 2% SB414 cream downregulated major gene expressions in patients with atopic dermatitis
E. Guttman-Yassky1, A. B. Pavel1, T. Durham1, T. Maeda-Chubachi1
1Novan, Inc, Morrisville, North Carolina, United States, 2Icahn School of Medicine at Mount Sinai Medical Center, New York, New York, United States

2:18 PM - 2:30 PM

Abstract #562: Mini-punch grafting for the treatment of refractory and stable vitiligo
T. Zhao, Z. Ye, T. Gao, S. Li, C. Li
Xijing Hospital, Fourth Military Medical University, Xian, China

2:30 PM - 2:42 PM

Abstract #556: Evaluating important change and clearance of disease activity as clinical efficacy measures for clinical trials in dermatomycoses
S. Ahmed2, S. Chakka1,2, R. Krain1,2, R. Feng2, V. P. Werth1,2
1CMCVAMC, Philadelphia, Pennsylvania, United States, 2University of Pennsylvania, Philadelphia, Pennsylvania, United States

2:42 PM - 2:54 PM

Abstract #564: Temporal outcomes and factors predictive of remission and relapse after rituximab therapy of pemphigus vulgaris (PV)
N. Tovabnabutra1,2, C. Kushner3, A. Payne1
1University of Pennsylvania, Philadelphia, Pennsylvania, United States, 2Chiang Mai University, Chiang Mai, Thailand

2:54 PM - 3:06 PM

Abstract #553: Pembrolizumab with or without vismodegib for advanced basal cell carcinoma: An investigator-initiated, proof-of-concept study
A. Chang1, D. C. Tran1, J. Cannon1, S. Li1, M. Jeng1, K. Rieger1, K. Y. Sarin1, K. Yost1, A. Satpathy1, S. Reddy1, A. Colevas1
1Dermatology, Stanford University School of Medicine, Redwood City, California, United States, 2Medicine - Oncology, Stanford University School of Medicine, Stanford, California, United States, 3Pathology, Stanford University School of Medicine, Stanford, California, United States

3:06 PM - 3:18 PM

Abstract #590: Detecting Merkel cell carcinoma recurrence using a blood test: Outcomes from 774 patients
K. Lachance1, T. Akailek1, K. Cahill1, L. Zawacki1, N. Singh1, C. Doolittle-Amiava1,2, S. Park1, C. Morishima1, K. W. Hutchinson1, J. J. Cate1, D. A. Galloway1, K. Paulson1,2, P. T. Nghiem2,4
1Laboratory Medicine, UW, Seattle, Washington, United States, 2Medical Oncology, UW, Seattle, Washington, United States, 3Dermatology, UW, Seattle, Washington, United States, 4Pathology, SCCA, Seattle, Washington, United States, 5Human Biology, FHCRC, Seattle, Washington, United States

3:18 PM - 3:30 PM

Abstract #570: Safety and efficacy of bertilimumab, a human anti-eotaxin-1 monoclonal antibody, in bullous pemphigoid in a phase 2a study
A. S. Fiorino1, S. Baum2, A. Czernik3, R. Hall4, T. Zeeli5, A. Banerjee2, B. King3, W. Zhang2, L. Zhu2, C. Banfield2, . Maeda-Chubachi1
1UPenn, Philadelphia, Pennsylvania, United States, 2CMCVAMC, Philadelphia, Pennsylvania, United States, 3University of Pennsylvania, Philadelphia, Pennsylvania, United States, 4Duke University, Durham, North Carolina, United States, 5Tel Aviv Medical Center, Tel Aviv, Israel

3:30 PM - 3:42 PM

Abstract #587: Evaluating meaningful change in disease activity as a clinical efficacy measure for clinical trials in cutaneous lupus erythematosus
S. Chakka1,2, R. Krain1,2, S. Ahmed1,2, R. Feng2, V. P. Werth1,2
1CMCVAMC, Philadelphia, Pennsylvania, United States, 2University of Pennsylvania, Philadelphia, Pennsylvania, United States

3:42 PM - 3:54 PM

Abstract #610: Safety and efficacy of lenalidomide, a human anti-eotaxin-1 monoclonal antibody, in bullous pemphigoid in a phase 2a study
V. P. Werth1,2, D. Pearson1,2, J. Okawa1,2, R. Feng1, J. Concha1,2, B. Patel1,2, E. Hejazi1,2, C. Cornwell1, S. Constantine1, B. White1
1UPenn, Philadelphia, Pennsylvania, United States, 2CMCVAMC, Philadelphia, Pennsylvania, United States, 3Corbus Pharmaceuticals, Norwood, Massachusetts, United States
Concurrent Minisymposium 5

Photobiology

Studies on biological, biochemical, and molecular responses to ultraviolet radiation in cells, animals and humans

THURSDAY, MAY 9, 2019

1:30 PM - 4:00 PM

CONTINENTAL BALLROOM B

Presider(s): Amanda MacLeod, MD and Taihao Quan, MD/PhD

1:30 PM - 1:42 PM

Abstract #765: NRF2-mediated inhibition of UVB-induced hyperpigmentation by topical sulforaphane is dependent on upregulation of IL6Rα expression on keratinocytes


Department of Dermatology, Johns Hopkins University School of Medicine, Baltimore, Maryland, United States

1:42 PM - 1:54 PM

Abstract #731: Circular RNA expression profile in human fibroblast premature senescence after repeated UVB irradiations revealed by microarray

D. Luo, 3, C. Sir, B. Zhou

Dermatology, The First Affiliated Hospital of Nanjing Medical University, Nanjing, Jiangsu, China, Dermatology, Nanfang Medical University, Guangdong, China

1:54 PM - 2:06 PM

Abstract #751: A comparative analysis of skin aging-associated secreted proteins (SAASP) produced by dermal fibroblasts from intrinsically versus extrinsically aged human skin

S. Schneider, J. Tigges, M. Knechten, A. Marini, J. Krutmann

IUF, Düsseldorf, Germany

2:06 PM - 2:18 PM

Abstract #768: Type I interferons modulate ultraviolet radiation induced suppression of immune responses by Stimulator of Interferon Genes (STING)

M. Sherwani1, K. Yang1, C. Raman1, C. Elmets1,2, Y. Yusuf1

Dermatology, UAB, Birmingham, Alabama, United States, Clinical Immunology and Rheumatology, UAB, Birmingham, Alabama, United States, Birmingham VA Medical Center, Birmingham, Alabama, United States

2:18 PM - 2:30 PM

Abstract #771: Increased PD-L1 expression in human skin acutely and chronically exposed to UV irradiation

S. Dickinson1,2, M. Krutzsch1, M. Yozwiak1, K. Saboda4, E. Pietrocin1, V. Calvert1, C. Curiel-Lewandrowski1,2

George Mason Univ., Manassas, Virginia, United States, Univ. of AZ Dept. of Medicine, Tucson, Arizona, United States, Pharmacology, Univ. of Arizona, Tucson, Arizona, United States, Univ. of Arizona Cancer Center, Tucson, Arizona, United States

2:30 PM - 2:42 PM

Abstract #748: Duplex sequencing reveals the effects of caffeine on reducing UV-induced mutations of cancer-relevant genes

D. Rokunohe1, K. Ratnakumar1, B. F. Kohrn, K. Loubet-Senear2, J. Shen1, L. A. Loeb1, P. Nghiem1, M. Kawasumi1

Dermatology, University of Washington, Seattle, Washington, United States, Pathology, University of Washington, Seattle, Washington, United States

2:42 PM - 2:54 PM

Abstract #750: Ultraviolet irradiation modulates appetite and energy homeostasis in mice by hormonal regulation

E. Kim1,2, T. J. Kim, S. Kim, Q. Quan1,2, Y. Tian1,2, C. Shin1,2, D. Lee1,2, J. Chung1,2

1Department of Dermatology, Seoul National University College of Medicine, Seoul, Korea (the Republic of), 2Laboratory of Cutaneous Aging Research, Biomedical Research Institute, Seoul National University Hospital, Seoul, Korea (the Republic of), 3Institute of Human-Environment Interface Biology, Seoul National University, Seoul, Korea (the Republic of)

2:54 PM - 3:06 PM

Abstract #772: Age-associated alterations in pro-inflammatory cytokine signaling as well as UV-induced DNA damage contribute to increased basal cell carcinoma (BCC) tumor burden in Ptc1+/-/SKH-1 mice

A. L. Kim, D. Owens, Y. Zhu, D. R. Bickers

Dermatology, Columbia University Irving Medical Center, New York, New York, United States

3:06 PM - 3:18 PM

Abstract #728: LL-37 promotes endothelial photo-sensitivity and adhesion molecule expression in Rosacea

N. N. Kulkarni, T. Takahashi, L. Tong, J. Y. Cheng, R. L. Gallo

Dermatology, UC San Diego, San Diego, California, United States

3:18 PM - 3:30 PM

Abstract #741: UV-induced CD39 expression on immunosuppressive memory T cells in human cutaneous squamous cell carcinoma

M. J. Whitley1, C. Lai2, J. Suwanpradit1, R. R. Rudolph3, D. Zeilic4, W. Havran4, J. Cook1, D. Erdmann1, H. Levinson1, E. P. Healy4, A. S. MacLeod1

1Dermatology, Duke University, Durham, North Carolina, United States, 2Dermatopharmacology, University of Southampton, Southampton, United Kingdom, 3Plastic Surgery, Scripps Clinic, La Jolla, California, United States, 4Immunology and Microbiology, The Scripps Research Institute, La Jolla, California, United States, 5Plastic Surgery, Duke University, Durham, North Carolina, United States

3:30 PM - 3:42 PM

Abstract #753: The UVB-induced tryptophan photoprodut 6-formylindolo[3,2-c]carbazole (FICZ) activates aryl hydrocarbon receptor (AHR) signaling in keratinocytes to prevent UVA-induced apoptosis

K. M. Rolfs1, M. Nakamura2, J. Krutmann1, T. Haarmann-Stemmann1

1IUF – Leibniz Research Institute for Environmental Medicine, Düsseldorf, Germany, 2Department of Geriatric and Environmental Dermatology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Aichi, Japan

3:42 PM - 3:54 PM

Abstract #759: Protection of geriatric skin from abnormal procarcinogenic UVB responses by dermal wounding strategies which upregulate IGFl-1 levels

J. B. Travers1, M. G. Kemp3, D. F. Spandau1

1Pharmacology, Wright State University, Dayton, Ohio, United States, 2Dermatology, Dayton VA Medical Center, Dayton, Ohio, United States, 3Dermatology, Indiana University, Indianapolis, Indiana, United States
Concurrent Minisymposium 6

Interdisciplinary Spotlight: Disease Models

Studies involving model systems of skin disease including organotypic, innovative murine models, xenograft studies, 3-dimensional tissue culture approaches and ‘omics approaches for predicting biomarkers of disease

THURSDAY, MAY 9, 2019

1:30 PM – 4:00 PM

WALDORF ROOM

<table>
<thead>
<tr>
<th>Time</th>
<th>Presenter (s)</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:30 PM</td>
<td>Robert Dorschner, MD and Bethany Perez-White, PhD</td>
<td><a href="#">Abstract #052: Regulatory T cell-mediated, OX40-dependent peripheral tolerance to autoantigen, desmoglein 3</a></td>
<td>H. Irikil, H. Takahashil, N. Wadal, S. Horal, M. Amagail, 3 Dermatology, Keio University School of Medicine, Tokyo, Japan, 3Graduate School of Pharmaceutical Sciences, University of Tokyo, Tokyo, Japan, Laboratory for Skin Homeostasis, RIKEN IMS, Yokohama, Japan</td>
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<td>1:42 PM</td>
<td></td>
<td><a href="#">Abstract #391: Validating causative mutations in patients with Ehlers-Danlos Syndrome using a novel xenograft model</a></td>
<td>N. Diette, A. Frieman, A. Rozhok, D. Roop, I. Kogut, G. Bilousova Gates Center for Regenerative Medicine, University of Colorado, Aurora, Colorado, United States</td>
</tr>
</tbody>
</table>
| 1:54 PM  | | [Abstract #450: The skin microbiome promotes the pathogenesis of Netherton syndrome](#) | M. R. Williams, Y. Wang, D. Kaul, C. Dupont, A. Hovnanian, R. L. Gallo  
  1Dermatology, University of California San Diego, La Jolla, California, United States, 1Department of Genetics, Imagine Institute, Paris, France, 1J. Craig Venter Institute, La Jolla, California, United States |
| 2:06 PM  | | [Abstract #361: Ephrin-A1 ligand strengthens tight junction function and prevents Th2 cytokine-induced barrier collapse](#) | B. E. Perez White  
  Northwestern U., Chicago, Illinois, United States |
| 2:18 PM  | | [Abstract #492: A new innovative approach combining comparative transcriptomics from three unique psoriasis models to identify predictive PsA biomarkers](#) | W. R. Swindell, J. Gudjonsson, N. L. Ward  
  1Ohio University, Athens, Ohio, United States, 2University of Michigan, Ann Arbor, Michigan, United States, 3Case Western Reserve University, Cleveland, Ohio, United States |
| 2:42 PM  | | [Abstract #369: Permanent alteration of Abcc6 with in vivo CRISPR-Cas9 genome editing](#) | D. Zhi, E. Dang, G. Wang  
  Department of Dermatology, Xijing Hospital, Fourth Military Medical University, Xi’an, Shaanxi, China |
  1Department of Biosciences, Durham University, Durham, United Kingdom, 2Mason Business Centre, Procter and Gamble, Cincinnati, Ohio, United States, 3Institute of Cellular Medicine, Newcastle University, Newcastle upon Tyne, United Kingdom, 4Reprocell Europe, Sedgefield, United Kingdom |
| 3:06 PM  | | [Abstract #927: The path from skin to fat: Is adipocyte differentiation the default lineage for embryonic dermal cells?](#) | A. C. Gimore, J. D. Glover, D. J. Headon, C. A. Jahoda  
  1Department of Biosciences, Durham University, Durham, United Kingdom, 2The Roslin Institute, University of Edinburgh, Edinburgh, United Kingdom |
| 3:18 PM  | | [Abstract #1014: Harnessing Sleeping Beauty transposon mutagenesis to model tumor heterogeneity in melanoma preclinical models](#) | A. M. Contreras-Sandoval, M. B. Mann  
  1Molecular Oncology, H. Lee Moffitt Cancer Center and Research Institute, Tampa, Florida, United States, 2Cutaneous Oncology, H. Lee Moffitt Cancer Center and Research Institute, Tampa, Florida, United States |

1:30 PM - 1:42 PM

Abstract #052: Regulatory T cell-mediated, OX40-dependent peripheral tolerance to autoantigen, desmoglein 3

H. Irikil, H. Takahashil, N. Wadal, S. Horal, M. Amagail, 3 Dermatology, Keio University School of Medicine, Tokyo, Japan, 3Graduate School of Pharmaceutical Sciences, University of Tokyo, Tokyo, Japan, Laboratory for Skin Homeostasis, RIKEN IMS, Yokohama, Japan

1:42 PM - 1:54 PM

Abstract #391: Validating causative mutations in patients with Ehlers-Danlos Syndrome using a novel xenograft model

N. Diette, A. Frieman, A. Rozhok, D. Roop, I. Kogut, G. Bilousova Gates Center for Regenerative Medicine, University of Colorado, Aurora, Colorado, United States

1:54 PM - 2:06 PM

Abstract #450: The skin microbiome promotes the pathogenesis of Netherton syndrome

M. R. Williams, Y. Wang, D. Kaul, C. Dupont, A. Hovnanian, R. L. Gallo  
  1Dermatology, University of California San Diego, La Jolla, California, United States, 1Department of Genetics, Imagine Institute, Paris, France, 1J. Craig Venter Institute, La Jolla, California, United States

2:06 PM - 2:18 PM

Abstract #361: Ephrin-A1 ligand strengthens tight junction function and prevents Th2 cytokine-induced barrier collapse

B. E. Perez White  
  Northwestern U., Chicago, Illinois, United States

2:18 PM - 2:30 PM

Abstract #492: A new innovative approach combining comparative transcriptomics from three unique psoriasis models to identify predictive PsA biomarkers

W. R. Swindell, J. Gudjonsson, N. L. Ward  
  1Ohio University, Athens, Ohio, United States, 2University of Michigan, Ann Arbor, Michigan, United States, 3Case Western Reserve University, Cleveland, Ohio, United States

2:30 PM - 2:42 PM

Abstract #369: Permanent alteration of Abcc6 with in vivo CRISPR-Cas9 genome editing

D. Zhi, E. Dang, G. Wang  
  Department of Dermatology, Xijing Hospital, Fourth Military Medical University, Xi’an, Shaanxi, China

2:42 PM - 2:54 PM

Abstract #908: Bioengineering a novel in vitro model to study ageing in human skin

L. F. Costello, N. Fullard, M. Roger, B. Hulette, D. S. Hill, C. Bascom, T. Dicolandrea, R. Isfort, P. Lovat, S. Przyborski  
  1Department of Biosciences, Durham University, Durham, United Kingdom, 2Mason Business Centre, Procter and Gamble, Cincinnati, Ohio, United States, 3Institute of Cellular Medicine, Newcastle University, Newcastle upon Tyne, United Kingdom, 4Reprocell Europe, Sedgefield, United Kingdom

2:54 PM - 3:06 PM

Abstract #927: The path from skin to fat: Is adipocyte differentiation the default lineage for embryonic dermal cells?

A. C. Gimore, J. D. Glover, D. J. Headon, C. A. Jahoda  
  1Department of Biosciences, Durham University, Durham, United Kingdom, 2The Roslin Institute, University of Edinburgh, Edinburgh, United Kingdom

3:06 PM - 3:18 PM

Abstract #1014: Harnessing Sleeping Beauty transposon mutagenesis to model tumor heterogeneity in melanoma preclinical models

A. M. Contreras-Sandoval, M. B. Mann  
  1Molecular Oncology, H. Lee Moffitt Cancer Center and Research Institute, Tampa, Florida, United States, 2Cutaneous Oncology, H. Lee Moffitt Cancer Center and Research Institute, Tampa, Florida, United States
STATE-OF-THE-ART PLENARY LECTURES
In Recognition of Dr. Stephen I. Katz

LECTURE I
Large-Scale Regeneration in the Skin

THURSDAY, MAY 9, 2019
4:15 PM – 4:45 PM
INTERNATIONAL BALLROOM NORTH

Introduction by:  Alexander Enk, MD

Maksim Plikus, PhD
University of California, Irvine
Irvine, CA

Maksim Plikus, PhD has been selected to deliver the State-of-the-Art Plenary Lecture I at the 2019 SID Annual Meeting, on Thursday, May 9, 2019. Dr. Plikus completed his PhD in Pathology in 2007 at the University of Southern California, before joining laboratory of Dr. George Cotsarelis at the University of Pennsylvania for post-doctoral training. He joined the University of California Irvine (UCI) in 2012, where he is now an Associate Professor in the Department of Developmental and Cell Biology. During his Ph.D. studies, Dr. Plikus showed that regeneration in a population of hair follicles is coordinated by a large-scale signaling mechanism, with skin adipocyte- and hair follicle-derived inhibitory and activating signals at its core. Works on this topic helped to recognize pattern formation as a generic mechanism for integrating activities of multiple stem cells in large organs, such as skin. During his post-doctoral training, he studied the mechanism of adipocyte regeneration in adult skin wounds. These studies showed that myofibroblasts are the principal progenitors for newly regenerating adipocytes and that hair follicle-derived signals drive the myofibroblast-to-adipocyte reprogramming. His lab at UCI continues to study several aspects of skin regeneration during homeostasis and after wounding, with primary focus on hair follicle and adipocyte biology. The SID looks forward to having Dr. Plikus as a part of the 2019 SID Annual Meeting

LECTURE II
Immune Regulation of Skin Inflammation and Itch

THURSDAY, MAY 9, 2019
4:45 PM – 5:15 PM
INTERNATIONAL BALLROOM NORTH

Introduction by:  Alice Pentland, MD

Brian Kim, MD/MTR
Washington University in St. Louis
St. Louis, MO

Dr. Brian Kim is Assistant Professor of Dermatology, Anesthesiology, Pathology and Immunology, and Co-Director of the Center for the Study of Itch at Washington University School of Medicine in St. Louis. His laboratory focuses on innate immune mechanisms that underlie skin inflammation and the sensation of itch. Specifically, the Kim Lab identified previously unrecognized contributions of group 2 innate lymphoid cells (ILC2s) and basophils to the pathogenesis of atopic dermatitis (AD) in both mice and humans. These cells have emerged as critical sources of the type 2 cytokines IL-4, IL-5, and IL-13, which are now among the most important targets for biologic therapy in AD and other allergic disorders. More recently, the Kim Lab was the first to identify functionality of IL-4 receptor alpha (IL-4Ra) and Janus kinases (JAKs) in sensory neurons as master regulators of chronic itch in AD and other disorders. These studies have immediate clinical implications as type 2 cytokine and JAK blockade have emerged as some of the most efficacious therapeutics in AD. His research on the immune regulation of AD and itch has led to awards and funding from the National Institutes of Health, Doris Duke Charitable Foundation, American Skin Association, American Academy of Dermatology, and the American Society for Clinical Investigation.
The LEO Foundation presents the 2019 LEO Foundation Award of 100,000 USD to a young researcher from Region Americas whose work represent extraordinary contributions to medical research. Thursday, May 9, Chief Grant Officer Ida Brams will announce the Awardee at the event, and the Awardee will give a short talk about his or her research – and its future perspectives. The other two awards will be presented later this year – for Region EMEA at the ESDR meeting in September in Bordeaux - France, and for Region Asia-Pacific at the JSID meeting in November in Aomori - Japan.

A global review panel has been appointed with the kind support from the investigative dermatology societies across the three regions:

- Cheng-Che Eric Lan (Taiwan/TSID)
- Edel O’Toole (UK/ESDR)
- Eli Sprecher (Israel/ESDR)
- Manabu Fujimoto (Japan/JSID)
- Nicole Ward (US/SID)
- Richard Gallo (US/SID)
- Robert Swerlick (US/SID)
- Sabine Eming (Germany/ESDR)
- Soyun Cho (Korea/KSID)

ABOUT THE LEO FOUNDATION
The LEO Foundation provides philanthropic grants and awards to some of the world’s leading scientists within skin research, combating the impact of skin diseases. Our mission is to support the best international research in skin diseases and make Denmark a global beacon for skin research.

The LEO Foundation is one of Denmark’s largest commercial foundations. Established in 1984, its main objective is to ensure the long-term independence and success of the global, research-based pharmaceutical company LEO Pharma. The LEO Foundation is the sole shareholder of LEO Pharma and is independent from heirs, outside shareholders, and other interests.

In addition to the ownership of LEO Pharma, the LEO Foundation owns financial assets of around 18 billion DKK. The main objectives of the investments are to provide capability to support LEO Pharma’s long-term continuation and strategic development, as well as provide funds for the Foundation’s philanthropic activities.

The LEO Foundation also provides open competition grants to support the best dermatology research projects worldwide. Read more about the LEO Foundation grants and awards here:
The International immunosuppression & Transplant Skin Cancer Collaborative (ITSCC)

4th Annual Transplant Symposium

THURSDAY, MAY 9, 2019  5:30 PM - 6:30 PM  CONTINENTAL BALLROOM C

5:30 PM
Welcome
John Carucci

5:40 PM
Abstract #135
Defining the T cell landscape and neoantigens via T-cell receptor sequencing and gene expression profiling in cutaneous squamous cell carcinoma
N.A. Doudican, A. Santana, J. Carucci, D. Felsen, A. Khodadadi-Jamayran, A. Tsirigos

5:52 PM
Abstract #253
Incidence of multiple primary keratinocyte carcinomas in organ transplant patients
M.R. Wehner, D. Margolis, T.M. Shin, L. Wheless, L. Wang

6:04 PM
Abstract #532
Switching from calcineurin inhibitors to belatacept decreases keratinocyte carcinomas incidence rate in kidney transplant recipients
M. Wang, A. Mittal, O.R. Colegio

6:16 PM
Abstract #672
Pramlintide produces immunomodulatory effects on myeloid-derived suppressor cells and T-cells in squamous cell carcinoma in-vivo
L. Tordesillas, B. Sell, K. Nguyen, E. Flores, K.Y. Tsai

6:28 PM
Closing Remarks
John Carucci

The International immunosuppression & Transplant Skin Cancer Collaborative (ITSCC) is an organization comprised of dermatologic surgeons, dermatologists, clinicians and researchers from multiple disciplines dedicated to advancing the care and understanding of skin cancer in organ transplant recipients.

To learn more, visit: www.itscc.org.
American Dermato-Epidemiology Network (ADEN) Symposium

THURSDAY, MAY 9, 2019
5:30 PM - 6:30 PM
BOULEVARD B

AGENDA

5:30 PM
Welcome and introductions

5:35 PM
Founder's Award

5:40 PM
Trainee Award

5:45 PM
TED-Style talks with interactive question and answer session

5:45 PM
Association of particulate matter air pollution and itch: a digital epidemiology approach
Shawn Kwatra

5:55 PM
Comorbidity clusters in hidradenitis suppurativa in a large commercially insured population in the US
Vivian Hua

6:05 PM
Characterizing Amelanotic melanoma and factors associated with survival-
Ryan Carlisle

6:15 PM
ADEN Business meeting

6:25 PM
Social
National Psoriasis Foundation

THURSDAY, MAY 9, 2019

5:30 PM - 6:30 PM

ASTORIA ROOM

RECEPTION AT SID

HILTON CHICAGO, ASTORIA ROOM

THURSDAY, MAY 9, 2019

5:30 - 6:30 PM

JOIN US FOR AN EXCITING EVENT TO NETWORK AND LEARN ABOUT NPF’S RESEARCH, GRANTS AND FELLOWSHIPS, PATIENT ENGAGEMENT AND MEMBERSHIP OPPORTUNITIES.

HOSTED BAR AND LIGHT HORS D’OEUVRES WILL BE PROVIDED.

QUESTIONS? EMAIL THE NPF AT RESEARCH@PSORIASIS.ORG
# Friday Sessions

<table>
<thead>
<tr>
<th>PAGE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>71</td>
<td>Meeting-At-A-Glance</td>
</tr>
<tr>
<td>72</td>
<td>WDS, Networking Breakfast &amp; Panel Discussion</td>
</tr>
<tr>
<td>73</td>
<td>Pediatric Dermatology at the Society for Investigative Dermatology Meeting</td>
</tr>
<tr>
<td>74</td>
<td>Research in Cutaneous Surgery</td>
</tr>
<tr>
<td>75</td>
<td>Irvin H. Blank Forum II</td>
</tr>
<tr>
<td>76</td>
<td>American Skin Association (ASA) Awards</td>
</tr>
<tr>
<td>77</td>
<td>Business Meeting for Members</td>
</tr>
<tr>
<td>78</td>
<td>Stephen Rothman Memorial Award</td>
</tr>
<tr>
<td>79</td>
<td>Plenary Session II</td>
</tr>
<tr>
<td>80-84</td>
<td>Selected ePoster Discussions II</td>
</tr>
<tr>
<td></td>
<td>• Carcinogenesis and Cancer Genetics</td>
</tr>
<tr>
<td></td>
<td>• Epidemiology</td>
</tr>
<tr>
<td></td>
<td>• Epidermal Structure and Barrier Function</td>
</tr>
<tr>
<td></td>
<td>• Neuro-Cutaneous Biology and Inflammation</td>
</tr>
<tr>
<td></td>
<td>• Pharmacology and Drug Development</td>
</tr>
<tr>
<td>85</td>
<td>AbbVie Sponsored Symposium</td>
</tr>
<tr>
<td>86-90</td>
<td>Selected ePoster Discussions III</td>
</tr>
<tr>
<td></td>
<td>• Innate Immunity, Microbiology, Microbiome</td>
</tr>
<tr>
<td></td>
<td>• Pigmentation and Melanoma</td>
</tr>
<tr>
<td></td>
<td>• Skin, Appendages, and Stem Cell Biology</td>
</tr>
<tr>
<td></td>
<td>• Tissue Regeneration and Wound Healing</td>
</tr>
<tr>
<td></td>
<td>• Translational Studies</td>
</tr>
<tr>
<td>91</td>
<td>Herman Beerman Lecture</td>
</tr>
<tr>
<td>92</td>
<td>Eugene M. Farber Lecture</td>
</tr>
<tr>
<td>93</td>
<td>Concurrent Minisymposium 7: Carcinogenesis and Cancer Genetics</td>
</tr>
<tr>
<td>94</td>
<td>Concurrent Minisymposium 8: Epidemiology</td>
</tr>
<tr>
<td>95</td>
<td>Concurrent Minisymposium 9: Epidermal Structure and Barrier Function</td>
</tr>
<tr>
<td>96</td>
<td>Concurrent Minisymposium 10: Neuro-Cutaneous Biology and Inflammation</td>
</tr>
<tr>
<td>97</td>
<td>Concurrent Minisymposium 11: Pharmacology and Drug Development</td>
</tr>
<tr>
<td>98</td>
<td>Concurrent Minisymposium 12: Skin of Color</td>
</tr>
<tr>
<td>99</td>
<td>State-Of-The-Art Plenary Lectures in Recognition of Dr. Stephen I. Katz</td>
</tr>
<tr>
<td>100</td>
<td>Progress in Epidermolysis Bullosa debrap Symposium</td>
</tr>
<tr>
<td>101</td>
<td>American Hair Research Society Scientific Meeting and Annual General Meeting</td>
</tr>
<tr>
<td>102</td>
<td>SATO Scientific Forum at SID 2019</td>
</tr>
</tbody>
</table>
Things To Do In Chicago

Lincoln Park

Navy Pier

Shedd Aquarium

Lincoln Park Zoo

Chicago River

Buckingham Fountain

choosechicago.com
Meeting-At-A-Glance

FRIDAY, MAY 10, 2019

7:00 AM — 7:00 PM
On-Site Registration
8TH ST. S. REGISTRATION AREA

7:30 AM — 8:30 AM
Irvin H. Blank Forum II: Modern Genetic Analysis Applied to Cutaneous Cancer
INTERNATIONAL BALLROOM NORTH

8:45 AM — 9:00 AM
American Skin Association (ASA) Awards
INTERNATIONAL BALLROOM NORTH

9:00 AM — 9:30 AM
Business Meeting for Members
INTERNATIONAL BALLROOM NORTH

9:30 AM — 9:45 AM
Stephen Rothman Memorial Award
RICHARD EDELSON, MD
INTERNATIONAL BALLROOM NORTH

9:45 AM — 10:45 AM
Plenary Session II
INTERNATIONAL BALLROOM NORTH

10:45 AM — 11:45 AM
Selected ePoster Discussions II
SEE PAGE 80-84 FOR ROOM LISTINGS

11:15 AM — 1:15 PM
Poster Session II/Coffee Break
STEVENS SALONS B/C/D
SEE PAGE 12 FOR POSTER NUMBER LISTINGS

11:45 AM — 1:15 PM
AbbVie Sponsored Symposium Hidradenitis Suppurativa: Translating Mechanisms and Basic Science into Improved Therapies
INTERNATIONAL BALLROOM NORTH

11:45 AM — 12:45 PM
Selected ePoster Discussions III
SEE PAGES 86-90 FOR ROOM LISTINGS

1:30 PM — 2:00 PM
Herman Beerman Lecture: Understanding People
ALEX PENTLAND, PHD
INTERNATIONAL BALLROOM NORTH

2:00 PM — 2:30 PM
Eugene M. Farber Lecture: Towards Precision Therapeutics: A Systems Approach to Understanding Psoriasis Plaque Resolution and Endotype Analysis
NICK REYNOLDS, MD
INTERNATIONAL BALLROOM NORTH

2:45 PM — 5:15 PM
Concurrent Minisymposium 7: Carcinogenesis and Cancer Genetics
CONTINENTAL BALLROOM A

2:45 PM — 5:15 PM
Concurrent Minisymposium 8: Epidemiology
INTERNATIONAL BALLROOM NORTH

2:45 PM — 5:15 PM
Concurrent Minisymposium 9: Epidermal Structure and Barrier Function
INTERNATIONAL BALLROOM SOUTH

2:45 PM — 5:15 PM
Concurrent Minisymposium 10: Neuro-Cutaneous Biology and Inflammation
CONTINENTAL BALLROOM C

2:45 PM — 5:15 PM
Concurrent Minisymposium 11: Pharmacology and Drug Development
CONTINENTAL BALLROOM B

2:45 PM — 5:15 PM
Concurrent Minisymposium 12: Skin of Color
WALDORF ROOM

5:45 PM — 6:15 PM
State-of-the-Art Plenary Lecture III: Skin Microbiome: Opposing Roles in Barrier Function, Inflammation and Repair
ELIZABETH GRICE, PHD
INTERNATIONAL BALLROOM NORTH

6:15 PM — 6:45 PM
State-of-the-Art Plenary Lecture IV: Mining Nature’s Chemistry: Ethnobotany and Drug Discovery for Dermatologic Applications
CASSANDRA QUAVE, PHD
INTERNATIONAL BALLROOM NORTH

7:00 PM — 9:00 PM
Young Investigator Collegiality Reception: Ticketed Event
PRE-REGISTRATION REQUIRED
JOLIET & MARQUETTE

ASSOCIATE GROUP PROGRAMMING IS TAKING PLACE TODAY. SEE PAGE 6 FOR DAILY SCHEDULE.
WDS, Networking Breakfast & Panel Discussion

**FRIDAY MAY 10, 2019** | **7:00 AM – 8:30 AM** | **CONTINENTAL BALLROOM A**
---|---|---
7:00 AM – 7:30 AM | Breakfast & Networking |
7:30 AM – 8:00 AM | Panel Discussion |
8:00 AM – 8:30 AM | Q&A |

**SID 2019 ANNUAL MEETING**

**WDS PHYSICIANS LEADERS MENTORS Women’s Dermatologic Society**

**OPEN TO ALL MEETING ATTENDEES**
Pediatric Dermatology at the Society for Investigative Dermatology Meeting

FRIDAY, MAY 10, 2019  7:00 AM – 8:30 AM  CONTINENTAL BALLROOM B

7:00 AM
Welcome
Amy Paller, MD, Northwestern University
Yvonne Chiu, MD, Medical College of Wisconsin

7:05 AM
Pediatric Dermatology Roadmap
Yvonne Chiu, MD, Medical College of Wisconsin

7:20 AM
Abstract #213
Red cell distribution width may mark cardiovascular risk among pediatric psoriasis patients
Rosalynn Conic, MD, Case Western Reserve University

7:30 AM
Abstract #251
Natural history of wounds in patients with recessive dystrophic epidermolysis bullosa
Claudia Teng, BA, Stanford University

7:40 AM
Immune Regulation of Atopic Dermatitis and Itch
Brian Kim, MD, Washington University

8:10 AM
Abstract #484
Diversity and adaptation of S. aureus on lesions of children with atopic dermatitis
Maria Teresa Garcia Romero, MD/MPH, National Institute for Pediatrics, Mexico

8:20 AM
Abstract #390
Second-hit, post-zygotic pmVKand MVD mutations cause linear porokeratosis
Lihi Atzmony-Maoz, MD, Yale University

Special thanks to the Society for Pediatric Dermatology (SPD) and the Pediatric Dermatology Research Alliance (PeDRA) for supporting these sessions.
The Research in Cutaneous Surgery Minisymposium is a forum for clinically relevant, patient-directed research in dermatologic surgery, including cancer surgery, laser surgery, and cosmetic surgery. With a primary emphasis on clinical research, the symposium aims to highlight clinical trials on procedure safety and effectiveness, as well as epidemiologic investigations. As research in cutaneous surgery is a growing field, the symposium also serves to bring together investigators to facilitate future collaborations. Pilot studies and early work are appropriate for submission. Those interested in directing an abstract to this session next year are encouraged to contact any of the co-moderators for more information.

**Moderator:** Murad Alam, MD  
**Co-Moderators:** Catherine DiGiorgio, MD and Kira Minkis, MD

1. 7:00 AM  
Sun protective behaviors and development of keratinocyte carcinomas in high-risk patients in the VAKCC (Veterans Affairs Keratinocyte Carcinoma Chemoprevention) Trial  
Meghan Beatson

2. 7:11 AM  
Correlates of multiple cutaneous squamous cell carcinoma  
Yuhree Kim

3. 7:22 AM  
Incidence of multiple primary keratinocyte carcinomas in organ transplant patients  
Mackenzie R. Wehner

4. 7:33 AM  
Use of immunohistochemical staining in basal cell carcinomas treated with Mohs micrographic surgery: A case-control study  
Shannon Zullo

5. 7:44 AM  
Sentinel events in dermatology: Beware of the three wrongs  
James Taylor

6. 7:56 AM  
Topical minoxidil adherence in alopecia patients  
Brianna De Souza

7. 8:07 AM  
Low-level laser therapy for the treatment of male and female-pattern hair loss: A review of literature  
Divya Aickara

8. 8:18 AM  
Differences in cosmetic motivations based on demographic variables  
Kelly A. Reynolds
Irvin H. Blank Forum II

Modern Genetic Analysis Applied to Cutaneous Cancer

FRIDAY, MAY 10, 2019 7:30 AM – 8:30 AM INTERNATIONAL BALLROOM NORTH

7:30 AM Welcome & Introduction

Cristina de Guzman Strong, PhD
Dr. de Guzman Strong is an Assistant Professor in the Division of Dermatology and the Center of Pharmacogenomics in the John T. Milliken Department of Medicine at Washington University in St. Louis School of Medicine. She is also a Core Faculty Member in the Center for the Study of Itch at WUSM. She received a B.S. in Biology from Emory University and Ph.D. in Human Genetics from the University of Alabama at Birmingham and completed her post-doctoral training in the Epithelial Biology Section at the National Human Genome Research Institute (NHGRI). Dr. de Guzman Strong has a long-standing interest in the genetics and genomics of the skin with focused studies on the Epidermal Differentiation Complex (EDC) locus. She has been internationally recognized for the molecular discoveries of enhancer-mediated chromatin modeling and genetic macroevolution of the EDC and the translational discoveries for filaggrin stop-gain variants in underserved populations of atopic dermatitis.

7:35 AM
Carolyn Lee, MD/PhD, Assistant Professor, Department of Dermatology, Stanford University, Stanford, CA

“Identifying Novel Cancer Genes that Drive Cutaneous Squamous Cell Carcinoma.”
Her current research is focused on discovering and functionally characterizing new oncogenes and tumor suppressor genes in skin cancer, with particular emphasis on high-risk cutaneous squamous cell carcinoma associated with poor clinical outcomes. As a board-certified dermatologist, Dr. Lee’s clinical focus is the management of patients at high risk of developing skin cancer, such as individuals on immune suppression therapy following organ transplant.

7:55 AM
Kojo Elenitoba-Johnson, MD, Professor, Department of Pathology and Laboratory Medicine, University of Pennsylvania, Philadelphia, PA

His research focuses on the pathogenesis of human malignant lymphomas, biomarker discovery by genomic and proteomic profiling, and cancer

8:15 AM Q & A
American Skin Association (ASA) Awards

FRIDAY, MAY 10, 2019  8:45 AM – 9:00 AM  INTERNATIONAL BALLROOM NORTH

David Martin Carter Mentor Award
ASA's David Martin Carter Mentor Award honors members of the dermatology community who embody the characteristics of the late David Martin Carter, MD/PhD that made him an inspiration to many dermatologists/investigators, colleagues, and medical students throughout the world.

ASA is delighted to present its 2019 David Martin Carter Mentor Awards to:

Luis Diaz, MD
University of North Carolina – Chapel Hill

John Stanley, MD
University of Pennsylvania

Research Achievement Awards
Instituted in 1989 to identify established scientists in investigative dermatology and cutaneous biology and to recognize those who have greatly advanced work related to autoimmune and inflammatory skin disorders, skin cancer and melanoma, psoriasis, public policy and medical education, and vitiligo and pigment cell disorders.

ASA is delighted to present its 2019 Research Achievement Awards to:

Nicole Ward, PhD
Case Western Reserve University
Research Achievement Award in Psoriasis

Victoria Werth, MD
University of Pennsylvania
Research Achievement Award in Autoimmune and Inflammatory Skin Disorders

Paul Nghiem, MD/PhD
University of Washington
Research Achievement Award in Melanoma and Skin Cancer

William Pavan, PhD
National Institutes of Health
Research Achievement Award in Vitiligo and Pigment Cell Biology

Mary-Margaret Chren, MD
Vanderbilt University Medical Center
Research Achievement Award in Public Policy and Medical Education
Honorary Membership is one of the highest honors the Society for Investigative Dermatology (SID) bestows. Each of the following SID Members has made sustained and important contributions to the research base in cutaneous biology and has contributed to the organizational success of the SID. Each has also excelled in their role as a mentor to numerous individuals over the course of their academic career.

Congratulations to Kathleen Green, PhD, S. Wright Caughman, MD, Alexander Enk, MD, and Masayuki Amagai, MD/PhD on their selection to SID Honorary Membership!

Masayuki Amagai, MD/PhD
Professor and Chair of the Department
and Dean at the Keio University School
of Medicine, Tokyo

S. Wright Caughman, MD
Emory University School of Medicine, Atlanta

Alexander Enk, MD/PhD
Chairman of Dermatology and Venerology of Ruprecht-Karls-University, Heidelberg

Kathleen Green, PhD
Northwestern University, Chicago
Introduction by: Robert A. Swerlick, MD

Richard Edelson, MD
Yale University
New Haven, CT

Following his graduation from Yale Medical School (YMS), Dr. Edelson did his Internal Medicine internship at the University of Chicago, his Dermatology residency at Harvard and his post-doctoral fellowship in Immunology at the National Institutes of Health. He then spent the next decade on the faculty of Columbia University’s College of Physicians and Surgeons, rising to the level of Professor, while serving as Deputy Director of that institution’s General Clinical Research Center, the Leader of the Immunology Program of its Comprehensive Cancer Center and Director of Dermatologic Research. In 1986, he returned to Yale University, as Professor and Chairman of its Department of Dermatology, a position he has held continuously from 1986 to present. From 2000-2003, he also served as YMS Deputy Dean for Clinical Affairs, and from 2003 to 2009 as the Director of the Yale University Comprehensive Cancer Center. He has been honored with several national and international awards, including Castle Connolly’s “National Physician of the Year”, the Dermatology Foundation’s “Discovery Award” and the American Skin Foundation’s “Mentor of the Year”.

His career links five synergistic clinical, research and educational themes. First, he has focused on the development and implementation of cellular immunotherapy for lymphoma, cutaneous T cell lymphoma (CTCL), which he originally identified, named and scientifically elucidated. Second, he was the originator of extracorporeal photochemotherapy (ECP), the first FDA-approved cellular immunotherapy for any cancer. That therapy has to date been administered more than three million times in over 400 university medical centers worldwide, in the care for more than 60 thousand individuals as treatment for CTCL, transplant recipients and autoimmune patients. Third, his team determined that the scientific basis of ECP’s efficacy is its physiologic generation of monocyte conversion to immunologically tunable dendritic antigen presenting cells, the master-switches of the immune system. Fourth, through application of those revealed scientific principles, he is leading the new effort to therapeutically apply ECP to a much broader spectrum of immunogenic cancers and autoreactive disorders. Because of the scope of those opportunities, he considers the current period of his career its most exciting phase yet. Fifth, he is especially delighted by the accomplishments and the prominence of the faculty and graduates of the Yale Dermatology Department.

LECTURESHIP HISTORY
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 honor.
Plenary Session II

FRIDAY, MAY 10, 2019                9:45 AM – 10:45 AM
INTERNATIONAL BALLROOM NORTH

Presiders: Lloyd Miller, MD/PhD and Kevin Wang, MD/PhD

9:45 AM - 9:57 AM
Abstract #200: Risks and timing of future skin cancers in patients with actinic keratosis
M. R. Wehner, D. Margolis
Dermatology, University of Pennsylvania, Philadelphia, Pennsylvania, United States

9:57 AM - 10:09 AM
Abstract #655: Cutaneous nociceptors trigger protective type-17 immunity through a nerve reflex arc
J. A. Cohen1, T. N. Edwards2, A. Liu1, T. Hirai1, M. Ritter-Jones4, J. Wu1, Y. Li1, J. Ho1, B. Davis1, K. Albers4, D. H. Kaplan1
1Dermatology, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania, United States, 2Dermatology, University of Pittsburgh, Pittsburgh, Pennsylvania, United States, 3Departments of Dermatology and Immunology, University of Pittsburgh, Pittsburgh, Pennsylvania, United States, 4Neurobiology, University of Pittsburgh, Pittsburgh, Pennsylvania, United States, 5Vascular Medicine, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania, United States

10:09 AM - 10:21 AM
Abstract #663: Activation of Trpv1+ nociceptive fibers stimulates an innate antiviral immune response following skin injury
C. Handfield1, J. Kwock1, P. Hoang2, A. S. MacLeod2, 3
1Dermatology, Duke School of Medicine, Durham, North Carolina, United States, 2Dermatology, Duke, Durham, North Carolina, United States, 3Immunology, Duke, Durham, North Carolina, United States

10:21 AM - 10:33 AM
Abstract #193: Atopic eczema in adulthood and the risk of dementia: A population-based cohort study
A. Magyari1, V. Lam1, M. R. Wehner2, D. Margolis2, S. Langan3, K. Abuabara1
1Dermatology, UCSF, San Francisco, California, United States, 2Dermatology, University of Pennsylvania, Philadelphia, Pennsylvania, United States, 3LSHTM, London, United Kingdom

10:33 AM - 10:45 AM
Abstract #991: Deep neural networks empower medical professionals in diagnosing skin cancer and predicting treatment options for general skin disorders
S. Han1, I. Park4, S. Chang1, J. Na2
1Dermatology, Seoul, Korea (the Republic of), 2Dermatology, Seoul National University Bundang Hospital, Seoul, Korea (the Republic of), 3Dermatology, Asan Medical Center, Ulsan University College of Medicine, Seoul, Korea (the Republic of), 4Radiology, Chonnam National University Medical School and Hospital, Gwangju, Korea (the Republic of)
Selected ePoster Discussions II

Carcinogenesis and Cancer Genetics

Studies on the genetics and other causes of cancer as well as mechanisms relevant to metastasis

FRIDAY, MAY 10, 2019

Moderator: Carlo Pincelli, MD

10:45 AM - 10:51 AM

Abstract #117: Small non-coding RNA SNORA12 effects MAPK1 signaling

Z. Chipurskhvili, R. M. Shenoy, L. Elcavage, P. A. Khavari

'Dermatology, Stanford University, Stanford, California, United States, VA Palo Alto Healthcare System, Palo Alto, California, United States

10:51 AM - 10:57 AM

Abstract #111: Systemic chemotherapy promotes HIF-1α mediated glycolysis and IL-17F pathways in mycosis fungoides

B. Wang, X. Shen, J. Zheng

'Internal Medicine, Lincoln Medical Center, New York, New York, United States, 'Dermatology, Ruijin Hospital, Shanghai, China

10:57 AM - 11:03 AM

Abstract #135: Defining the T cell landscape and neoantigens via T-cell receptor sequencing and gene expression profiling in cutaneous squamous cell carcinoma

N. A. Doudican, A. Santana, D. Felsen, A. Khodadadi-Jamayran, A. Tsirigos, J. Carucci

'Dermatology, NYU Langone Med Cntr, New York, New York, United States, 2Inst Ped Urol, Weil Cornell Medicine, New York, New York, United States, 3Applied Bioinformatics, NYU Langone Med Cntr, New York, New York, United States

11:03 AM - 11:09 AM

Abstract #118: Inhibition of p38 re-expresses e-cadherin and prevents vascular invasion in melanoma

J. Wenzina, S. Holzner, A. Forsthuber, E. Puujalka, P. Petzelbauer

'Skin and Endothelium Research Department, Medical University of Vienna, Vienna, Austria, 'Division of General Dermatology and Dermatooncology, Medical University of Vienna, Vienna, Austria

11:09 AM - 11:15 AM

Abstract #139: Transforming growth factor-β1 secreted by dermal fibroblasts induces an epithelial-to-mesenchymal transition in recessive dystrophic epidermolysis bullosa squamous cell carcinoma

W. Chen, K. Twaroski, M. Pickett-Leonard, J. Tolar

'University of Minnesota Stem Cell Institute, Minneapolis, Minnesota, United States, 2University of Minnesota Stem Cell Institute, Minneapolis, Minnesota, United States, 3Pediatrics, University of Minnesota, Minneapolis, Minnesota, United States

11:15 AM - 11:21 AM

Abstract #163: The H3K27 Demethylase UTX regulates skin carcinogenesis possibly through a HOXB9 pathway

Y. Yang, C. Sarantopoulos, H. Peng, Y. Yin, Y. Yao, C. Li, L. Zhou, Q. Mi

'Dermatology, Henry Ford Health System, Detroit, Michigan, United States, 'Dermatology, The PLA General Hospital, Beijing, China

11:21 AM - 11:27 AM

Abstract #156: Conditional expression of oncogenic KrasG12D and HrasG12V alleles in mouse keratinocytes reveals a dose dependent requirement for tumor formation

C. Cataisson, L. Li, A. Lee, M. Pan, S. Korkmaz, A. Mizes, A. Michalowski, S. Yuspa

Laboratory of Cancer Biology and Genetics, National Cancer Institute, Rockville, Maryland, United States

11:27 AM - 11:33 AM

Abstract #113: PRKAR2B is regulated by TOX and overexpressed in early stage mycosis fungoides


'Dermatology, Peking Union Medical College Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China, Beijing, China, 'Department of Dermatology, School of Medicine, University of California Davis, Sacramento, California, United States

11:33 AM - 11:39 AM

Abstract #115: Activation of CD271 neurotrophin receptor favors differentiation and reduces invasiveness of squamous cell carcinoma by in vitro and in vivo studies

E. Palazzo, M. Quadri, R. Lotti, N. Tiso, A. Marconili, C. Pincelli

'University of Modena, Modena, Italy, 'University of Padua, Padua, Italy

11:39 AM - 11:45 AM

Abstract #123: Ubiquitination control of tumor proliferation, metastasis and immune escape via prohibitin/stat3/PD-L1 axis in melanoma

J. Ma, W. Guo, S. Guo, C. Li

Dermatology, Xijing Hospital, Xi’an, Shaanxi, China
Selected ePoster Discussions II

Epidemiology

Studies on the genetics and other causes of cancer as well as mechanisms relevant to metastasis

FRIDAY, MAY 10, 2019

10:45 AM - 11:45 AM

STEvens Salon D

Moderator: Haley Naik, MD

10:45 AM - 10:51 AM

Abstract #217: Real-world chemotherapy adherence for Kaposi’s sarcoma in Sub-Saharan Africa


1Mass. General Hospital, Boston, Massachusetts, United States, 2Mass. General Hospital, Boston, Massachusetts, United States, 3AMPATH, Moi University, Eldoret, Kenya, 4UCSF, San Francisco, California, United States, 5Indiana University, Indianapolis, Indiana, United States, 6Infectious Disease Institute, Kampala, Uganda

10:51 AM - 10:57 AM

Abstract #188: Predictors of healthcare utilization in US adults with atopic dermatitis


1Northwestern Univ Feinberg School of Medicine, Chicago, Illinois, United States, 2Univ of Pennsylvania Perelman School of Medicine, Philadelphia, Pennsylvania, United States, 3National Jewish Health; Univ of Colorado School of Medicine, Denver, Colorado, United States, 4NYU Winthrop Hospital, Mineola, New York, United States, 5Nationwide Children’s Hospital; Ohio State Univ College of Medicine, Columbus, Ohio, United States, 6Children’s Hospital Los Angeles, Univ of Southern California, Keck School of Medicine, Los Angeles, California, United States, 7Oregon Health & Science Univ, Portland, Oregon, United States

10:57 AM - 11:03 AM

Abstract #275: Predictors of basal cell carcinoma and implications for follow up in high-risk patients in the VAKCC Trial

M. Beatson, A. Misisitz, S. Landow, H. Higgins, R. Lew, M. Weinstock

1Brown University Department of Dermatology, Providence, Rhode Island, United States, 2VA Medical Center Department of Dermatopathology, Providence, Rhode Island, United States, 3VA Healthcare System, Boston, Massachusetts, United States

11:03 AM - 11:09 AM

Abstract #247: The administrative burden and costs of prior authorizations in dermatology


1School of Medicine, University of Utah, Salt Lake City, Utah, United States, 2Department of Internal Medicine, University of Utah, Salt Lake City, Utah, United States, 3Department of Dermatology, University of Utah, Salt Lake City, Utah, United States

11:09 AM - 11:15 AM

Abstract #213: Red cell distribution width may mark cardiovascular risk among pediatric psoriasis patients

R. Conic, G. Damiani, T. McCormick, K. Cooper

1Dermatology, CWRU, Cleveland, Ohio, United States, 2Dermatology, Univ Hospitals Cleveland Medical Center, Cleveland, Ohio, United States

11:15 AM - 11:21 AM

Abstract #251: Natural history of wounds in patients with recessive dystrophic epidermolysis bullosa

C. Teng, D. Solis, J. Tang, M. Barriga, M. P. Marinkovich

Dermatology, Stanford University, Palo Alto, California, United States

11:21 AM - 11:27 AM

Abstract #207: Gender equality among award winners and leaders at the Society for Investigative Dermatology meetings

N. Shukla, M. R. Wehner, L. Morrison, H. Naik, E. Linos

1Dermatology, UCSF, San Francisco, California, United States, 2Dermatology, University of Pennsylvania, Philadelphia, Pennsylvania, United States

11:27 AM - 11:33 AM

Abstract #186: Factors causing lack of diversity in dermatology residency Programs: Medical students’ perspectives

N. Sanchez, B. W. Burroway, V. Cassidy, A. Nichols

Department of Dermatology and Cutaneous Surgery, University of Miami Miller School of Medicine, Miami, Florida, United States

11:33 AM - 1:39 AM

Abstract #245: Validation and interpretation of short form 12 and comparison with dermatology life quality index in adult atopic dermatitis


1Univ of Colorado, Denver, Colorado, United States, 2NYU Winthrop Hospital, Mineola, New York, United States, 3Ohio State Univ, Columbus, Ohio, United States, 4Oregon Health & Science Univ, Portland, Oregon, United States, 5Northwestern Univ, Chicago, Illinois, United States, 6Univ. Southern California, Los Angeles, California, United States, 7Univ of Pennsylvania, Philadelphia, Pennsylvania, United States

11:39 AM - 11:45 AM

Abstract #255: Prospective evaluation of body mass index, sun-protective behavior and keratinocyte carcinoma risk

A. Misitzis, M. Beatson, M. Tajalli, S. Landow, M. Weinstock

1Brown University, Department of Dermatology, Providence, Rhode Island, United States, 2VA Medical Center, Department of Dermatopathology, Providence, Rhode Island, United States

11:45 AM - 11:51 AM

Abstract #218: Predictors of healthcare utilization in US adults with atopic dermatitis


1Northwestern Univ Feinberg School of Medicine, Chicago, Illinois, United States, 2Univ of Pennsylvania Perelman School of Medicine, Philadelphia, Pennsylvania, United States, 3National Jewish Health; Univ of Colorado School of Medicine, Denver, Colorado, United States, 4NYU Winthrop Hospital, Mineola, New York, United States, 5Nationwide Children’s Hospital; Ohio State Univ College of Medicine, Columbus, Ohio, United States, 6Children’s Hospital Los Angeles, Univ of Southern California, Keck School of Medicine, Los Angeles, California, United States, 7Oregon Health & Science Univ, Portland, Oregon, United States
## Selected ePoster Discussions II
### Epidermal Structure and Barrier Function

Research on the components or regulation of keratinocyte proliferation, differentiation, including epidermal barrier function

**FRIDAY, MAY 10, 2019**
**10:45 AM - 11:45 AM**
**INTERNATIONAL BALLROOM SOUTH**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenters</th>
<th>Institutions</th>
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</thead>
<tbody>
<tr>
<td>10:45 AM - 10:51 AM</td>
<td>Abstract #354: Capturing epithelial-immune interactions to maintain tissue homeostasis</td>
<td>S. Park, C. Martone, V. Greco</td>
<td>Genetics, Yale University, New Haven, Connecticut, United States</td>
</tr>
<tr>
<td>10:51 AM - 10:57 AM</td>
<td>Abstract #334: The desmosome is a mesoscale lipid raft-like membrane domain</td>
<td>A. L. Caldara, J. D. Lewis, S. E. Zimmer, A. Seybold, N. L. Strong, S. N. Stahley, A. S. Frangakis, I. Levental, J. K. Wahl, A. L. Mattheyses, T. Sasaki, K. Nakabayashi, K. Hata, Y. Matsubara, A. Ishida-Yamamoto, M. Amagai, A. Kubo, A. P. Kowalczyk</td>
<td>Emory University, Atlanta, Georgia, United States, Goethe University Frankfurt, Frankfurt, Germany, University of Texas Health Science Center at Houston, Houston, Texas, United States, University of Nebraska Medical Center, USA, Nebraska, United States, Keio University School of Medicine, Tokyo, Japan, National Research Institute for Child Health and Development, Tokyo, Japan, Asahikawa Medical University, Asahikawa, Japan</td>
</tr>
<tr>
<td>10:57 AM - 11:03 AM</td>
<td>Abstract #314: Loricrin protects against chemical carcinogenesis but affects cancer immunoediting</td>
<td>T. Ogawa, Y. Ishitsuka, D. Roop, M. Fujimoto</td>
<td>Dermatology, University of Tsukuba, Tsukuba, Japan, Dermatology, University of Colorado, Denver, Colorado, United States</td>
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<td>11:03 AM - 11:09 AM</td>
<td>Abstract #337: The calcium sensing receptor regulates epidermal intracellular Ca2+ signaling and re-epithelialization in aged epidermis</td>
<td>A. Celli, C. Tu, W. Chang, T. M. Mauro</td>
<td>Dermatology, UCSF, San Francisco, California, United States, Endocrinology, VA Med Ctr/UCSF, San Francisco, California, United States, Medicine, UCSF, San Francisco, California, United States, Endocrinology, VA Med Ctr, San Francisco, California, United States, Dermatology, VA Med Ctr/UCSF, San Francisco, California, United States</td>
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<tr>
<td>11:09 AM - 11:15 AM</td>
<td>Abstract #341: Epidermal nuclear degradation during terminal differentiation involves cytoplasmic dispersal of lamina proteins and rapid nuclear shrinkage</td>
<td>C. Rogerson, R. O'Shaughnessy</td>
<td>Blizard Institute, Queen Mary University of London, London, United Kingdom</td>
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<td>11:15 AM - 11:21 AM</td>
<td>Abstract #288: DLX3- A Homeobox protein modulating regulatory networks and signaling pathways crucial for epidermal homeostasis</td>
<td>D. Bajpai, S. Meh dizadeh, C. Cataisson, S. Yuspa, T. Efimova, E. Palazzo, M. Kellet, M. Morasso</td>
<td>National Institutes of Health, Bethesda, Maryland, United States, National Cancer Institute, Bethesda, Maryland, United States, GW Cancer Center, Washington, Maryland, United States</td>
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<tr>
<td>11:21 AM - 11:27 AM</td>
<td>Abstract #308: Beneficial effect of coumestrol on the psychological stress-induced skin barrier dysfunction through inhibition of 11β-hydroxysteroid dehydrogenase type 1</td>
<td>E. Choi, J. Kim, Y. Kang, S. Cho, G. Cho, J. Kim, S. Kim, E. Choi, W. Park, H. Kim, E. Son</td>
<td>AmorePacific Corporation, Yongin-si, Gyeonggi-do, Korea (the Republic of), National Products Research Institute, Korea Institute of Science and Technology, Gangneung, Korea (the Republic of), Department of Dermatology, Yonsei University Wonju College of Medicine, Wonju, Korea (the Republic of)</td>
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<tr>
<td>11:27 AM - 11:33 AM</td>
<td>Abstract #333: Ciliophagy governs transdifferentiation of multiciliated cells in Xenopus embryonic skin</td>
<td>R. Ventrella, B. J. Mitchell</td>
<td>Department of Cellular and Molecular Biology, Northwestern University, Chicago, Illinois, United States</td>
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<td>11:33 AM - 11:39 AM</td>
<td>Abstract #353: Sphingosine 1-phosphate receptor 2 (S1PR2) deficiency alters skin barrier homeostasis</td>
<td>S. Igawa, Z. Wang, Y. Chang, C. Wu, A. Di Nardo</td>
<td>Dermatology, UC San Diego, San Diego, California, United States</td>
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Selected ePoster Discussions II

Neuro-Cutaneous Biology and Inflammation

Basic, pre-clinical and clinical studies on skin inflammation, crosstalk between the nervous and immune systems, and the relationship between cutaneous nerves and all aspects of skin biology including itch, pain, skin homeostasis and development

FRIDAY, MAY 10, 2019
10:45 AM - 11:45 AM

CONTINENTAL BALLROOM C

Moderator: Ralf Paus, MD

10:45 AM - 10:51 AM
Abstract #656: Psoriasis and obesity: Stearoyl-CoA desaturase 1 deficient mice are resistant to imiquimod-induced psoriasiform dermatitis
V. M. Adhami1, H. M. Buerger-Cole1, A. F. Pasterz1, A. Mui1, L. A. O’Brien1, J. M. Ntambi2, H. Mukhtar1
1Dermatology, University of Wisconsin, Madison, Wisconsin, United States, 2Biochemistry, University of Wisconsin, Madison, Wisconsin, United States

10:51 AM - 10:57 AM
Abstract #637: Oncostatin M induction of monocyte chemoattractant protein 1 (MCP-1) in human epidermal keratinocytes is inhibited by anti-oncostatin M receptor β monoclonal antibody KPL-716
C. D. Richards1, R. Gandhi2, F. Botelho1, L. Ho1, J. F. Paolini1
1McMaster Immunology Research Centre, McMaster University, Hamilton, Ontario, Canada, 2Kiniksa Pharmaceuticals Corporation, Lexington, Massachusetts, United States

10:57 AM - 11:03 AM
Abstract #662: Extracellular ATP released from Candida albicans activates non-peptidergic nerves to augment skin immunity
T. N. Edwards1, S. Zhang1, S. Mogavero2, M. Bougnoux3, J. Berman1, B. Hube1, C. d’Enfert1, D. H. Kaplan1
1Dermatology and Immunology, University of Pittsburgh, Pittsburgh, Pennsylvania, United States, 2Hans Knöll Institute, Jena, Germany, 3Institut Pasteur, Paris, France, 4Tel Aviv University, Ramat Aviv, Israel

11:03 AM - 11:09 AM
Abstract #661: Development of a novel humanized mouse model for atopic dermatitis
A. Keren1,2, C. Riethmüller3, Y. Ullmann2,1, R. Paus4, A. Gilhar1,2
1Technion, Haifa, Israel, 2Rambam, Haifa, Israel, 3Serendip GmbH, Münster, Germany, Münster, Germany, 4University of Miami, Miami, Florida, United States

11:09 AM - 11:15 AM
Abstract #646: Activated-Grape Seed Extract (AGSE) inhibits oxidative stress and demethylation of PP2A in human skin
K. L. Huber1, C. Webb1, J. R. Fernandez2, J. R. Healy1, M. Stock1, J. B. Stock2, E. Perez1
1Signum Dermalogix, Monmouth Junction, New Jersey, United States, 2Molecular Biology, Princeton University, Princeton, New Jersey, United States

11:15 AM - 11:21 AM
Abstract #657: IL-17A upregulates endothelin-1 in keratinocytes in the pathogenesis of Prurigo nodularis
L. Wong2, C. Lee1
1Dermatology, Kaohsiung Chang Gung Memorial Hospital, Kaohsiung, Taiwan, 2Dermatology, Chang Gung Memorial Hospital-Kaohsiung Medical Center, Kaohsiung, Taiwan

11:21 AM - 11:27 AM
Abstract #643: Skin cells can sense and integrate signals coming from eucalyptus extract to combat environmental insults and regenerate from within
Advanced Technologies, Estee Lauder Companies, Melville, New York, United States

11:27 AM - 11:33 AM
Abstract #666: Role for epidermal keratinocytes in small fiber degeneration in diabetic peripheral neuropathy
A. Belmadani1, N. Jayaraj2, D. Ren3, D. George4, A. S. Paller5, R. Miller4, D. Menichella2
1Pharmacology, Northwestern University, Chicago, Illinois, United States, 2Neurology, Northwestern University, Chicago, Illinois, United States, 3Dermatology, Northwestern University, Chicago, Illinois, United States, 4Dermatology, Northwestern University, Chicago, Illinois, United States
Selected ePoster Discussions II
Pharmacology and Drug Development

Basic and preclinical studies aimed at developing therapeutics, elucidating their mechanisms of action, and identifying biomarkers of drug activity

FRIDAY, MAY 10, 2019
10:45 AM - 11:45 AM
CONTINENTAL BALLROOM B

Moderator: Adam Raff, MD/PhD

10:45 AM - 10:51 AM
Abstract #701: High dimensional peripheral blood immune cell profiling of atopic dermatitis patients unveiled IL21 cytokine activation
H. Kim1, N. Kameyama1, J. Glickman1, H. He1, T. Czarnowicki1, A. B. Pavel1, Y. Estrada1, J. Gonzalez2, B. Lee1, A. Rahman1, M. Merad1, J. G. Krueger2, E. Guttman-Yassky1
1Icahn School of Medicine at Mount Sinai, New York, New York, United States, 2Rockefeller University, New York, New York, United States

10:51 AM - 10:57 AM
Abstract #667: Targeting the JAK/STAT pathway for CTCL therapy
Y. Gu1, P. Perez-Duran2, K. Oshima2, J. Rodriguez-Cortes3, A. Ferrando2, T. Palomero2, L. J. Geskin3
1Vagelos College of Physicians & Surgeons, Columbia University, New York, New York, United States, 2Institute for Cancer Genetics, Columbia University, New York, New York, United States, 3Department of Dermatology, Columbia University, New York, New York, United States

10:57 AM - 11:03 AM
Abstract #693: BET inhibitor OTX015 reduces imiquimod-induced mouse psoriasiform dermatitis
Dermatology, UCDAVIS, Sacramento, California, United States

11:03 AM - 11:09 AM
Abstract #706: Predictive modeling of patient response to JAK/STAT inhibitors and dynamic patient-matching
J. C. Chen, A. Christiano
Dermatology, Columbia University, New York, New York, United States

11:09 AM - 11:15 AM
Abstract #695: Selectively targeting JAK1 or JAK3 pathway is sufficient to reverse alopecia areata
Z. Dai, E. Loesch, J. C. Chen, E. Wang, E. Lee, A. Christiano
Dermatology, Columbia University, New York, New York, United States

11:15 AM - 11:21 AM
Abstract #702: Plasma exosomal miR-375-3p regulates mitochondria-dependent keratinocyte apoptosis by targeting XIAP in SJS/TEN
C. Zhang, G. Wang, M. Fu
Dermatology, Xijing Hospital, Fourth Military Medical University, Xi’an, China, Xi’An, ShaanXi, China

11:21 AM - 11:27 AM
Abstract #708: Promotion of hair growth in alopecia areata by topical treatment of HDAC inhibitors
E. Wang1, J. C. Chen2, A. Christiano1
1Dermatology, Columbia University, New York, New York, United States, 2Systems Biology, Columbia University, New York, New York, United States

11:27 AM - 11:33 AM
Abstract #676: Exploring novel therapeutic targets in the treatment of cutaneous T-cell lymphoma
S. Yumeen1, A. O. King1, S. Kim1, J. Lewis1, K. Carlson1, S. Umlauf2, Y. Surovtseva2, F. Foss1, M. Girardi1
1Yale School of Medicine, New Haven, Connecticut, United States, 2Yale Center for Molecular Discovery, West Haven, Connecticut, United States

11:33 AM - 11:39 AM
Abstract #672: Pramlintide produces immunomodulatory effects on myeloid-derived suppressor cells and T-cells in squamous cell carcinoma in-vivo
L. Tordesillas, B. Sell, K. Nguyen, E. Flores, K. Y. Tsai
Moffitt Cancer Center, Riverview, Florida, United States

11:39 AM - 11:45 AM
Abstract #727: Use of PI3K/mTOR/Akt inhibitors as skin protectors to spare skin from glucocorticoid-induced atrophy
S. Agarwal1, S. Mirzoeva2, B. Readhead3, 4, E. Lesovaya5, J. T. Dudley4, I. Budunova1
1Dermatology, Northwestern University, Chicago, Illinois, United States, 2Banner Neurodegenerative Disease Research Center, ASU, Tempe, Arizona, United States, 3Blokhin Cancer Center, Moscow, Russian Federation, 4Icahn School of Medicine at Mount Sinai, New York, New York, United States
**AbbVie Sponsored Symposium**

**Hidradenitis Suppurativa: Translating Mechanisms and Basic Science into Improved Therapies**

**FRIDAY, MAY 10, 2019**

**11:45 AM**

**Welcome & Introduction**

**Amanda MacLeod, MD**, Assistant Professor, Department of Dermatology, Duke University, Durham, NC

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**Michael Rosenblum, MD/PhD**, Assistant Professor, Department of Dermatology, University of California San Francisco, San Francisco, CA

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**11:50 AM**

**Kathleen M. Smith, PhD,** Principal Research Scientist Immunology Systems Computational Biology Dermatology Lead, AbbVie

Dr. Smith received her PhD in Immunology from the University of California, San Francisco and did her post-doctoral work at DNAX Research Institute. She has a broad expertise in clinical study design and execution, human tissue acquisition, and data analysis and interpretation with a focus on human inflammatory skin diseases. She is currently a member of the Immunology Systems Computational Biology Group at AbbVie in Cambridge, MA where she works closely with the Discovery Dermatology and Fibrosis team in the Chicago area studying disease mechanisms in psoriasis, atopic dermatitis, and hidradenitis suppurativa with the goal of identifying therapies which will help patients live better lives.

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**11:55 AM**

**Michelle Lowes, MD/PhD**, Associate Professor of Clinical Investigation, Laboratory for Investigative Dermatology. The Rockefeller University, New York, NY

“Pathogenesis of hidradenitis suppurativa”

Dr. Lowes is an investigative dermatologist with a long-term goal to understand the contribution of the skin immune system to health and disease. She has predominantly studied psoriasis, a common inflammatory skin disease, in the Laboratory of Investigative Dermatology at The Rockefeller University. In recent years, Dr. Lowes has turned her attention to investigate hidradenitis suppurativa. She is now on the medical board of the Hidradenitis Suppurativa Foundation (HSF) and committed to the mission of the HSF: to support patient care, promote physician and patient education, and to encourage research aimed at the control and cure of HS.

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**12:10 PM**

**Support patient care, promote physician and patient education, Foundation (HSF) and committed to the mission of the HSF: to now on the medical board of the Hidradenitis Suppurativa Foundation (HSF) and committed to the mission of the HSF: to support patient care, promote physician and patient education, and to encourage research aimed at the control and cure of HS.**

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**12:30 PM**

**Margaret Lowe, PharmD/PhD**

Elucidating the Immunopathogenesis of Hidradenitis Suppurativa at the Cellular and Molecular Levels

Margaret Lowe obtained her PharmD from the University of North Carolina, Chapel Hill in 2008 and her PhD in 2013 from the University of California, San Francisco (UCSF). She did her post-doctoral training in the laboratory of Dr. Michael Rosenblum and currently holds a Professional Researcher position in the Cutaneous Immunology group at UCSF. Margaret's research focuses on understanding how immune cells function in healthy and diseased skin in the context of human autoimmunity and chronic inflammatory diseases. Her most recent studies have centered around investigating the overarching immunopathology of hidradenitis suppurativa. With the support of the UCSF Hidradenitis Suppurativa Center, she has comprehensively interrogated the immune infiltrate in HS skin at both the phenotypic and functional levels. In this capacity, her research is providing novel insights into the major cell types and molecular pathways underlying the pathogenesis of HS and the influence of specific immunomodulatory therapies on these processes.

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**12:50 PM**

**Angel Byrd, MD/PhD**, Assistant Professor, Department of Dermatology, Howard University, Washington, DC

“From biobank to bedside - Neutrophil extracellular traps and Type 1 Interferons contribute to immune dysregulation in Hidradenitis Suppurativa”

Dr. Byrd recently completed the Ethnic Skin Postdoctoral Fellowship at Johns Hopkins University School of Medicine, Department of Dermatology, studying immune mechanisms in Hidradenitis suppurativa under the mentorship of Dr. Ginette Okoye. Currently, she is an Assistant Professor at Howard University College of Medicine and an Adjunct Assistant Professor at Johns Hopkins, Departments of Dermatology, where she is pioneering research efforts to further understand immunopathological mechanisms in ethnic skin diseases.

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**1:00 PM**

**Heidi Kong, MD**

“The skin microbiome in hidradenitis suppurativa”

Dr. Kong is Head of the Cutaneous Microbiome and Inflammation Section and Investigator in the Dermatology Branch, NIAMS, NIH. Her research on the human microbiome focuses on understanding host-microbial relationships, particularly of human skin. Dr. Kong’s work includes investigations in the microbiome of inflammatory skin diseases including atopic dermatitis and in patients with primary immunodeficiency syndromes.

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**1:10 PM**

**Amanda MacLeod, MD**

**Michael Rosenblum, MD/PhD**
Selected ePoster Discussions III  
**Innate Immunity, Microbiology, Microbiome**  
Studies of cells, receptors and effector molecules of the innate immune response; studies on skin microbes, microbiome and infectious processes of the skin

**FRIDAY, MAY 10, 2019  
11:45 AM - 12:45 PM  
STEVENS SALON D**

Moderator: **Maria T. Garcia-Romero, MD/MPH**

### 11:45 AM - 11:51 AM  
Abstract #522: Gut microbiota is required for the development of alopecia areata  
1Dermatology, Columbia University, New York, New York, United States, 2Medicine, Columbia University, New York, New York, United States

### 11:51 AM - 11:57 AM  
Abstract #457: Epidermal IκBζ is indispensable for induction of psoriasisform dermatitis and protection from bacterial infection  
1Dermatology, Tohoku University Graduate School of Medicine, Sendai, Miyagi, Japan, 2Tohoku University School of Medicine, Sendai, Japan

### 11:57 AM - 12:03 PM  
Abstract #531: Resident skin bacteria produce “human” immunomodulatory lipids  
**K. N. Haas**, **R. Sivamani**  
1Dermatology, UCDavis Medical Center, Davis, California, United States, 2Biology, CSUS, Sacramento, California, United States

### 12:03 PM - 12:09 PM  
Abstract #468: Neutrophil extracellular traps exacerbate psoriasis via activating inflammasomes of keratinocytes  
**X. Yuan**, **G. Wang**  
Dermatology, Xijing Hospital, Fourth Military Medical University, Xi’an, Shaanxi, China

### 12:09 PM - 12:15 PM  
Abstract #485: Diversity and adaptation of *S. aureus* on lesions of children with atopic dermatitis  
1Institute for Medical Engineering and Sciences, Massachusetts Institute for Technology, Cambridge, Massachusetts, United States, 2Bacteriology, National Institute for Pediatrics, Mexico City, Mexico, 3Dermatology, National Institute for Pediatrics, Mexico City, Mexico
## Selected ePoster Discussions III
### Pigmentation and Melanoma
Studies on all aspects of cutaneous and extracutaneous pigmentation; molecular cellular and biological facets of melanoma

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Abstracts</th>
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| FRIDAY, MAY 10, 2019 | 11:45 AM – 12:45 PM | INTERNATIONAL BALLROOM SOUTH      | 11:45 AM - 11:51 AM  
Abstract #789: Immune checkpoint therapy polarizes fibroblasts into a proinflammatory state  
J. Ramseier¹, D. Thakral¹, ², W. Damsky¹, M. Bosenberg¹  
¹Department of Dermatology, Yale School of Medicine, New Haven, Connecticut, United States, ²Department of Genetics, Yale School of Medicine, New Haven, Connecticut, United States |
|                   | 11:51 AM - 11:57 AM |                                   | 11:51 AM - 11:57 AM  
Abstract #840: Aberrant differentiation as a novel mechanism for lentigines and hair graying  
Dermatology, University of Colorado AMC, Aurora, Colorado, United States |
|                   | 11:57 AM - 12:03 PM |                                   | 11:57 AM - 12:03 PM  
Abstract #826: The Role of TRAF6 in the tumor microenvironment of melanoma  
Dermatology, Xiangya Hospital, Central South University, Changsha, Hunan, China |
|                   | 12:03 PM - 12:09 PM |                                   | 12:03 PM - 12:09 PM  
Abstract #778: Risk of second primary cutaneous melanoma by anatomic region among melanoma survivors: A nationwide U.S. population study  
Dermatology, Northwestern University, Feinberg School of Medicine, Chicago, Illinois, United States |
|                   | 12:09 PM - 12:15 PM |                                   | 12:09 PM - 12:15 PM  
Abstract #791: Up-regulated SIRT7 expression contributed to melanoma growth by promoting MITF expression  
S. Wang, W. Guo, J. Ma, H. Wang, T. Gao, C. Li  
Department of Dermatology, Xijing Hospital, Fourth Military Medical University, 127 Changle Western Road, Xi’an, China |
|                   | 12:15 PM - 12:21 PM |                                   | 12:15 PM - 12:21 PM  
Abstract #784: A new immune evasion mechanism in melanoma  
K. A. Tran¹, ², J. E. Sligh³, E. Maverakis¹  
¹Dermatology, UC Davis, Sacramento, California, United States, ²College of Medicine, University of Arizona, Tucson, Arizona, United States, ³University of Arizona Cancer Center, Tucson, Arizona, United States |
|                   | 12:21 PM - 12:27 PM |                                   | 12:21 PM - 12:27 PM  
Abstract #792: Oxidative stress-induced IL-15 trans-presentation in keratinocytes contributes to CD8+ T cells activation via JAK-STAT pathway in vitiligo  
Department of Dermatology, Xijing Hospital, Xi’an, Shaanxi, China |
|                   | 12:27 PM - 12:33 PM |                                   | 12:27 PM - 12:33 PM  
Abstract #836: EPAC2/RABGEF4 promotes cell cycle progression selectively in primary melanoma cells by regulating cellular and mitochondrial metabolism  
A. Bhasker, A. Krishnan, D. Mikheil, E. Castro-Perez, V. Setaluri  
Dermatology, University of Wisconsin-Madison, Madison, Wisconsin, United States |
|                   | 12:33 PM - 12:39 PM |                                   | 12:33 PM - 12:39 PM  
Abstract #777: Enhanced recovery of PD-1 expression on the cell surface of PD-1 negative T cells in nivolumab-treated advanced melanoma patients  
R. Takahashi¹, Y. Sato², M. Kimishima², M. Ohyama¹, ²  
¹Flow Cytometry Core Facility, Kyorin University School of Medicine, Mitaka, Tokyo, Japan, ²Department of Dermatology, Kyorin University School of Medicine, Mitaka, Tokyo, Japan |
|                   | 12:39 PM - 12:45 PM |                                   | 12:39 PM - 12:45 PM  
Abstract #780: Novel mechanism of UVB-mediated pigmentation through the axis of ATP-P2X7  
E. Lee¹, J. Kim¹, Y. Ahn¹, B. Lee², Y. Heo³, S. Hwang¹, S. Lee⁴, J. Lee², G. Chung², S. Oh¹  
¹Yonsei University College of Medicine, Seoul, Korea (the Republic of), ²Seoul National University School of Dentistry, Seoul, Korea (the Republic of), ³Yonsei University College of Pharmacy, Incheon, Korea (the Republic of), ⁴Seoul National University Hospital, Seoul, Korea (the Republic of) |
Selected ePoster Discussions III

Skin, Appendages, and Stem Cell Biology

Studies on the hair follicle, sebaceous gland, and other skin appendages; developmental biology of skin and hair; roles of stem cells in pre and post-natal growth and development

FRIDAY, MAY 10, 2019 11:45 AM - 12:45 PM
CONTINENTAL BALLROOM B

Moderator: Marta Bertolini, PhD

11:45 AM - 11:51 AM
Abstract #909: PPARγ stimulation protects from cyclophosphamide-induced hair follicle cytotoxicity and bulge stem cell damage
I. Picciní1, I. Chéret1–2, S. Ghatak1, M. Alam1, J. Hardmann2, H. Erdmann2, F. Jimenez3, C. Ward1, R. Paus2–4, M. Bertolini1
1Monasterium Laboratory, Skin and Hair Research Solutions, Muenster, Germany, 2University of Miami, Miami, Florida, United States, 3Mediteknia Skin & Hair Lab, Gran Canaria, Spain, 4University of Manchester, Manchester, United Kingdom, 5Clinica Joelle, Dubai, United Arab Emirates, 6Mediteknia Clinic, Gran Canaria, Spain

11:51 AM - 11:57 AM
Abstract #921: Generation of a new rodent model of scleroderma
J. Quaggin-Smith1, R. M. Lavker1, H. Peng1, M. Kelly2, V. Hranis-Eremina1, J. Varga1, S. Quaggin2
1Northwestern University, Chicago, Illinois, United States, 2School of Medicine and Health Sciences TecSalud, Monterrey, Mexico, 3Dermatology, Niigata University, Niigata, Japan

11:57 AM - 12:03 PM
Abstract #878: Keratin 17 upregulate the expression of CXCL1 in human psoriatic keratinocyte cells through going the nucleus
Y. Luo, Z. Zhu, E. Dang, G. Wang
Department of Dermatology, Xijing Hospital, Fourth Military Medical University, Xi’an, Shaanxi, China

12:03 PM - 12:09 PM
Abstract #924: Efficient genome editing using CRISPR/Cas9 ribonucleoprotein approach in iPS cells for recessive dystrophic epidermolysis bullosa
J. Jackow1, Z. Guo1, H. E. Abaci1, Y. Doucet1, J. Shin1, C. Hansen1, Y. Kabata1, S. Shinkuma1, J. Salas-Alanis2, A. Christiano1
1Dermatology, Columbia University, New York, New York, United States, 2School of Medicine and Health Sciences TecSalud IESM, Monterrey, Mexico, 3Dermatology, Niigata University, Niigata, Japan

12:09 PM - 12:15 PM
Abstract #869: The specification of Merkel cell in the back skin and glabrous paw skin is controlled by FGFR2-mediated signaling
M. B. Nguyen1, I. Cohen1, J. Valdes1–2, Z. Xu1, C. Bar1, K. Dauber1, P. Tsai1, D. Zhao1–4, D. Zheng1–3, Y. Hsu1, T. Chen1, E. Ezkhova1
1Developmental & Regenerative Biology, Icahn School of Medicine at Mount Sinai, New York, New York, United States, 2Department of Cell Biology and Development, Instituto de Fisiologia Celular, UNAM, Mexico City, Mexico, 3National Institute of Biological Sciences Beijing, Beijing, China, 4Department of Stem Cell and Regenerative Biology, Harvard Stem Cell Institute, Cambridge, Massachusetts, United States, 5Department of Genetics, Yale University School of Medicine, New Haven, Connecticut, United States, 6Departments of Genetics, Neurology, and Neuroscience, Albert Einstein College of Medicine, New York, New York, United States, 7Albert Einstein College of Medicine, New York, New York, United States, 8Yale Center for Genome Analysis, Yale University, New Haven, Connecticut, United States

12:15 PM - 12:21 PM
Abstract #913: Gorab regulates dermal papilla cell migration through the cytoskeleton and extracellular matrix
K. Chen, J. Chen
Departments of Dermatology and Pathology, Stony Brook University, Stony Brook, New York, United States

12:21 PM - 12:27 PM
Abstract #923: Molecular phenotyping of lichen planopilaris revealed dysregulation of cholesterol/fatty acid metabolism, fibrosis and mast cell pathways
Columbia University, New York, New York, United States

12:27 PM - 12:33 PM
Abstract #867: Contraction of myoepithelial cells in human eccrine sweat glands, revealed by 3D live imaging
K. Nakashima1, R. Kurata1–2, F. Fujita1–2, F. Okada1–2, A. Tanemura1, H. Murota1, K. Sekiguchi1
1Laboratory of Advanced Cosmetic Science, Graduate School of Pharmaceutical Sciences, Osaka University, Suita, Osaka, Japan, 2Fundamental Research Institute, Mandom Corporation, Osaka, Osaka, Japan, 3Department of Dermatology, Graduate School of Medicine, Osaka University, Suita, Osaka, Japan, 4Division of Matrixome Research and Application, Institute for Protein Research, Osaka University, Suita, Osaka, Japan

12:33 PM - 12:39 PM
Abstract #880: Gasdermin A3-mediated cell death causes niche collapse and precocious activation of hair follicle stem cells
S. Li1, W. Suen1, C. Kao2, M. Yang3, P. Lin1, L. Yang1
1Inst. of Cellular and System Medicine, National Health Research Institutes, Zhunan, Miaoli County, Taiwan, 2Center of General Education, Chang Gung University, Taoyuan, Taiwan

12:39 PM - 12:45 PM
Abstract #884: LRRK1 regulates hair follicle (HF) growth via coordinating Wnt and SHH signaling
H. Peng1, N. Kaplan1, W. Yang1, R. M. Lavker2
1Dermatology, Northwestern University, Chicago, Illinois, United States, 2Northwestern University, Chicago, Illinois, United States
Selected ePoster Discussions III

Tissue Regeneration and Wound Healing

Wound healing and regeneration studies; processes/signaling that regulate vascular development and angiogenesis; interactions between different skin components (epithelial cells, dermal cells, nerves, vasculature, melanocytes, fat) in homeostasis and regeneration

FRIDAY, MAY 10, 2019 11:45 AM - 12:45 PM

CONTINENTAL BALLROOM C

Moderator: Mayumi Ito, PhD

11:45 AM - 11:51 AM
Abstract #954: MagneTESkin – Orientation matters
C. Fuchs1, Y. Wang1, W. A. Farinelli1, R. R. Anderson1,2, J. Tam1,2
1Wellman Center for Photomedicine, Boston, Massachusetts, United States, 2Department of Dermatology, Harvard Medical School, Boston, Massachusetts, United States

11:51 AM - 11:57 AM
Abstract #960: Innate immune antimicrobial response by retinoic acid during reactive adipogenesis is dependent on HIF1α
M. C. Liggins, L. Zhang, F. Li, R. L. Gallo
Dermatology, University of California, San Diego, Vista, California, United States

11:57 AM - 12:03 PM
Abstract #950: Autophagy is inhibited in keloid-derived fibroblasts
M. Jiang, M. Li, H. Gu, X. Chen
Institute of Dermatology, Chinese Academy of Medical Sciences and Peking Union Medical College, Nanjing, Jiangsu, China

12:03 PM - 12:09 PM
Abstract #969: Wounding response and wound healing in a novel tension-based skin explant model
D. Grussu1, M. Connelly1, L. Nicholson1, K. Hirata1, D. Lamont1, D. Lunny2, W. McLean1, R. Hickerson1
1School of Life Science, University of Dundee, Dundee, United Kingdom, 2Skin Research Institute of Singapore, A*STAR, Singapore, Singapore

12:09 PM - 12:15 PM
Abstract #948: CD44 regulates α-SMA gene expression via a novel G-actin/MRTF mediated pathway that requires TGFβR/p38MAPK activity in murine skin fibroblasts
Y. Wang1, J. Mack2, E. Maytin1
1Dept. Biomedical Engineering, Cleveland Clinic, Cleveland, Ohio, United States, 2Dept. BME, Dept. Dermatology, Cleveland Clinic, Cleveland, Ohio, United States

12:15 PM - 12:21 PM
Abstract #970: Distinct angiogenic profiles between papillary and reticular fibroblasts
C. Mainzer1, A. Mauroux1,2,2, L. Verzeaux2,3, S. Bordes3, F. Ruggiero2, L. Muller3, B. Closs1
1SILAB Inc, East Brunswick, New Jersey, United States, 2R&D Department, SILAB, Brive, France, 3UMRS242 CNRS - ENS - UCLB - USC INRA, IGFL, Lyon, France, 4Collège de France, CNRS, INSERM, PSL Research University, CIRB, Paris, France

12:21 PM - 12:27 PM
Abstract #959: Regulation of IL36-mediated skin regeneration by non-coding RNA sensing
N. Islam1, R. Silverman1, H. Liu1, L. Miller1, W. Huang2, M. Kane2, D. Kim1, L. Garza1
1Johns Hopkins School of Medicine, Baltimore, Maryland, United States, 2University of Maryland School of Pharmacy, Baltimore, Maryland, United States, 3Cleveland Clinic, Cleveland, Ohio, United States

12:27 PM - 12:33 PM
Abstract #958: Pharmacological inhibition of JAK/STAT signaling by tofacitinib prevents organ fibrosis: Novel therapy for scleroderma
S. Bhattacharyya1, W. Wang1, A. Yeldandi1, R. Goncalves Maragoni1, C. Fehglah-Bostwick1, J. Weil1, J. Varga1
1Feinberg School of Medicine, Northwestern University, Chicago, Illinois, United States, 2Medical University of South Carolina, Charleston, South Carolina, United States

12:33 PM - 12:39 PM
Abstract #953: The skin transcriptome in hidradenitis suppurativa uncovers an antimicrobial and sweat gland gene signature that has distinct overlap with wounded skin
M. Coates1, D. Corcoran2, P. Rosa Coutinho Goulart Marlottoni1, T. Jaleel1, D. Brown1, J. Murray1, M. Morasso2, A. S. MacLeod3, S. Dermatology, Duke University, Durham, North Carolina, United States, 2Duke Center for Genomic and Computational Biology, Duke University, Durham, North Carolina, United States, 3Laboratory of Skin Biology, NIH, Bethesda, Maryland, United States, 4Dermatology, Duke, Durham, North Carolina, United States, 5Immunology, Duke University, Durham, North Carolina, United States, 6Plastic Surgery, Duke University, Durham, North Carolina, United States

12:39 PM - 12:45 PM
Abstract #942: Hedgehog stimulates hair follicle neogenesis by creating inductive dermis during murine skin wound healing
C. Lim1, Q. Sun1, K. Ratti1, S. Lee1, Y. Zheng2, M. Takeo1, W. Lee1, P. Rabbani1, M. Pilkus3, J. Cain4, D. Wang5, N. Watkins5, S. Millar6, M. Takeko7, P. Myung8, G. Cotsarelis2, M. Ito1
1New York University, New York, New York, United States, 2University of Pennsylvania, Philadelphia, Pennsylvania, United States, 3University of California, Irvine, California, United States, 4University of California, Irvine, California, United States, 5Monash University, Clayton, Victoria, Australia, 6University of Texas Southwestern Medical Center, Dallas, Texas, United States, 7Garvan Institute of Medical Research, Darlinghurst, New South Wales, Australia, 8Kyoto University, Kyoto, Japan, 9Yale University, New Haven, Connecticut, United States
Selected ePoster Discussions III
Translational Studies
Including studies involving human tissue and human cells including biomarker studies that furthers our understanding of skin disease

FRIDAY, MAY 10, 2019  11:45 AM - 12:45 PM  CONTINENTAL BALLROOM A

Moderator: Carolyn Jack, MD/PhD

11:45 AM - 11:51 AM
Abstract #996: Epidermal AMBRA1 and Loricrin; A paradigm shift in prognostication and stratification of AJCC stage I melanoma
R. Ellis1, A. McConnell1, D. Tang1, B. Nasr1, A. Greenwood1, G. Watson2, P. Barrett4, S. Horswell1, M. Labus1, P. Lovat1
1Newcastle University, Newcastle upon Tyne, United Kingdom, 2James Cook University Hospital, Middlesbrough, United Kingdom, 3The Francis Crick Institute, London, United Kingdom, 4University Hospital North Durham, Durham, United Kingdom

11:51 AM - 11:57 AM
Abstract #1044: Human skin tissue-specific T cell dysregulation: A model for adult atopic dermatitis
C. Jack
Dermatology, McGill, Montreal, Quebec, Canada

11:57 AM - 12:03 PM
Abstract #1038: Convergent molecular and histologic profiles of guttate and plaque psoriasis
J. E. Hawkes1, S. Garcet1, X. Zheng1, G. G. Krueger2, K. Callis Duffin1, J. G. Krueger1
1Rockefeller University, New York, New York, United States, 2University of Utah, Salt Lake City, Utah, United States

12:03 PM - 12:09 PM
Abstract #1011: Evaluation of a skin microsampling clinical trial design for temporal/spatial molecular profiling in topically treated photoaged skin
T. Prow
Future Industries Institute, University of South Australia, Adelaide, South Australia, Australia

12:09 PM - 12:15 PM
Abstract #1033: The potential pro-proliferative role of polo-like kinase 4 in non-melanoma skin cancer
D. R. Garvey, M. A. Ndiaye, N. Ahmad
Dermatology, University of Wisconsin-Madison, Madison, Wisconsin, United States

12:15 PM - 12:21 PM
Abstract #1037: Transcriptome analysis in Sézary syndrome and lymphocytic variant hypereosinophilic syndrome identifies common and unique genes
A. Moerman-Herzog1, D. Acheampong1, A. Brooks1, S. Blair1, H. K. Wong1
1Dermatology, University of Arkansas for Medical Science, Little Rock, Arkansas, United States, 2Program in Bioinformatics, University of Arkansas at Little Rock, Little Rock, Arkansas, United States

12:21 PM - 12:27 PM
Abstract #993: Molecular abnormalities of early-onset pediatric atopic dermatitis are captured by tape strips
A. Diaz1, A. B. Pavel1, R. Li, M. Fernandez1, X. Peng1, Y. Estrada1, J. G. Krueger1, A. S. Paller1, E. Guttman-Yassky1
1Dermatology, Icahn School of Medicine at Mount Sinai, New York, New York, United States, 2Dermatology, Northwestern University, Chicago, Illinois, United States, 3Dermatology, The Rockefeller University, New York, New York, United States

12:27 PM - 12:33 PM
Abstract #1015: Radiation therapy eradicates malignant T cells and is associated with improved survival in early-stage mycosis fungoides
J. T. O'Malley1, A. de Masson1, E. Jaibert1, A. Giobbie-Hurder1, A. Gehad2, E. Seger2, N. LeBoeuf2, C. Larocca1, J. E. Teague2, T. Kupper2, P. M. Devlin4, R. A. Clark5
1Dermatology, Saint-Louis Hospital, Paris, France, 2Dermatology, Brigham and Women’s Hospital/Harvard Medical School, Boston, Massachusetts, United States, 3Statistics, Dana-Farber Cancer Institute, Boston, Massachusetts, United States, 4Radiation-Oncology, Brigham and Women’s Hospital/HMS, Boston, Massachusetts, United States, 5Dermatology, Brigham and Women’s Hospital, Boston, Massachusetts, United States

12:33 PM - 12:39 PM
Abstract #1030: A minimally invasive method for the quantification of lymphatic vessel function in the skin
A. Polomska1, S. T. Proulx1, D. Fehr2, M. Bonmarin2, J. Leroux1, M. Detmar1
1Institute of Pharmaceutical Sciences, ETH Zurich, Switzerland, 2Zurich University of Applied Sciences, Winterthur, Switzerland

12:39 PM - 12:45 PM
Abstract #1029: High throughput TCR sequencing greatly improves prediction of recurrence in primary melanomas
W. Pruessmann1, J. Rytlewski2, J. Wilmott3, M. Bonmarin1, J. Leroux1, M. Detmar2
1Institute of Pharmaceutical Sciences, ETH Zurich, Switzerland, 2Zurich University of Applied Sciences, Winterthur, Switzerland

12:45 PM - 12:51 PM
Abstract #1010: High throughput TCR sequencing greatly improves prediction of recurrence in primary melanomas
W. Pruessmann1, J. Rytlewski2, J. Wilmott3, M. Bonmarin1, J. Leroux1, M. Detmar2
1Institute of Pharmaceutical Sciences, ETH Zurich, Switzerland, 2Zurich University of Applied Sciences, Winterthur, Switzerland

12:51 PM - 12:57 PM
Abstract #1032: High throughput TCR sequencing greatly improves prediction of recurrence in primary melanomas
W. Pruessmann1, J. Rytlewski2, J. Wilmott3, M. Bonmarin1, J. Leroux1, M. Detmar2
1Institute of Pharmaceutical Sciences, ETH Zurich, Switzerland, 2Zurich University of Applied Sciences, Winterthur, Switzerland

12:57 PM - 13:03 PM
Abstract #1031: A minimally-invasive method for the quantification of lymphatic vessel function in the skin
A. Polomska1, S. T. Proulx1, D. Fehr2, M. Bonmarin1, J. Leroux1, M. Detmar2
1Institute of Pharmaceutical Sciences, ETH Zurich, Switzerland, 2Zurich University of Applied Sciences, Winterthur, Switzerland

13:03 PM - 13:09 PM
Abstract #1036: A minimally-invasive method for the quantification of lymphatic vessel function in the skin
A. Polomska1, S. T. Proulx1, D. Fehr2, M. Bonmarin1, J. Leroux1, M. Detmar2
1Institute of Pharmaceutical Sciences, ETH Zurich, Switzerland, 2Zurich University of Applied Sciences, Winterthur, Switzerland

13:09 PM - 13:15 PM
Abstract #1027: High throughput TCR sequencing greatly improves prediction of recurrence in primary melanomas
W. Pruessmann1, J. Rytlewski2, J. Wilmott3, M. Bonmarin1, B. Dyring-Andersen1, R. A. Clark1, H. Robins2, R. Scolyer3, T. Kupper1
1Dermatology, BWH/HMS, Boston, Massachusetts, United States, 2Adaptive Biotechnologies, Seattle, Washington, United States, 3Melanoma Institute Australia, Sydney, New South Wales, Australia
HERMAN BEERMAN LECTURE

Understanding People

FRIDAY, MAY 10, 2019
1:30 PM – 2:00 PM
INTERNATIONAL BALLROOM NORTH

Introduction by: Ponciano Cruz, MD

Alex Pentland, PhD
Massachusetts Institute of Technology
Cambridge, MA

Alex Pentland, PhD has been selected to be the 2019 Herman Beerman Lecture recipient. Dr. Pentland received his bachelors degree from the University of Michigan and later obtained his PhD in Psychology from Massachusetts Institute of Technology (MIT) in 1982.

He started as lecturer at Stanford University in both computer science and psychology, and joined the MIT faculty in 1986, where he became Academic Head of the Media Laboratory and received the Toshiba Chair in Media Arts and Sciences. He serves on the Boards of the UN Global Partnership for Sustainable Development Data, the American Bar Association, AT&T, and several of the startup companies he has co-founded. He previously co-founded and co-directed the Media Lab Asia laboratories at the Indian Institutes of Technology and Strong Hospital’s Center for Future Health.

He directs the MIT Media Lab Human Dynamics Lab and MIT Connection Science Program which explore the use of big data and AI to better understand human society, and the Trust Data Alliance which is an alliance of companies and nations building open-source software that makes AI and big data safe, trusted and secure. He also manages the MIT Media Lab Entrepreneurship Program which creates ventures to take cutting edge technologies into the real world. He also serves as Academic Director of Data-Pop Alliance, a joint project on big data and human development co-created by the MIT Media Lab, the Harvard Humanitarian Initiative and the Overseas Development Institute.

In 2011 Forbes named him one of the world’s seven most powerful data scientists along with a founder of Google and the CTO of the United States. His most recent books are ‘Social Physics,’ published by Penguin Press, and ‘Honest Signals’, published by MIT Press. The SID looks forward to welcoming Dr. Pentland to the 2019 SID Annual Meeting.

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.
EUGENE M. FARBER LECTURE

Towards Precision Therapeutics: A Systems Approach to Understanding Psoriasis Plaque Resolution and Endotype Analysis

FRIDAY, MAY 10, 2019                  2:00 PM – 2:30 PM
INTERNATIONAL BALLROOM NORTH

Introduction by:  Nicole Ward, PhD

Nick Reynolds, MD
Newcastle University
Newcastle upon Tyne, UK

Nick Reynolds is Professor of Dermatology and Director of the MRC/EPSRC Molecular Pathology Node in Newcastle where he also leads a multi-disciplinary psoriasis service for patients with severe disease. After qualifying in medicine from the University of London, he received his dermatology and academic training in Bristol, Ann Arbor Michigan, USA and Newcastle upon Tyne, with research fellowship support from the British Association of Dermatologists, the Psoriasis Association and the Wellcome Trust.

Nick Reynolds’ current research is focused on the mechanism of action of therapeutic agents in psoriasis and atopic eczema, human models of skin disease, systems biology and precision medicine. His group published one of the first personalized medicine studies in Dermatology – a randomised controlled trial of azathioprine in atopic eczema that utilised pharmacogenetic-based dosimetry (Lancet). His interdisciplinary and computer modelling studies of UVB phototherapy in psoriasis identified apoptosis as a biomarker of response and as a key mechanism involved in plaque remodelling. He has been a member of BADBIR’s (British Association of Dermatologists Biologics Intervention Register) Steering Committee since its inception and has chaired the Research Committee since 2009. As work-strand lead in a multi-centre stratified medicine Programme – PSORT (Psoriasis Stratification to Optimise Relevant Therapy), he has contributed particularly to transcriptomic and systems analyses as well as working closely with patient groups. In 2016 he was appointed Director of Newcastle’s MRC/EPSRC Molecular Pathology Node, one of six units established in the UK to bring researchers, clinicians and industry together to develop molecular diagnostic tools for personalized medicine.

He was the inaugural Chair of UK TREND (Translational Research Network in Dermatology) and is past president of the European Society for Dermatological Research (ESDR).

LECTURESHIP HISTORY
The Eugene M. Farber endowment was established by the family of Dr. Farber 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.
Concurrent Minisymposium 7
Carcinogenesis and Cancer Genetics

Studies on the genetics and other causes of cancer as well as mechanisms relevant to metastasis

FRIDAY, MAY 10, 2019
2:45 PM - 5:15 PM
CONTINENTAL BALLROOM A

Presider(s): Raymond Cho, MD and Carolyn Lee, MD/PhD

2:45 PM - 2:57 PM
Abstract #130: Novel method for non-invasive assessment of molecular markers of UV exposure in normal skin

E. Muradova1, S. Ojeda2, B. Sell3, M. B. Mann3, N. Patel3, K. Y. Tsai1
1College of Medicine, University of South Florida, Tampa, Florida, United States, 2Moffitt Cancer Center, Tampa, Florida, United States, 3MD Anderson Cancer Center, Houston, Texas, United States

2:57 PM - 3:09 PM
Abstract #169: Single-cell profiling of cutaneous T-cell lymphoma reveals underlying heterogeneity predicting disease progression

N. Borchering3, 4, A. Voigt5, V. Liu3, 4, B. Link3, 4, W. Zhang3, A. Jabbari3, 4, 7
3Pathology, University of Iowa, Iowa City, Iowa, United States, 4Pathology, Immunology and Laboratory Medicine, University of Florida, Gainesville, Florida, United States, 5Dermatology, University of Iowa, Iowa City, Iowa, United States, 6Holden Comprehensive Cancer Center, University of Iowa, Iowa City, Iowa, United States, 7Interdisciplinary Program in Immunology, University of Iowa, Iowa City, Iowa, United States

3:09 PM - 3:21 PM
Abstract #110: Multiparameter tissue imaging reveals the cutaneous T cell lymphoma microenvironment in response to immunotherapy

D. Phillips, C. Schuerch, M. Khodadoust, Y. Kim, G. Nolan
Stanford, Stanford, California, United States

3:21 PM - 3:33 PM
Abstract #120: The novel AKT inhibitor afuresertib inhibits Merkel cell carcinoma through targeting TSC-mTOR and GSK-3 pathways

J. Wu, A. Limmer, H. Doan, R. Simonette, P. Rady, S. TYring
Ut Health Science Center, Houston, Texas, United States

3:33 PM - 3:45 PM
Abstract #131: Loss of PD-L1 expression in metastatic Merkel cell carcinoma strongly correlates with a poor prognosis

M. Nakamura1, Y. Teramoto2, M. Yasuda3, H. Wada4, T. Ozawa5, Y. Umemori6, D. Ogata7, T. Kobayashi8, M. Hata9, A. Morita10
1Dermatology and Skin Science, University of British Columbia, Vancouver, British Columbia, Canada, 2Medicine, University of Toronto, Toronto, Ontario, Canada, 3Urological Science, University of British Columbia, Vancouver, British Columbia, Canada, 4Pathology, University of British Columbia, Vancouver, British Columbia, Canada, 5Dermatology, UT Southwestern Medical Center, Dallas, Texas, United States, 6Internal Medicine, University of Iowa, Iowa City, Iowa, United States, 7Interdisciplinary Program in Immunology, University of Iowa, Iowa City, Iowa, United States, 8Internal Medicine, University of Iowa, Iowa City, Iowa, United States, 9Gastroenterology, University of Iowa, Iowa City, Iowa, United States, 10Pathology, Immunology and Laboratory Medicine, University of Iowa, Iowa City, Iowa, United States

3:45 PM - 3:57 PM
Abstract #132: Atoh1 is required for maintenance of Merkel cell carcinoma lineage identity

M. E. Verhaegen1, D. Mangelberger1, D. Wilbert1, J. VanGoort1, P. Harms2, A. A. Dlugosz1
1Dermatology, University of Michigan, Ann Arbor, Michigan, United States, 2Pathology, University of Michigan, Ann Arbor, Michigan, United States

3:57 PM - 4:09 PM
Abstract #133: Translation and transforming activity of a circular RNA from human papillomavirus

J. Zhao1, E. Lee1, J. Kim1, B. Chamseddin1, R. Yang1, M. Kim2, X. Zhan1, L. Laimins1, R. Wang1
1Dermatology, UT Southwestern Medical Center, Dallas, Texas, United States, 2Quantitative Biomedical Research Center, UT Southwestern Medical Center, Dallas, Texas, United States, 3Microbiology-Immunology, Northwestern University, Chicago, Illinois, United States

4:09 PM - 4:21 PM
Abstract #136: Dissecting intratumoral heterogeneity and microenvironment interactions in SCC through single-cell RNA-sequencing

A. Ji1, A. Rubin1, D. Reynolds1, M. Guo1, A. Baduri1, B. George1, S. Hollmig1, S. Aasi1, P. Khavari1, 2
1Dermatology, Stanford University, Stanford, California, United States, 2Dermatology, VA Palo Alto Healthcare System, Palo Alto, California, United States

4:21 PM - 4:33 PM
Abstract #138: LAP2 proteins chaperone GLI1 movement between the lamina and chromatin to regulate transcription

A. N. Mirza
Department of Dermatology, Stanford School of Medicine, Stanford, California, United States

4:33 PM - 4:45 PM
Abstract #140: Paranuclear dot sequesters death receptors to inhibit apoptosis in Merkel cell carcinoma

N. T. Hill1, L. Collado1, K. Nagashima2, P. Harms3, I. Brownell4
1Dermatology, National Institute of Arthritis and Musculoskeletal and Skin Diseases, Bethesda, Maryland, United States, 2Frederick National Laboratory for Cancer Research, National Cancer Institute, Frederick, Maryland, United States, 3Department of Pathology, University of Michigan Medicine, Ann Arbor, Michigan, United States

4:45 PM - 4:57 PM
Abstract #143: Molecular targeting of the DNA binding domain of TOX protein results in selective inhibition of cutaneous T cell lymphoma cells

Y. Huang1, 2, V. Agrawal3, M. Su1, A. Cherkasov3, Y. Zhou1, 4
1Dermatology and Skin Science, University of British Columbia, Vancouver, British Columbia, Canada, 2Medicine, University of Toronto, Toronto, Ontario, Canada, 3Urological Science, University of British Columbia, Vancouver, British Columbia, Canada, 4Dermatologic Oncology, BC Cancer, Vancouver, British Columbia, Canada

4:57 PM - 5:09 PM
Abstract #160: Mechanisms governing promoter methylation and apoptosis in cutaneous T-cell lymphoma: implications for therapy with methotrexate and JAK-inhibitors

M. Nihal1, J. Wu2, G. S. Wood1, 2
1Dermatology, University of Wisconsin, Madison, Wisconsin, United States, 2Dermatology, William S. Middleton VA Medical Center, Madison, Wisconsin, United States
Concurrent Minisymposium 8
Epidemiology
Epidemiological research on any aspect of skin disease

FRIDAY, MAY 10, 2019
2:45 PM – 5:15 PM
INTERNATIONAL BALLROOM NORTH

Presider(s): Zelma Chiesa Fuxench, MD and Aaron Drucker, MD

2:45 PM - 2:57 PM
Abstract #258: Temporal trends and abnormal values for laboratory monitoring during isotretinoin therapy for acne
J. S. Barbieri, S. Wang, D. B. Shin, D. J. Margolis, J. Takeshita
University of Pennsylvania, Philadelphia, Pennsylvania, United States

2:57 PM - 3:09 PM
Abstract #227: Real-world drug discontinuation of acitretin (ACI), ciclosporin (CsA), fumaric acid esters (FAE) and methotrexate (MTX) in patients with moderate-severe psoriasis
K. J. Mason
BADBIR Study Group, London, United Kingdom

3:09 PM - 3:21 PM
Abstract #189: Risk of serious infection in patients on systemic medications for the treatment of psoriasis: an observational comparative cohort study
E. Dommasch1, 2, M. P. Lee3, 4, J. J. Gagne
1Dermatology, Beth Israel Deaconess Medical Center, Boston, Massachusetts, United States, 2Harvard Medical School, Boston, Massachusetts, United States, 3Division of Pharmacoepidemiology and Pharmacoeconomics, Dept of Medicine, Brigham and Women's Hospital, Boston, Massachusetts, United States, 4Dept of Epidemiology, University of North Carolina, Chapel Hill, North Carolina, United States

3:21 PM - 3:33 PM
Abstract #277: Heritability of tanning addiction: A prospective twin concordance study
R. Tripathi, K. D. Knasel, H. H. Ezaldein, J. S. Bordeaux, J. F. Scott
Dermatology, Case Western Reserve University and University Hospitals Cleveland Medical Center, Cleveland, Ohio, United States

3:33 PM - 3:45 PM
Abstract #278: Incidence rates for cutaneous melanoma subtypes by US geographic region: analysis of data from the NCI nationwide SEER Program utilizing regional UV index data
M. Murphrey1, C. Rauck1, T. Erickson1, Y. Ali1, E. C. Gwilliam1, J. Jimenez1, W. Liszewski2, D. P. West1, J. K. Robinson1, B. Nardone1
1Dermatology, Feinberg School of Medicine, Northwestern University, Chicago, Illinois, United States, 2Dermatology, University of Minnesota, Minneapolis, Minnesota, United States

3:45 PM - 3:57 PM
Abstract #170: Impact of congenital cutaneous hemangiomas on newborn care in the United States
R. Tripathi, K. Knasel, H. H. Ezaldein, J. S. Bordeaux, J. F. Scott
Dermatology, Case Western Reserve University/University Hospitals, Cleveland, Ohio, United States

3:57 PM - 4:09 PM
Abstract #236: Morbidity and mortality of measles in US inpatients
R. Chovatiya, J. Silverberg
Dermatology, Northwestern University, Chicago, Illinois, United States

4:09 PM - 4:21 PM
Abstract #191: Incidence, survival, and demographics of primary cutaneous gamma/delta T-cell lymphoma in the United States from 2006-2015: A surveillance, epidemiology, and end results-18 analysis
A. Goyal, K. Bohjanen, D. Pearson
Dermatology, University of Minnesota, Minneapolis, Minnesota, United States

4:21 PM - 4:33 PM
Abstract #172: Associations of primary site and laterality on regional or distant metastases in Merkel cell carcinoma using a retrospective single-center database and SEER registry
S. Ghanian, J. Rhee, E. Cho, J. Walker
Department of Dermatology, Brown University, Providence, Rhode Island, United States

4:33 PM - 4:45 PM
Abstract #226: Using a skin cancer polygenic risk score to stratify high- and low-risk individuals
M. R. Roberts1, P. Kraft2, M. Asgari1
1Dermatology, Massachusetts General Hospital, Boston, Massachusetts, United States, 2Biostatistics, Harvard TH Chan School of Public Health, Boston, Massachusetts, United States

4:45 PM - 4:57 PM
Abstract #272: Predictors of squamous cell carcinoma and implications for follow-up in high-risk patients in the Veterans Affairs Keratinocyte Carcinoma Chemoprevention (VAKCC) Trial
A. Misitzis1, 4, M. Beatson1, 4, S. Landow1, 4, R. Lew5, H. Higgins1, M. Weinstock1, 2
1Brown University Department of Dermatology, Providence, Rhode Island, United States, 2VA Medical Center, Department of Dermatology, Providence, Rhode Island, United States, 3VA Healthcare System, Boston, Massachusetts, United States, 4VA Medical Center Department of Dermatopeidemiology, Providence, Rhode Island, United States

4:57 PM - 5:09 PM
Abstract #194: Dermatologic assessment is associated with improved melanoma outcomes: population-based cohort study
P. Fleming1, K. Fung2, A. Chan1, 2, 3
1Medicine (Dermatology), Women's College Hospital, Toronto, Ontario, Canada, 2ICES, Toronto, Ontario, Canada, 3University of Toronto, Toronto, Ontario, Canada
Concurrent Minisymposium 9

Epidermal Structure and Barrier Function

Research on the components or regulation of keratinocyte proliferation, differentiation, including epidermal barrier function

FRIDAY, MAY 10, 2019

2:45 PM - 5:15 PM

INTERNATIONAL BALLROOM SOUTH

Presider(s): Bogi Andersen, MD and Anna Mandinova, MD/PhD

2:45 PM - 2:57 PM

Abstract #339: Keratin 1–keratin 10 helix 1B tetramer crystal structures reveal a knob-pocket mechanism important for proper assembly of intermediate filaments

A. J. Hinbest1, M. Ho1, S. A. Eldirany1, I. B. Lomakin2, C. G. Bunick1,2

1Dermatology, Yale University, New Haven, Connecticut, United States, 2Molecular Biophysics and Biochemistry, Yale University, New Haven, Connecticut, United States

2:57 PM - 3:09 PM

Abstract #346: The role of Nde1 and Nde1 in regulating keratin assembly at the desmosome

Y. Kim, D. Hlavaty, J. Maycock, T. Lechler

Duke University, Durham, North Carolina, United States

3:09 PM - 3:21 PM

Abstract #358: Bioinformatic analysis of keratinocyte differentiation from induced pluripotent stem cells

Z. Guo, J. Jackow, D. Delorenzo, R. Hayashi, A. Christiano, A. Ram1

Dermatology, Columbia University, New York, New York, United States

3:21 PM - 3:33 PM

Abstract #332: A noncoding RNA CRISPR-interference screen identifies novel regulators and pathways of human epidermis formation

A. Otten1, P. Caí2, B. Cheng1, M. A. Ishii1, K. Qu2, B. Sun1

1Dermatology, University of California, San Diego, La Jolla, California, United States, 2Division of Molecular Medicine, University of California, San Diego, California, United States

3:33 PM - 3:45 PM

Abstract #309: Differentiation-dependent expression of NIX promotes mitochondrial fission via dynamin-related protein 1 in epidermal keratinocytes

C. L. Simpson1, E. L. Holzbaur1

1Physiology, Univ. of Pennsylvania, Philadelphia, Pennsylvania, United States, 2Dermatology, Univ. of Pennsylvania, Philadelphia, Pennsylvania, United States

3:45 PM - 3:57 PM

Abstract #290: Glycolytic control of keratinocyte differentiation

C. Sutter, K. Olesen, J. Bhju, Z. Guo, T. Sutter

University of Memphis, Memphis, Tennessee, United States

3:57 PM - 4:09 PM

Abstract #310: Staphylococcus epidermidis cysteine protease EcpA is an epidermal barrier penetration enzyme

L. Cau1,2, M. R. Williams1, T. Nakatsuji1, C. Mainzer1, B. Closs2, A. Horswill1, R. L. Gallo1

1Dermatology, UCSD, La Jolla, California, United States, 2SILAB R&D, St. Viance, France, 3Immunology & Microbiology, UC Denver, Denver, Colorado, United States, 4SILAB Inc, East Brunswick, New Jersey, United States

4:09 PM - 4:21 PM

Abstract #312: Epigenetic modules governing skin epidermal homeostasis

S. Nayak1, M. A. Cross1, S. Brooks2, P. Bible1, K. Jiang3, S. Dell’Orso2, G. Gutierrez-Cruz2, F. Naz1, H. Sun2, M. Morasso1

1Laboratory of Skin Biology, NIAMS, National Institutes of Health, Bethesda, Maryland, United States, 2Biodata Mining and Discovery Section, NIAMS, National Institutes of Health, Bethesda, Maryland, United States, 3Office of Science and Technology, NIAMS, National Institutes of Health, Bethesda, Maryland, United States

4:21 PM - 4:33 PM

Abstract #350: Chromatin remodelling ATFase Lsh maintains DNA methylation at constitutive heterochromatin and prevents activation of silent transposable elements in epidermal keratinocytes

G. Chen1, A. Aziz2, V. Botchkarev1, K. Muegge1, A. Sharov2

1Dermatology, Boston University, Boston, Massachusetts, United States, 2Dermatology, Boston University School of Medicine, Boston, Massachusetts, United States, 3Center for Cancer Research, NCI, Frederick, Maryland, United States

4:33 PM - 4:45 PM

Abstract #313: In vivo enhancer deletion in the EDC results in decreased proximal involucrin and Lce6a target gene expression marked by less accessible chromatin

M. Mathyer1, I. Y. Oh1, S. Matkovich2, A. M. Quiggle1, C. de Guzman Strong1

1Division of Dermatology, Department of Medicine, Washington University School of Medicine, Saint Louis, Missouri, United States, 2Medicine, Washington University School of Medicine, Saint Louis, Missouri, United States

4:45 PM - 4:57 PM

Abstract #319: Epigenetic enhancer regulation in epithelial development and carcinogenesis

S. Egolf1, Y. Aubert1, A. Anderson1, Y. Lan1, A. Maldonado-Lopez1, C. Simpson1, M. Zarkos1, K. Ge1, B. C. Capell2,3

1Dermatology, University of Pennsylvania, Philadelphia, Pennsylvania, United States, 2Penn Epigenetics Institute, University of Pennsylvania, Philadelphia, Pennsylvania, United States, 3NIH, Bethesda, Maryland, United States

CME CREDITS: 2.5
Concurrent Minisymposium 10

Neuro-Cutaneous Biology and Inflammation

Basic, pre-clinical and clinical studies on skin inflammation, crosstalk between the nervous and immune systems, and the relationship between cutaneous nerves and all aspects of skin biology including itch, pain, skin homeostasis and development

FRIDAY, MAY 10, 2019  2:45 PM – 5:15 PM

CONTINENTAL BALLROOM C

President(s): Sarina Elmariah, MD/PhD and Sakeen Kashem, MD/PhD

2:45 PM – 2:57 PM
Abstract #654: Mechanisms of itch, allergy and neurogenic inflammation: Substance P functions through MRGPRs
E. Azimi, V. B. Reddy, S. B. Elmariah, T. Luo, E. A. Lerner
Cutaneous Biology Research Center, Massachusetts General Hospital, Charlestown, Massachusetts, United States

2:57 PM – 3:09 PM
Abstract #655: Pruritogen activation of human MRGPRX2
E. Azimi, V. B. Reddy, S. B. Elmariah, T. Luo, E. A. Lerner
Cutaneous Biology Research Center, Massachusetts General Hospital, Charlestown, Massachusetts, United States

3:09 PM – 3:21 PM
Abstract #645: The female-biased factor VGLL3 drives cutaneous and systemic autoimmunity
A. C. Billi1, M. Gharaee-Kermani2, J. Fullmer1, A. Tsoi1, M. Kahlenberg2, J. Gudjonsson1
1Dermatology, University of Pittsburgh, Pittsburgh, Pennsylvania, United States; 2Department of Dermatology, University of California, San Francisco, California, United States

3:21 PM – 3:33 PM
Abstract #644: Tweek/fn14 signaling pathway participates in experimental atopic dermatitis
Q. Liu, H. Wang, X. Wang, Y. Xia
Dermatology, The Second Affiliated Hospital, School of Medicine, Xi'an Jiaotong University, Xi'an, Shaanxi, China

3:33 PM – 3:45 PM
Abstract #664: The neurokinin A/NK2R axis controls IL-10 levels to inhibit activation of cutaneous MCs in vitro and in vivo
T. Sumpter1, Y. Li1, L. D. Falo2, A. Larregina3
1Dermatology, University of Pittsburgh, Pittsburgh, Pennsylvania, United States; 2University of Michigan, Ann Arbor, Michigan, United States; 3Department of Dermatology, Case Western Reserve University, Cleveland, Ohio, United States

3:45 PM – 3:57 PM
Abstract #638: SPNS2 enables T cell egress from lymph nodes during an immune response
V. Fang, M. Okuniewska, A. Baeysens, S. R. Schwab
Pathology, Skirball Institute of Biomolecular Medicine at New York University School of Medicine, Ny, New York, United States

3:57 PM – 4:09 PM
Abstract #650: IL-31 produced by Th17 cells contributes to psoriasiform dermatitis
1Duke University, Durham, North Carolina, United States; 2Department of Dermatology, University of California, San Francisco, California, United States; 3Department of Microbiology and Immunology, University of California, San Francisco, California, United States; 4Department of Dermatology, University of California, San Francisco, California, United States

4:09 PM – 4:21 PM
Abstract #648: Machine-based learning identifies fish oil as a putative psoriasis drug: Efficacy in KC-Tie2 psoriasis mice via RXR activation and increases in fatty acid metabolism
D. Gruszka, B. Richardson, M. Mumaw, M. Cartwright, R. Xu, M. J. Cameron, N. L. Ward
CWRU, Cleveland, Ohio, United States

4:21 PM – 4:33 PM
Abstract #660: Recapitulating T cell infiltration in psoriasis for patient-specific drug testing models
J. Shin, H. E. Abaci, L. Herron, Z. Guo, Y. Doucet, J. Jackow, B. Salee, A. Christiano
Dermatology, Columbia University, New York, New York, United States

4:33 PM – 4:45 PM
Abstract #640: The female-biased factor VGLL3 drives cutaneous and systemic autoimmunity
A. C. Billi1, M. Gharaee-Kermani2, J. Fullmer1, A. Tsoi1, M. Kahlenberg2, J. Gudjonsson1
1Dermatology, University of Pittsburgh, Pittsburgh, Pennsylvania, United States; 2Department of Dermatology, University of California, San Francisco, California, United States

4:45 PM – 4:57 PM
Abstract #642: Targeting a Langerhans cell-keratinocyte axis in the skin as a novel approach to modulate systemic manifestations of lupus erythematosus
W. D. Shipman1, S. Choyou2, C. M. Magro2, R. D. Granstein2, M. A. Lowes3, D. H. Kaplan, C. P. Blobel2, T. T. Lu3
1Weill Cornell/Rockefeller/Sloan-Kettering MD-PhD Program, New York, New York, United States; 2Weill Cornell Medicine, New York, New York, United States; 3Hospital for Special Surgery, New York, New York, United States; 4Rockefeller University, New York, New York, United States; 5University of Pittsburgh, Pittsburgh, Pennsylvania, United States

4:57 PM – 5:09 PM
Abstract #651: Ablation of disintegrin and metalloproteinase 10 (ADAM10) disrupts hair follicle immune privilege
K. Sakamoto, T. Kobayashi, B. Voisin, D. Kim, K. Nagao
Dermatology Branch, National Institutes of Health, North Bethesda, Maryland, United States

OPEN TO ALL MEETING ATTENDEES

CME CREDITS: 2.5
Concurrent Minisymposium 11
Pharmacology and Drug Development

Basic and preclinical studies aimed at developing therapeutics, elucidating their mechanisms of action, and identifying biomarkers of drug activity

FRIDAY, MAY 10, 2019
2:45 PM - 5:15 PM

CONTINENTAL BALLROOM B

Presider(s): Leigh Nattkemper, PhD and Bin Zheng, PhD

2:45 PM - 2:57 PM
Abstract #720: Early-stage drug discovery reveals new targets for the treatment of Merkel cell carcinoma
K. Garman1, T. Gelb1, D. Urban2, M. Hall2, I. Brownell1
1Dermatology Branch, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Bethesda, Maryland, United States, 2National Center for Advancing Translational Sciences, National Institutes of Health, Bethesda, Maryland, United States

2:57 PM - 3:09 PM
Abstract #681: Development of a topical Hedgehog inhibitor for prevention of new surgically eligible basal cell carcinomas in patients with Gorlin Syndrome: Phase 3 trial
PellePharm, San Francisco, California, United States

3:09 PM - 3:21 PM
Abstract #688: Identification of biomarkers of innate immune events during skin reaction following intradermal injection
J. Gonnet1, C. Meriaux 2, L. Poncelet 3, E. Goncalves 1
3Centre d’Immunologie-Maladies Infectieuses-Cimi, Lille, France, 2Regeneron, Tarrytown, New York, United States, 1Centre d’Infection Maladies Infectieuses-Cimi, Lille, France

3:21 PM - 3:33 PM
Abstract #677: Discovery and characterization of a small molecule IL-36γ antagonist as a novel approach to treat plaque psoriasis
V. Todorovic1, Z. Su1, C. Putman1, S. J. Kavakas1, K. Salte1, H. A. McDonald1, J. Wetter2, S. E. Paulsobe3, G. Sun1, L. Medina1, B. Sialaff1, C. Gerstein1, L. Olson1, H. Stockmann1, P. Richardson1, W. Olui1, M. A. Argiriadi1, R. M. B. Herod1, M. J. S. Mcgrawarty1, P. Homore2, J. Shotwell2
1AbbVie Inc., North Carolina, Chicago, Illinois, United States, 2AbbVie Bierse, Wallonie, Belgium, 3Oregon State University, Corvallis, Oregon, United States

3:33 PM - 3:45 PM
Abstract #675: Real-world persistence with dupilumab among adults with atopic dermatitis (AD)
J. Silverberg1, E. Guttman-Yassky2, A. Gadkari1, A. Kuznik3, U. G. Mallya1, T. Gelb1, M. Hall2, I. Brownell1
1Dermatology, Northwestern University Feinberg School of Medicine, Chicago, Illinois, United States, 2Mt Sinai Health System, New York, New York, United States, 3Regeneron, Tarrytown, New York, United States

3:45 PM - 3:57 PM
Abstract #714: Productivity losses in adults with atopic dermatitis (AD): A cross-sectional study from clinical practices in Europe and Canada
L. Guan1, L. Zhai1, J. Xu1, R. Li1, D. Kern2, H. Knaggs2, A. Chang3
1Dermatology, Stanford University School of Medicine, Redwood City, California, United States, 2Unis of S California, Los Angeles, California, United States, 3NeSkin Enterprises, Inc., Provo, Utah, United States

4:09 PM - 4:21 PM
Abstract #683: Exploratory study to examine the gene expression effects of topical retinol on aging-related pathways in Indian individuals of East Asian descent
J. Stauber3, 8, M. Wisztorski2, B. Combadiere1
1St. Andrew’s Centre for Plastic Surgery, Geelong, Victoria, Australia, 2University of Melbourne, Parkville, Victoria, Australia, 3St. Paul’s General Hospital, St. Paul’s, London, United Kingdom

4:21 PM - 4:33 PM
Abstract #709: Development of a high-throughput, cell-based phenotypic assay to identify novel anti-fibrotic medicines to prevent scar formation after burn injury
A. R. Laphorn1, M. M. Ilg1, J. V. Sullivan5, P. Dziewulski2, S. Celler3
1Medical Technology Research Centre, Anglia Ruskin University, Cambridge, United Kingdom, 2University of Michigan, Ann Arbor, Michigan, United States, 3Cytel Corporation, Minneapolis, Minnesota, United States, 4Children’s Hospital of Wisconsin, Milwaukee, Wisconsin, United States, 5University of Kentucky, Lexington, Kentucky, United States

4:45 PM - 4:57 PM
Abstract #711: Propranolol exhibits activity against hemangiomatis independent of beta blockade
M. Sasaki1, 2, J. Bubley1, J. M. Elsey3, P. E. North4, S. Wu4, M. Zou1, S. Rao1, J. L. Arbiser1, 2
1Dermatology, Emory University, Atlanta, Georgia, United States, 2Pathology and Laboratory Medicine, Atlanta Veterans Affairs Medical Center, Decatur, Georgia, United States, 3Children’s Hospital of Wisconsin, Milwaukee, Wisconsin, United States, 4Center for Molecular and Translational Medicine Research Science Center, Atlanta, Georgia, United States, 5Winship Cancer Institute, Atlanta, Georgia, United States

4:57 PM - 5:09 PM
Abstract #717: Peripheral blockade of T-type calcium channels by DX416 inhibits acute itch and modulates immune responses
J. Kreitinger1, V. M. Gadotti2, B. Uhlenbruck3, N. Wageling1, G. Zamponi2, P. Diaz1, 3
1DermAxe, Missoula, Montana, United States, 2University of Calgary, Calgary, Alberta, Canada, 3BAMED, University of Montana, Missoula, Montana, United States
Concurrent Minisymposium 12
Skin of Color

Studies of the pathogenesis or treatment of skin diseases that disproportionately affect patients from, or are more severe in their manifestation in, racial/ethnic groups with skin of color; such as keloids, scarring alopecias, disorders of pigmentation, systemic lupus erythematosus, dermatomyositis, among others

FRIDAY, MAY 10, 2019
2:45 PM – 5:15 PM
WALDORF ROOM

Presider(s): Crystal Aguh, MD and Benjamin Chong, MD

2:45 PM - 2:57 PM
Abstract #851: Calreticulin, an endoplasmic reticulum stress sensor, modulates human melanocytes apoptosis: Possible implication in vitiligo pathogenesis? P. Song, W. Zhang, G. Wang, T. Gao, L. Liu, C. Li Department of Dermatology, Xijing Hospital, Fourth Military Medical University, Xi’an, Shaanxi, China

2:57 PM - 3:09 PM
Abstract #855: Persistent hypoxia signaling maintains glucose dependence and chronic fibrosis in keloid fibroblasts J. Richert, V. M. Harvey, J. Chan Skin of Color Research Institute, Hampton University, Hampton, Virginia, United States

3:09 PM - 3:21 PM
Abstract #861: Association between keloids and atopic dermatitis: a cross-sectional study at a tertiary care center A. C. Eseonu1, R. Khanna1, A. Basirat2, D. Glass3, 4, S. G. Kwatra1 Dermatology, Johns Hopkins School of Medicine, Baltimore, Maryland, United States, 1Dermatology, UT Southwestern Medical Center, Dallas, Texas, United States, 2UT Southwestern Medical Center, Dallas, Texas, United States, 3McDermott Center for Human Growth and Development, UT Southwestern Medical Center, Dallas, Texas, United States

3:21 PM - 3:33 PM
Abstract #850: Proteomic blood signature of African American patients with atopic dermatitis shows more prominent Th2 activation and Th1 attenuation compared to other ethnicities H. He1, R. Li1, L. Zhou1, S. Choi1, Y. Estrada1, J. G. Krueger2, E. Guttman-Yassky1,2 1Icahn School of Medicine at Mount Sinai, New York, New York, United States, 2The Rockefeller University, New York, New York, United States

3:33 PM-3:45 PM
Abstract #855: Inpatient burden of prurigo nodularis in the United States K. Whang, S. Kang, S. G. Kwatra Department of Dermatology, Johns Hopkins University School of Medicine, Baltimore, Maryland, United States

3:45 PM - 3:57 PM
Abstract #854: GWAS of acne vulgaris among African Americans A. Khan1, M. Hayes1, J. Connolly1, F. Mentrch1, B. Almoguera2, H. Hakonarson2, J. Denny1, C. Wang1, G. Hripcsak1, K. Kyriluk1, L. Petukhova1 1Columbia, NY, New York, United States, 2CHOP, Philadelphia, Pennsylvania, United States

3:57 PM - 4:09 PM
Abstract #848: Genes implicated in lipid & metabolic regulation downregulated in CCCA J. Lamb Thomas1, Y. Dina1, S. Rachidi1, L. Garza2, C. Aguh1 1School of Medicine, UT Southwestern, Dallas, Texas, United States, 2Dermatology, Johns Hopkins School of Medicine, Baltimore, Maryland, United States, 3School of Medicine, Meharry Medical College, Nashville, Tennessee, United States

4:09 PM - 4:21 PM
Abstract #863: Central centrifugal cicatricial alopecia gene expression analysis revealed cholesterol, fatty acid, and mast cell pathways J. Richert, V. M. Harvey, J. Chan Skin of Color Research Institute, Hampton University, Hampton, Virginia, United States

4:21 PM - 4:33 PM
Abstract #856: Ethnic variations in scalp pruritus and hair loss O. Osemwota1, C. M. Herbsos2, C. Zhong1, S. G. Kwatra2, L. Huff3, Y. R. Semenov4 1St. Louis Dermatology Center, St. Louis, Missouri, United States, 2Dermatology, Johns Hopkins School of Medicine, Baltimore, Maryland, United States, 3Dermatology, Washington University School of Medicine, St. Louis, Missouri, United States

4:33 PM - 4:45 PM
Abstract #852: Racial differences in adolescent perceptions of skin color and tone: A questionnaire and colorimetric-based cross-sectional study S. Patel1, A. M. Bender1, O. Tang2, S. G. Kwatra1,2, A. Grossberg1 1Dermatology, Johns Hopkins University, Baltimore, Maryland, United States, 2Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States

4:45 PM - 4:57 PM
Abstract #857: Psoriasis-related quality-of-life differs by race/ethnicity J. Takeshita1, M. Augustin2, E. de Jong3, K. Lafferty4, W. Langhoff5, R. Langley6, C. Leonardi7, A. Menter8, A. Alexis9 1University of Pennsylvania, Philadelphia, Pennsylvania, United States, 2Univ Medical Center Hamburg, Director Institute of Health Care Research in Dermatology and Nursing, Hamburg, Germany, 3Janseen Research & Development, LLC, Spring House, Pennsylvania, United States, 4Janssen Scientific Affairs, LLC, Horsham, Pennsylvania, United States, 5Radboud Univ Medical Center, Nijmegen, Netherlands, 6Dalhousie Univ, Halifax, Nova Scotia, Canada, 7Central Dermatology, St. Louis, Missouri, United States, 8Menter Dermatology Research Institute, Dallas, Texas, United States, 9Icahn School of Medicine at Mount Sinai, New York, New York, United States

4:57 PM - 5:09 PM
Abstract #864: Genetics of pigmentation changes in a pediatric population H. Tang1, C. Little1, J. Aalborg2, N. Asdigian2, T. Terzian3, R. Dellavalle4, A. Barón4, S. Mokrohisky1, J. Morelli1, L. Crane2, N. Box2 1Dermatology, University of Colorado, Aurora, Colorado, United States, 2Community and Behavioral Health, Colorado School of Public Health, Aurora, Colorado, United States, 3Dermatology, University of Colorado - Denver, Aurora, Colorado, United States, 4Biostatistics and Bioinformatics, Colorado School of Public Health, Aurora, Colorado, United States
STATE-OF-THE-ART PLENARY LECTURES
In Recognition of Dr. Stephen I. Katz

LECTURE III
Skin Microbiome: Opposing Roles in Barrier Function, Inflammation, and Repair

FRIDAY, MAY 10, 2019  5:45 PM – 6:15 PM  INTERNATIONAL BALLROOM NORTH

Introduction by:  Masayuki Amagai, MD/PHD

Elizabeth Grice, PhD
University of Pennsylvania
Philadelphia, PA

Elizabeth A. Grice, PhD, is an Associate Professor of Dermatology and Microbiology at the University of Pennsylvania Perelman School of Medicine in Philadelphia, PA. Research in the Grice laboratory integrates genomics, microbiology, skin biology, and bioinformatics to investigate the skin microbiome and its roles in cutaneous barrier function, tissue repair, and colonization resistance to pathogens. Dr. Grice began her scientific training as an undergraduate at Luther College and then received a PhD in Human Genetics from Johns Hopkins University in 2006. She then completed an NIGMS PRAT fellowship in Dr. Julia Segre’s lab at the NIH. Dr. Grice has received numerous awards for her work, including the Penn Medicine Michael S. Brown New Investigator Award, the Penn One Health Award, and the Burroughs Wellcome Fund Investigator in the Pathogenesis of Infectious Disease Award.

LECTURE IV
Mining Nature’s Chemistry: Ethnobotany and Drug Discovery for Dermatologic Applications

FRIDAY, MAY 10, 2019  6:15 PM – 6:45 PM  INTERNATIONAL BALLROOM NORTH

Introduction by:  Sarolta Kárpáti, MD/PhD

Cassandra Quave, PhD
Emory University
Atlanta, GA

Dr. Cassandra Quave is Curator of the Emory University Herbarium and Assistant Professor of Dermatology and Human Health at Emory University, where she leads drug discovery research initiatives and teaches undergraduate courses on medicinal plants, food and health. Trained as a medical ethnobotanist, her research focuses on the documentation and biochemical analysis of botanical remedies used in the traditional treatment of infectious and inflammatory skin disease. She earned her B.S. in Biology and Anthropology from Emory University in 2000, her Ph.D. in Biology from Florida International University in 2008, and completed post-doctoral fellowships in Microbiology at the University of Arkansas for Medical Sciences (2009-2011) and Human Health at Emory University (2012). Her research has been supported by the NIH (T32, F31, F32, R01, R21), industry contracts, and philanthropy. To date, she has authored more than 60 publications, 2 edited books and 3 patents. Dr. Quave is the co-founder and CEO/CSO of PhytoTEK LLC, a drug discovery company dedicated to developing solutions from botanicals for the treatment of antibiotic resistant infections and recalcitrant wounds. She is also a Past President of the President of the Society for Economic Botany, an international society with the mission of fostering research and education on the past, present, and future uses of plants by people. She has been the subject of feature profiles in the New York Times Magazine, BBC Focus, Brigitte Magazin and the National Geographic Channel, and her work has been featured on NPR, in the National Geographic Magazine and several major news outlets including the Washington Post, The Telegraph, CBS News and NBC News. Follow her research on Twitter (@QuaveEthnobot), Instagram (@quaveethnobot), Facebook (@QuaveMedicineWoman) or LinkedIn (Cassandra Quave).
Progress In Epidermolysis Bullosa
DEBRA Symposium at SID

FRIDAY, MAY 10, 2019
7:00 PM – 10:00 PM
CONTINENTAL BALLROOM C

(Organized by Angela Christiano, Brett Kopelan and Jouni Uitto)

PROGRAM

1. **Cristina Has** (Freiburg University)
   Update of Classification and Nomenclature of EB: Summary of the 2019 DEBRA International Consensus Meeting

2. **Bahar Dasgeb** (Thomas Jefferson University)
   The DEBRA Adult EB and Complex Skin Cancer Clinic: The Jefferson Experience

3. **Alain Hovnanian** (Necker-Enfants Malades Hospital, Paris)
   Research Advances Towards Treatment and Cure of EB

4. Abstract Presentations on Cutting Edge EB Research

   **Marcel F. Jonkman In Memoriam Abstract**
   **Yenamandra et al.** (University Medical Center Groningen, The Netherlands)
   Abstract #414
   Uncovering the cause of early lethality in generalized severe junctional epidermolysis bullosa

   **Twariski & Tolar** (University of Minnesota, USA)
   Abstract #396
   Revertant mosaic fibroblasts in recessive dystrophic epidermolysis bullosa

   **Torkelson et al.** (University of Colorado, USA)
   Abstract #1036
   Scalable production of CRISPR-corrected autologous iPSC derived skin grafts to treat epidermolysis bullosa

5. **Brett Kopelan** (DEBRA of America)
   Future Treatments of EB: Industry Panel Discussion

Refreshments served.
Funding for this symposium is provided by: Amryt Pharma, Berg Health, Castle Creek Pharma, Constant Therapeutics, Fibrocell Science, Innova Therapeutics, Krystal Biotech, and ProQR
American Hair Research Society Scientific Meeting and Annual General Meeting

FRIDAY, MAY 10, 2019
7:00 PM - 9:30 PM
INTERNATIONAL BALLROOM NORTH

PRESIDERS:
John T. Seykora, MD/PhD, Chair, Scientific Program Committee, and Maria K. Hordinsky, MD, President

7:00 PM
Poster Viewing & Reception


3. CD4 T cells require CD8 T cells to induce disease in murine alopecia areata. Sydney Crotts, L. Ortolan and A. Jabbari. Abstract Final ID #99

4. LFA-1 blockade prevents the onset of alopecia areata in C3H/HeJ mice. Zhenpeng Dai, E. Wang, E. Lee, A. de Jong and A. Christiano. Abstract Final ID #97

5. In search of the common mechano-chemical pathways during the regeneration of spiny (acomys cahirinus) and laboratory (mus musculus) mouse skin. Hans I-Chen Harn, T. Jiang, S. Wang, Y. Liang, C. Chuong and Y. Lai. Abstract Final ID #965


7. Tsc2 disruption in mesenchymal progenitors regulates hair follicles and TGF beta signaling. Peter Klover, R Thangapazham, J. Wang, S. Li, T. Darling, J. Moss, MD Wilkerson and C.L. Dalgard. Abstract Final ID #376


10. The non-coding control region of Trichodysplasia spinulosa polyomavirus is responsible for cell-type specific viral gene expression in vivo. Li-Jyun Syu, D. Wilbert, AA. Dlugosz, E. van der Meijden and MC. Feltkamp. Abstract Final ID #920


7:45 PM
Welcome and Awards

7:50 PM
Keynote Speaker

Delineating a path for hair follicle dermal niche specification that starts before morphogenesis

Peggy Myung, MD/PhD
Assistant Professor of Dermatology and of Pathology
Yale School of Medicine

8:15 PM
Oral Presentations
12 minutes for presentation + 3 minutes for Q&A and change of speaker

1. Identification of T cell receptor α and β chains responsible for AA pathogenesis via single cell TCR sequencing. Gwennaelle Celine Monnot, Z. Dai, A de Jong, A. Christiano and A. Han. Abstract Final ID #96

2. An eQTL in syntaxin17 (STX17) leads to disrupted melanogenesis in alopecia areata. Stephanie O Erjavec, A. Christiano, R. Gund and B. Sallee. Abstract Final ID #838


9:00 PM
AHRS Annual Business Meeting

Visit www.Americanhairresearchsociety.org for more information about the AHRS and membership!
Atopic Dermatitis - Evolving Pathogenesis and Therapeutics

Dr. Emma Guttman-Yassky is the Sol and Clara Kest Professor and Vice Chair for Research at the Department of Dermatology, Director of the Center for Excellence in Eczema, Director of the Laboratory of Inflammatory Skin Diseases at the Icahn School of Medicine Mount Sinai Medical Center, New York. She is a world-renowned expert in inflammatory skin diseases, with a particular focus on atopic dermatitis/eczema and alopecia areata. Her research has contributed significantly to our understanding of the disease's pathogenesis and has led to the development of novel therapeutic strategies.

Dr. Guttman-Yassky's major clinical and research area of expertise is inflammatory skin diseases with major focus on atopic dermatitis or eczema and alopecia areata, as well as other inflammatory skin diseases. She made paradigm-shifting discoveries on the immunologic basis of AD/eczema in humans, opening the door to new therapeutics. Dr. Guttman has developed the only comprehensive molecular maps of AD, defining skin differentiation and immune-circuits characterizing this disease. She has established the reversibility of the AD phenotype and defined a series of biomarkers that are now accelerating testing of novel pathway-specific drugs for AD. Her research on atopic dermatitis/eczema has contributed directly to many of the recently developed treatments for this disease, earning her a unique place as one of the leaders in dermatology and immunology worldwide. She has also shown that Atopic dermatitis is a complex disease with distinct phenotypes based on ethnicity, age and other factors. She has shown that atopic dermatitis in Asian and African American patients is different from atopic dermatitis in European American patients, with important therapeutic implications. She is now testing (both clinically and mechanistically) multiple targeted-therapeutics for atopic dermatitis. She has recently also extended her research interest to alopecia areata in which her findings are also translated to novel therapeutic targets. She has co-founded the international eczema council/IEC, for which she functions as president. This organization now comprises of the vast majority of top experts in atopic dermatitis/eczema worldwide. She is also on the scientific advisory board of the national eczema association. She was elected to the American Society for Clinical Investigation/ASCI, the American Dermatological Society/ADA, and received the Young Investigator Award (2011) from the AAD, as well as other awards. She has also been elected to serve on the board of the American Skin Association.

Dr. Guttman is considered one of the world's leading experts in inflammatory skin diseases and authored more than 150 articles and is often invited as a keynote speaker to multiple international and national meetings. Her achievements have been numerous highlighted by the media including the New York Times, ABC news, CBS news, Daily news, Reuters, wall street journal, NY1, and others.

Dr. Guttman divides her time between a busy clinic, where she sees patients from all over the US and the world, that are coming to seek her advice in treating inflammatory skin diseases, and her growing laboratory that focuses on research on the mechanisms underlying inflammatory skin diseases, leading to novel treatments for these patients.
## Saturday Sessions

<table>
<thead>
<tr>
<th>PAGE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>107</td>
<td>Meeting-At-A-Glance</td>
</tr>
<tr>
<td>108</td>
<td>Albert M. Kligman/Phillip Frost Leadership Lecture and Award</td>
</tr>
<tr>
<td>109</td>
<td>Plenary Session III</td>
</tr>
<tr>
<td>110</td>
<td>Diversity and Inclusion Session</td>
</tr>
<tr>
<td>111</td>
<td>Concurrent Minisymposium 13: Innate Immunity, Microbiology, and Microbiome</td>
</tr>
<tr>
<td>112</td>
<td>Concurrent Minisymposium 14: Pigmentation and Melanoma</td>
</tr>
<tr>
<td>113</td>
<td>Concurrent Minisymposium 15: Skin, Appendages, and Stem Cell Biology</td>
</tr>
<tr>
<td>114</td>
<td>Concurrent Minisymposium 16: Tissue Regeneration and Wound Healing</td>
</tr>
<tr>
<td>115</td>
<td>Concurrent Minisymposium 17: Translational Studies</td>
</tr>
<tr>
<td>116-117</td>
<td>Chinese Society for Investigative Dermatology (CSID) Research Forum</td>
</tr>
</tbody>
</table>
JUST ANNOUNCED!

The 2024 SID Annual Meeting will take place at the Hilton Anatole in Dallas, Texas May 15 – 18, 2024
Meeting-At-A-Glance

SATURDAY, MAY 11, 2019

7:00 AM — 12:00 PM
On-Site Registration
8TH ST. S. REGISTRATION AREA

8:00 AM — 9:30 AM
Albert M. Kligman/Phillip Frost Leadership Lecture:
25 Years of Riding the Hair Wave
GEORGE COTSARELIS, MD
INTERNATIONAL BALLROOM NORTH

8:30 AM — 9:30 AM
Plenary Session III
INTERNATIONAL BALLROOM NORTH

9:30 AM — 10:00 AM
Diversity and Inclusion Session
INTERNATIONAL BALLROOM NORTH

10:00 AM — 12:30 PM
Concurrent Minisymposium 13: Innate Immunity,
Microbiology, Microbiome
INTERNATIONAL BALLROOM NORTH

10:00 AM — 12:30 PM
Concurrent Minisymposium 14: Pigmentation and Melanoma
INTERNATIONAL BALLROOM SOUTH

10:00 AM — 12:30 PM
Concurrent Minisymposium 15: Skin, Appendages, and Stem Cell Biology
CONTINENTAL BALLROOM B

10:00 AM — 12:30 PM
Concurrent Minisymposium 16: Tissue Regeneration and Wound Healing
CONTINENTAL BALLROOM C

10:00 AM — 12:30 PM
Concurrent Minisymposium 17: Translational Studies
CONTINENTAL BALLROOM A

12:45 PM — 2:45 PM
Poster Session III/Coffee Break
STEVENS SALONS B/C/D
SEE PAGE 13 FOR POSTER NUMBER LISTINGS

ASSOCIATE GROUP PROGRAMMING IS TAKING PLACE TODAY.
SEE PAGE 6 FOR DAILY SCHEDULE.
Albert M. Kligman/Phillip Frost Leadership Lecture and Award

25 Years of Riding the Hair Wave

SATURDAY, MAY 11, 2019 8:00 AM – 8:30 AM INTERNATIONAL BALLROOM NORTH

Introduction by: Ed Cowen, MD

George Cotsarelis, MD
University of Pennsylvania
Philadelphia, PA

Dr. Cotsarelis is the Milton B. Hartzell Professor and Chair of the Department of Dermatology at the University of Pennsylvania Perelman School of Medicine. He received his undergraduate and medical degrees from the University of Pennsylvania. He performed a medical internship at Geisinger Medical Center and his dermatology residency at the Hospital of the University of Pennsylvania. He subsequently completed a Dermatology Foundation postdoctoral research fellowship in the Department of Dermatology and then a Howard Hughes Medical Institute Postdoctoral Research Fellowship for Physicians in the Department of Pathology at Penn. Dr. Cotsarelis is a member of numerous professional organizations including the American Society for Clinical Investigation, the Association of American Physicians, the American Academy of Dermatology, the Society for Investigative Dermatology, the Dermatology Foundation, and the American Dermatological Association. He directs the Hair and Scalp Clinic at Penn and is an Assistant Director of the Edwin and Fannie Gray Hall Center for Human Appearance and Director of the Program on Epithelial Regeneration and Stem Cells at the Penn Institute for Regenerative Medicine, as well as former President of the North American Hair Research Society. Dr. Cotsarelis has received numerous awards, including the SID’s Montangna lecturer, the AAD’s Marion Sulzberger Award and the Mancunian Skin Club’s Lifetime Achievement Award. He has an honorary degree from China Medical University. His research focuses on hair follicle stem cells, alopecia and skin regeneration. He has published many high-impact research manuscripts, served on an array of grant review panels, and presented numerous invited lectures throughout the U.S. and abroad. Dr. Cotsarelis has held research support from the National Institutes of Health for over twenty years.

LECTURESHIP HISTORY
Established in 2007 by Dr. Phillip Frost, the lectureship is intended to honor Dr. Albert 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 acknowledgement of significant contributions to the understanding of structure and function of skin.
<table>
<thead>
<tr>
<th>Abstract #</th>
<th>Title</th>
<th>Authors</th>
<th>Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>918</td>
<td>Skin morphogenesis by coupling biochemical-bioelectric signals: Calcium oscillations coordinate dermal cell movement by epidermis-derived SHH signaling during feather bud orientation</td>
<td>A. Li, J. Cho, T. Jiang, Y. Zhou, M. Zhao, R. Widelitz, R. Chow, C. Chuong</td>
<td>Pathology, University of Southern California, Los Angeles, California, United States; Physiology &amp; Neuroscience, University of Southern California, Los Angeles, California, United States; Texas A&amp;M, Houston, Texas, United States; UC Davis, Sacramento, California, United States</td>
</tr>
<tr>
<td>577</td>
<td>Successful allogeneic epidermal grafting of chronic recessive dystrophic epidermolysis bullosa wounds from hematopoietic cell donors in the outpatient setting</td>
<td>C. L. Ebens, J. Braun, G. Lilja, S. Preussler, M. Tekmen-Clark, D. Keene, M. Riddle, J. Tolar</td>
<td>Pediatric Blood and Marrow Transplantation, University of Minnesota, Minneapolis, Minnesota, United States; Shriner's Hospital, Portland, Oregon, United States</td>
</tr>
<tr>
<td>287</td>
<td>Polycomb repressive complex 1 (PRC1) preserves epidermal tissue integrity independently of PRC2</td>
<td>I. Cohen, D. Zhao, G. Menon, M. Nakayama, H. Koseki, D. Zheng, E. Ezhkova</td>
<td>Black Family Stem Cell Institute, Department of Cell, Developmental, and Regenerative Biology, Icahn School of Medicine at Mount Sinai, New York, New York, United States; Department of Genetics, Albert Einstein College of Medicine, Bronx, New York, United States; California Academy of Sciences, San Francisco, California, United States; Department of Frontier Research and Development, Kazusa DNA Research Institute, Chiba, Japan; Laboratory for Developmental Genetics, RIKEN Center for Integrative Medical Sciences (RIKEN-IMS), Tsunumi-ku, Yokohama, Japan; Departments of Genetics, Neurology, and Neuroscience, Albert Einstein College of Medicine, Bronx, New York, United States</td>
</tr>
<tr>
<td>366</td>
<td>Unraveling keratinocyte gene regulatory networks with single-cell crispr screening and epigenomic profiling</td>
<td>M. Ramanathan, A. Rubin, K. Parker, A. Satpathy, W. Greenleaf, H. Chang, P. Khavari</td>
<td>Dermatology, Stanford University, Los Altos, California, United States; Genetics, Stanford University, Stanford, California, United States</td>
</tr>
</tbody>
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Diversity and Inclusion Session

SATURDAY, MAY 11, 2019     9:30 AM – 10:00 AM     INTERNATIONAL BALLROOM NORTH

Welcome & Introduction,

Cory Simpson, MD, PhD
Clinical Instructor, Department of Dermatology, University of Pennsylvania, Philadelphia, PA

“Challenges in Achieving Diversity in Dermatology”,

Amit Pandya, MD
Professor, Department of Dermatology, University of Texas Southwestern Medical Center, Dallas, TX

Dr. Pandya has written multiple articles and book chapters in the field of dermatology and has given lectures and served as a visiting professor nationally and internationally. He has a special interest in vitiligo, melasma and other pigmentary disorders. His ongoing clinical and translational research is focused on the etiology, epidemiology, measurement, quality of life, diagnosis and treatment of these cutaneous disorders. He is also interested in mentorship, diversity and pipeline Programs.

9:55 AM
Q&A
Concurrent Minisymposium 13

Innate Immunity, Microbiology, and Microbiome

Studies of cells, receptors and effector molecules of the innate immune response; studies on skin microbes, microbiome and infectious processes of the skin

SATURDAY, MAY 11, 2019 10:00 AM - 12:30 PM INTERNATIONAL BALLROOM NORTH

Presider(s): Tiffany C. Scharschmidt, MD and Philip Scumphia, MD/PhD

10:00 AM - 10:12 AM Abstract #525: Novel peptide from commensal Staphylococcus simulans blocks MRSA quorum sensing and protects host skin from damage

M. M. Brown1, D. Todd2, N. Cech2, A. Horswill2
1Immunology & Microbiology, The University of Colorado Anschutz Medical Campus, Aurora, Colorado, United States, 2Chemistry & Biochemistry, The University of North Carolina Greensboro, Greensboro, North Carolina, United States

10:12 AM - 10:24 AM Abstract #514: A tryptophan metabolite of the skin microbiota attenuates inflammation in atopic dermatitis via the aryl hydrocarbon receptor

J. Yu, Z. Zhu, G. Wang, W. Li
Department of Dermatology, Xijing Hospital, Fourth Military Medical University, Xi’an, China

10:24 AM - 10:36 AM Abstract #473: Competition between AMP kingdoms in atopic dermatitis leads to depletion of the defense function of the skin microbiome against S. aureus

T. Nakatsuji, A. Butcher, J. Y. Cheng, F. Shafiq, T. Hata, R. L. Gallo
Dermatology, UCSD, San Diego, California, United States

10:36 AM - 10:48 AM Abstract #507: Diet-induced obesity impairs the antimicrobial function of dermal fat

L. Zhang1, 2, S. X. Chen2, F. Li2, X. Zhang1, M. Yin1, R. L. Gallo2
1Pharmaceutical Science, Xiamen University, Xiamen, Fujian, China, 2Dermatology, University of California San Diego, San Diego, California, United States

10:48 AM - 11:00 AM Abstract #487: Dynamics of IL-1R signaling in innate and adaptive immunity against a Staphylococcus aureus skin infection in mice

Q. Liu, H. Liu, M. Mazhar, M. Alphonse, R. Yu, Y. Wang, R. Ortines, D. Dikeman, R. Miller, N. Archer, L. Miller
Department of Dermatology, Johns Hopkins University School of Medicine, Baltimore, Maryland, United States

11:00 AM - 11:12 AM Abstract #467: Soluble Interleukin-36 receptor antagonizes IL-36/IL-36R signaling to control skin inflammation in psoriasis

W. Wang, Y. Lai
East China Normal University, Shanghai, China

11:12 AM - 11:24 AM Abstract #503: IL-36γ renders keratinocytes resistant to herpes simplex virus-1 through interferon response factor-1 (IRF1) dependent and independent pathways

P. Wang1, A. Gamero2, L. E. Jensen1
1Microbiology and Immunology, Temple University School of Medicine, Philadelphia, Pennsylvania, United States, 2Temple University School of Medicine, Philadelphia, Pennsylvania, United States

11:24 AM - 11:36 AM Abstract #520: Body site heterogeneity and microbial diversity is lost in individuals with hidradenitis suppurativa

A. Schneider, L. Cook, X. Zhan, K. Banerjee, Z. Cong, Y. Imamura-Kawasawa, S. Gettle, A. Longenecker, J. Kirby, A. Nelson
Penn State College of Medicine, Hershey, Pennsylvania, United States

11:36 AM - 11:48 AM Abstract #452: Cutibacterium acnes carbohydrates from multiple phylotypes induce IL-17: A potential ligand implicated in acne disease pathogenesis

P. T. Tran1, E. Evron2, M. Qin2, I. Dohill1, A. Baugh1, G. Agak2, J. Kim2
1David Geffen School of Medicine at UCLA, Los Angeles, California, United States, 2Division of Dermatology, David Geffen School of Medicine at UCLA, Los Angeles, California, United States

11:48 AM - 12:00 PM Abstract #526: Gut dysbiosis in alopecia areata patients reveals overabundance of firmicutes and under representation of bacteroides

B. Sallee1, R. Perez-Lorenzo1, E. H. Wang1, J. C. Chen1, A. R. Abdelaziz2, L. A. Bordone1, A. Cristiano1
1Dermatology, Columbia University, New York, New York, United States, 2Dermatology, Columbia University Medical Center, New York, New York, United States, 3Columbia University, New York, New York, United States

12:00 PM - 12:12 PM Abstract #474: Binding of ubiquitin by A20 restricts psoriatic skin and joint disease

B. Razani1, M. Whang1, R. Advincula2, J. Oses3, A. Burlingame3, B. Malynn2, A. Ma1
1Department of Dermatology, UCSF and Veterans Affairs Medical Center, San Francisco, California, United States, 2School of Medicine, UCSF, San Francisco, California, United States, 3Pharmaceutical Chemistry, UCSF, San Francisco, California, United States

12:12 PM - 12:24 PM Abstract #462: Differential requirement for CCR6 in IL-23 DNA minicircle-mediated skin and joint inflammation

Z. Shi1, I. E. Adamopoulos1, C. Nguyen1, S. T. Hwang1
1Division of Rheumatology, Allergy and Clinical Immunology, University of California Davis School of Medicine, Sacramento, California, United States, 2Department of Dermatology, University of California Davis School of Medicine, Sacramento, California, United States
Concurrent Minisymposium 14

Pigmentation and Melanoma

Studies on all aspects of cutaneous and extracutaneous pigmentation; molecular cellular and biological facets of melanoma

SATURDAY, MAY 11, 2019
10:00 AM – 12:30 PM
INTERNATIONAL BALLROOM SOUTH

Presider(s): Liang Deng, MD/PhD and Nancy Thomas, MD/PhD

10:00 AM - 10:12 AM
Abstract #783: Evaluating the impact of high-dose steroids on checkpoint inhibitor efficacy in a murine model of melanoma

M. Ferreira, W. Damsky, M. Bosenberg
Dermatology, Yale School of Medicine, New Haven, Connecticut, United States

10:12 AM - 10:24 AM
Abstract #799: Sex differences in central carbon metabolism underlie sex differences in melanoma patient survival

B. M. Michalski1, L. Cornelius1, J. Ippolito2
1Dermatology, Washington University in St. Louis, St. Louis, Missouri, United States, 2Radiology, Washington University in St. Louis, Saint Louis, Missouri, United States

10:24 AM - 10:36 AM
Abstract #820: m6A mRNA demethylase FTO regulates tumorigenicity and response to anti-PD-1 immunotherapy in melanoma

S. Yang1, J. Wei1, Y. Cui1, P. Shah1, Y. Deng1, A. Aplin3, Z. Lu2, C. He2, Y. He1
1University of Chicago, Chicago, Illinois, United States, 2Newcastle University, Newcastle upon Tyne, United Kingdom, 3Dermatology, Johns Hopkins School of Medicine, Baltimore, Maryland, United States

10:36 AM - 10:48 AM
Abstract #843: Immune checkpoint molecule PD-1H/VISTA expression correlates with melanoma survival

M. D. Vesely1, P. Gaule2, L. Chen1
1Pathology, Yale University, New Haven, Connecticut, United States, 2Dermatology, Yale University, Stamford, Connecticut, United States

10:48 AM - 11:00 AM
Abstract #831: Bortezomib-induced immunogenic cell death enhances immune response in melanoma

S. M. Daignault1, R. Ju1, L. Spoerri1, S. J. Stehbens1, D. S. Hill1, B. Gebrielli1, R. Dolcetti1, N. K. Haass1
1The University of Queensland Diamantina Institute, The University of Queensland, Woolloongabba, Queensland, Australia, 2Newcastle University, Newcastle upon Tyne, United Kingdom

11:00 AM - 11:12 AM
Abstract #816: Autophagy inhibition sensitizes targeted therapy-resistant melanoma to MEK1/2 inhibitors

A. Truong1, 2, C. Kinsey2, M. Foth2, M. Scherzer1, 2, J. Sanchez1, M. McMahon2, 4
1Department of Oncological Sciences, University of Utah, Salt Lake City, Utah, United States, 2Huntsman Cancer Institute, Salt Lake City, Utah, United States, 3Department of Pathology, University of Utah, Salt Lake City, Utah, United States, 4Department of Dermatology, University of Utah, Salt Lake City, Utah, United States

11:12 AM - 11:24 AM
Abstract #834: Rational design of recombinant modified vaccinia virus Ankara for cancer immunotherapy

N. Yang1, Y. Wang1, S. Shuman2, T. Merghoub3, J. D. Wolchok2, L. Deng1
1Dermatology Service/Department of Medicine, Memorial Sloan Kettering Cancer Center, New York, New York, United States, 2Molecular Biology Program, Memorial Sloan Kettering Cancer Center, New York, New York, United States, 3Melanoma and Immunotherapeutics Service/Department of Medicine, Memorial Sloan Kettering Cancer Center, New York, New York, United States

11:24 AM - 11:36 AM
Abstract #823: Biomarker approaches for anti-PD-1 in melanoma: A meta-analysis

S. Lu1, J. Stein1, L. Danilova1, C. Hoyt1, J. Taube1
1Dermatology, Johns Hopkins School of Medicine, Baltimore, Maryland, United States, 2Biostatistics & Bioinformatics, Johns Hopkins School of Medicine, Baltimore, Maryland, United States, 3Akoya Biosciences, Hopkinton, Massachusetts, United States

11:36 AM - 11:48 AM
Abstract #837: Depletion of senescent cells reduces growth of mouse melanoma

R. Perez-Lorenzo1, S. O. Erjavec1, C. G. Drake2, A. Christiano1
1Dermatology, Columbia University, New York, New York, United States, 2Medicine, Columbia University New York, New York, United States

11:48 AM - 12:00 PM
Abstract #825: Keratinocyte desmoglein 1 controls keratinocyte/melanocyte paracrine signaling to regulate the tanning response

Q. R. Roth-Carter1, C. Arnette2, J. Koetsier1, J. A. Broussard1, 4, H. E. Burks2, P. Gerami1, 3, J. Johnson2, 1, K. Green1, 17
1Dermatology, Northwestern University, Chicago, Illinois, United States, 2Pathology, Northwestern University, Chicago, Illinois, United States, 3Pediatriess, Northwestern University, Chicago, Illinois, United States, 4Biostatistics & Bioinformatics, Johns Hopkins School of Medicine, Baltimore, Maryland, United States

12:00 PM - 12:12 PM
Abstract #846: Resistance to apoptosis and PD-L1 induction in melanoma is associated with suppressed aryl hydrocarbon receptor signaling

J. Mohammed, N. Estharabadi
Dermatology, University of Minnesota, Minneapolis, Minnesota, United States

12:12 PM - 12:24 PM
Abstract #832: Total body photography facilitates early melanoma detection and improves survival

J. L. Strunck1, T. Smart1, K. Boucher2, A. M. Secret3
1University of Utah School of Medicine, Salt Lake City, Utah, United States, 2Dermatology, University of Utah, Salt Lake City, Utah, United States, 3Huntsman Cancer Institute, Salt Lake City, Utah, United States

12:24 PM - 12:30 PM

OPEN TO ALL MEETING ATTENDEES
CME CREDITS: 2.5
Skin, Appendages, and Stem Cell Biology

Studies on the hair follicle, sebaceous gland, and other skin appendages; developmental biology of skin and hair; roles of stem cells in pre and post-natal growth and development

SATURDAY, MAY 11, 2019
10:00 AM – 12:30 PM
CONTINENTAL BALLROOM B

Concurrent Minisymposium 15

President(s): Ya-Chieh Hsu, PhD and Sunny Wong, PhD

10:00 AM - 10:12 AM
Abstract #886: Proteomic and phosphoproteomic analysis reveals distinct signatures and regulatory signaling in quiescent and primed hair follicle stem cells
W. Wang1, Y. Liao2, C. Chen3, S. Tee4, S. Fan5, Y. Chen3,5, S. Lin1,4
1Department of Biomedical Engineering, National Taiwan University, Taipei, Taiwan, 2Department of Chemistry, National Taiwan University, Taipei, Taiwan, 3Institute of Chemistry, Academia Sinica, Taipei, Taiwan, 4Department of Dermatology, National Taiwan University Hospital and College of Medicine, Taipei, Taiwan

10:12 AM - 10:24 AM
Abstract #874: DNA dioxygenases Tet1/2/3 control hair shaft-specific differentiation in the hair follicle keratinocytes via modulation of BMP signaling
G. Chen1, Q. Xu2, M. Fessing2, A. N. Mardaryev2, A. Sharov2, G. Xu3, V. Botchkarev2
1Dermatology, Boston University, Boston, Massachusetts, United States, 2Shanghai Institute Biochemistry Cell Biol CAS, Shanghai, China, 3University of Bradford, Bradford, United Kingdom

10:24 AM - 10:36 AM
Abstract #925: Regulation of sebaceous gland stem cell proliferation and fate decisions by their differentiated daughters
W. Ning1, A. Muroyama2, T. Lechler2
1Dermatology, Duke University, Durham, North Carolina, United States, 2Biochemistry and Molecular Biology, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States

10:36 AM - 10:48 AM
Abstract #887: Hair follicle dermal condensate cells originate from a selectively proliferative dermal progenitor population
D. Dong1, K. Gupta, P. Weng, J. Levinsohn, P. Myung
1Dermatology, Yale University, New Haven, Connecticut, United States

10:48 AM - 11:00 AM
Abstract #905: Dysfunction of hair follicle mesenchymal progenitors is associated with age-related hair loss
W. Shin1, N. Rosin1, H. Sparks1, S. Sinha1, W. Rahmani1, M. Workentine1, S. Abbasi1, J. Stratton1,2, J. Biernaskie1,2,3
1Comparative Biology and Experimental Medicine, University of California, San Francisco, Daly City, California, United States, 2VA, San Francisco, California, United States, 3VA, San Francisco, California, United States

11:00 AM - 11:12 AM
Abstract #904: Alterations in stem cell self-renewal in aged human epidermis
A. Charruyer1,2, T. Weisenberger1,2, H. Li1,2, R. Ghadially1,2
1Dermatology, UCSF, Alameda, California, United States, 2VA, San Francisco, California, United States, 3Dermatology, University of California, San Francisco, Daly City, California, United States

11:12 AM - 11:24 AM
Abstract #900: Single cell RNA seq (scRNA-seq) defines early and late epithelial transit amplifying (TA) cells
R. M. Lavker, N. Kaplan, H. Peng
Dermatology, Northwestern University, Chicago, Illinois, United States

11:24 AM - 11:36 AM
Abstract #926: Keratin 17: A novel regulator of nuclear morphology and chromatin organization
J. T. Jacob1, M. Matunis1, R. R. Nair2, P. A. Coulombe1,3
1Biochemistry and Molecular Biology, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States, 2Cell & Developmental Biology, University of Michigan, Ann Arbor, Michigan, United States, 3Dermatology, University of Michigan, Ann Arbor, Michigan, United States

11:36 AM - 11:48 AM
Abstract #883: Mechanical regulation of stem cell proliferation and fate decisions by their differentiated daughters
W. Ning1, A. Muroyama2, T. Lechler2
1Dermatology, Duke University, Durham, North Carolina, United States, 2Biochemistry and Molecular Biology, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, United States

11:48 AM - 12:00 PM
Abstract #879: Dynamic regulation of sebaceous gland stem cells during skin homeostasis and aging
N. A. Veniaminova1, M. Grachtchouk, O. Doane, J. Peterson, A. A. Dlugosz, A. Tsol, Y. Wong
1Dermatology, University of Michigan, Ann Arbor, Michigan, United States

12:00 PM - 12:12 PM
Abstract #914: Histone demethylase LSD1 is required for the embryonic development of dendritic epidermal T cells and Langerhans cells
Y. Wang1,2, J. Zhang1,2, Y. Yao1, J. Wang1, B. Yang2, L. Zhou1, Q. Mi1
1Dermatology, Henry Ford Health System, Detroit, Michigan, United States, 2Dermatology, Dermatology Hospital of Southern Medical University, Guangzhou, Guangdong, China

12:12 PM - 12:24 PM
Abstract #865: Frontal fibrosing alopecia is associated with dysregulation of cholesterol biosynthesis pathways, fibrosis and mast cells
1Columbia University, New York, New York, United States
Concurrent Minisymposium 16

Tissue Regeneration and Wound Healing

Wound healing and regeneration studies; processes/signaling that regulate vascular development and angiogenesis; interactions between different skin components (epithelial cells, dermal cells, nerves, vasculature, melanocytes, fat) in homeostasis and regeneration

SATURDAY, MAY 11, 2019
10:00 AM - 12:30 PM
CONTINENTAL BALLROOM C

Presider(s): Elizabeth Grice, PhD and Katherine Radek, PhD

10:00 AM - 10:12 AM
Abstract #944: Non-coding double stranded RNA induces retinoic acid synthesis and retinoid signaling to control regeneration

D. Kim1, R. Chen1, S. Kim1, N. Islam1, L. Miller1, S. Kang1, H. E. Abaci1, A. Coffman1, Y. Doucet1, J. C. Chen1, J. Jackow1, E. Wang1, Z. Guo1, A. Christiano2

1Dermatology, Johns Hopkins Medical Institute, Baltimore, Maryland, United States, 2Pharmaceutical Sciences, University of Maryland, Baltimore, Maryland, United States, 3Oncology, Johns Hopkins Medical Institute, Baltimore, Maryland, United States

10:12 AM - 10:24 AM
Abstract #968: Enhancing the efficiency of engineered hair follicles with master regulators and extrinsic factors

H. E. Abaci1, A. Coffman, Y. Doucet, J. C. Chen, J. Jackow, E. Wang, Z. Guo, A. Christiano

Dermatology, Columbia University, New York, New York, United States

10:24 AM - 10:36 AM
Abstract #978: CD44 expression on leukocytes is dynamically regulated by ECRG4

R. A. Dorschner1, X. Dang2, B. Eliceiri2, A. Baird2

1Dermatology, University of California, San Diego, California, United States, 2Surgery, University of California, San Diego, California, United States

10:36 AM - 10:48 AM
Abstract #939: A novel dermal hyaluronidase (Cemip) controls reactive adipogenesis and innate immune defense against S. aureus infection

T. Dokoshi1, F. Li1, R. L. Gallo1

University of California San Diego, La Jolla, California, United States

10:48 AM - 11:00 AM
Abstract #943: Temporal-spatial activation of Wnt-signaling within Type I / Type II immunity during wound healing

R. A. Ferrer1, M. D. Ordieres1, J. C. Simon1, S. Franz

Dermatology, Leipzig University Medical Center, Leipzig, Germany

11:00 AM - 11:12 AM
Abstract #952: Topical nicotinic receptor activation improves wound bacterial infection outcomes by suppressing TLR2-mediated inflammation in diabetic wounds

M. Kishibe1, 2, T. M. Griffin1, S. A. Kristian1, K. A. Radek2

1Department of Dermatology, Ashikawa Medical University, Ashikawa, Hokkaido, Japan, 2Department of Surgery, Loyola University Chicago, Maywood, Illinois, United States

11:12 AM - 11:24 AM
Abstract #956: Epidermal autophagy deficiency impairs skin wound healing through inhibiting keratinocyte proliferation and migration and fibroblast activation

L. Qiang1, S. Yang1, Y. Cui1, Y. He1

University of Chicago, Chicago, Illinois, United States

11:24 AM - 11:36 AM
Abstract #949: Single cell RNA-seq and single cell ATAC-seq analyses during a treatment for dystrophic epidermolysis bullosa

T. Shimbo1, S. Yamazaki1, 2, T. Kitayama1, 2, Y. Ouchi1, 2, R. Yamamoto1, 2, E. Takaki1, 2, Y. Kikuchi1, L. Bruckner-Tuderman1, J. Uitto1, Y. Kaneda1, K. Tamai1

1Osaka University, Suita, Osaka, Japan, 2StemRIM Co., Ltd., Ibaraki, Japan, 3University of Freiburg, Freiburg, Germany, 4Dermatology and Cutaneous Biology, Thomas Jefferson University, Philadelphia, Pennsylvania, United States

11:36 AM - 11:48 AM
Abstract #974: Single-cell analysis identifies heterogeneity of fibroblasts and myeloid-derived adipocytes in regenerating mouse skin wounds

C. F. Guerrero-Juarez1, P. Dedhi1, S. Jin1, Q. Nie1, 2, G. Cotsarelis1, 2, M. Pilkus1

1Mathematics/Developmental and Cell Biology, University of California, Irvine, California, United States, 2Developmental and Cell Biology, University of California, Irvine, Irvine, California, United States, 3Department of Dermatology, University of Pennsylvania, Philadelphia, Pennsylvania, United States

11:48 AM - 12:00 PM
Abstract #976: Knockout of mTOR/Akt inhibitor REDD1 results in hair cycle-independent dermal adipose expansion by promoting adipocyte differentiation

G. Rivera Gonzalez1, A. Klopot1, K. Sabin1, G. Baida1, V. Horsley1, 2, I. Budunova1

1Developmental Biology, Washington University in St. Louis, St. Louis, Missouri, United States, 2Dermatology, Northwestern University, Chicago, Illinois, United States, 4MCDB, Yale University, New Haven, Connecticut, United States

12:00 PM - 12:12 PM
Abstract #930: SOX2 epidermal overexpression promotes cutaneous wound healing via activation of EGFR/MEK/ERK signaling mediated by EGFR ligands

A. Uchiyama1, S. Nayak1, S. Nayak1, M. A. Cross1, A. Overmiller1, D. Grassini1, A. Sawaya1, J. Gtukind1, 2, S. Brooks1, 2, M. Morasso1

1School of Chemistry and Biosciences, University of Bradford, Bradford, United Kingdom, 2Laboratory of Skin Biology, NIAMS, NIH, Bethesda, Maryland, United States, 3Department of Pharmacology and Moores Cancer Center, University of California San Diego, La Jolla, California, United States, 4Biodata Mining and Discovery Section, NIH, NIAMS, Bethesda, Maryland, United States

12:12 PM - 12:24 PM
Abstract #972: The ATP-dependent chromatin remodeler BRG1 controls epidermal keratinocytes migration during human cutaneous wound healing

C. Kellett1, N. Botchkareva1, R. Bhogal3, M. A. Cross1, A. Overmiller1, C. F. Guerrero-Juarez1, 2, P. Dedhi1, S. Jin1, Q. Nie1, 2, G. Cotsarelis1, 2, M. Pilkus1

1School of Chemistry and Biosciences, University of Bradford, Bradford, United Kingdom, 2School of Chemistry and Biosciences/Faculty of Life Sciences, University of Bradford, Bradford, United Kingdom, 3Global R&D Centre, Unilever, Sharnbrook, United Kingdom
Concurrent Minisymposium 17
Translational Studies
Including studies involving human tissue and human cells including biomarker studies that furthers our understanding of skin disease

SATURDAY, MAY 11, 2019 10:00 AM – 12:30 PM

Presider(s): Brian Kim, MD and Paul Ngiem, MD/PhD

10:00 AM - 10:12 AM
Abstract #983: Fatty-acid-binding protein 5 induces Th17 polarization in atopic dermatitis patients with allergic march
J. Lee1, B. Kim2, H. Chu3, J. Kim1, S. Kim1, Z. Sun4, J. Park4, T. Kupper2, C. Park2, K. Lee1
1Department of Dermatology, Yonsei University College of Medicine, Seoul, Korea (the Republic of), 2Department of Dermatology, Brigham and Women's Hospital, Boston, Massachusetts, United States, 3Division of Allergy and Immunology, Department of Internal Medicine, Yonsei University College of Medicine, Seoul, Korea (the Republic of)

10:12 AM - 10:24 AM
Abstract #1016: Single-cell RNA-sequencing provides novel cell-specific molecular profiling in skin of atopic dermatitis patients and controls
H. He1, H. Suryawanshi2, J. Gay-Mimbrera3, N. Kameyama1, H. Kim1, P. Morozov4, J. Ruano Ruiz2, J. G. Krueger2, T. Tuschi1, E. Guttman-Yassky1, 2
1Icahn School of Medicine at Mount Sinai, New York, New York, United States, 2The Rockefeller University, New York, New York, United States, 3Reina Sofia University Hospital, Cordoba, Spain.

10:24 AM - 10:36 AM
Abstract #1024: Upadacitinib treatment of atopic dermatitis patients leads to reductions in epidermal hyperplasia and cellular infiltrates
T. Song1, A. B. Pavel1, X. Peng1, E. Del Duca1, Y. Estrada1, K. M. Grebe2, J. Parmentier2, H. D. Teixeira1, L. A. Beck1, E. Guttman-Yassky1
1Icahn School of Medicine at Mount Sinai, New York, New York, United States, 2AbbVie Bioresearch Center, Worcester, Massachusetts, United States, 3AbbVie, Inc., North Chicago, Illinois, United States, 4University of Rochester Medical Center, Rochester, New York, United States

10:36 AM - 10:48 AM
Abstract #990: 0.005% hypochlorite reduces serine protease in cultured human keratinocytes and alleviates itch of atopic skin
C. Lan, S. Huang, Y. Chen
Department of Dermatology, Kaohsiung Medical University, Kaohsiung, Taiwan

10:48 AM - 11:00 AM
Abstract #980: Treatment of atopic dermatitis branches, NIAMS, NIH, Bethesda, Maryland, United States

11:00 AM - 11:12 AM
Abstract #994: Risk and association of HLA alleles with methimazole induced cutaneous adverse reactions in Chinese Han population
H. Xiong1, M. Jiang2, W. Zhang3, H. Ye1, Z. Chen1, F. Zeng1, S. Chen3, Q. Xing2, X. Luo1
1Huashan Hospital, Fudan University, Shanghai, China, 2Institutes of Biomedical Sciences, Shanghai, China

11:12 AM - 11:24 AM
Abstract #1008: Personalized treatment of cutaneous T-cell lymphoma through application of a targeted next generation sequencing panel
E. B. Wang, K. Rieger, R. Novoa, H. Stehr, S. Yee, A. Lares, Y. Kim, M. Khodadoust
Stanford University, Stanford, California, United States

11:24 AM - 11:36 AM
Abstract #1031: Human polyomavirus 7 (HPyV7)-associated eruptions in immunocompromised hosts
R. Rosenstein1, D. V. Pastrana2, G. J. Starrett1, M. R. Sapio1, J. Jo2, N. T. Hill1, C. Lee1, M. J. Iadarola1, I. Brownell2, H. H. Kong1, C. B. Buck1, E. W. Cowen2
1NCI/NIH, Bethesda, Maryland, United States, 2NIAMS/NIH, Bethesda, Maryland, United States, 3CC/NIH, Bethesda, Maryland, United States

11:36 AM - 11:48 AM
Abstract #988: An open-label phase 2 clinical trial of topical remetinostat gel for basal cell carcinoma
N. Urman, S. Eichstadt, H. Do, A. N. Mirza, S. Li, A. Oro, S. Aasi, K. Y. Sarin
Dermatology, Stanford University, Stanford, California, United States

11:48 AM - 12:00 PM
Abstract #999: Ultra-thin, adhesive-less epidermal electronic systems with in-sensor analytics for neonatal intensive care
S. Xu1, 2, A. Paller1, 2, J. Rogers1
1Dermatology, Northwestern University, Chicago, Illinois, United States, 2Center for Bio-Integrated Electronics, Northwestern University, Evanston, Illinois, United States

12:00 PM - 12:12 PM
Abstract #1021: Intravenous gentamicin therapy for recessive dystrophic epidermolysis bullosa patients harboring nonsense mutations
D. Woodley1, A. Kwong1, J. Cogan1, Y. Hou1, V. Lincoln1, D. Mosallaei1, G. Kim1, D. Peng1, D. Keene2, M. Chen1
1University of Southern California, Los Angeles, California, United States, 2Shriners Hospital for Children, Portland, Oregon, United States

12:12 PM - 12:24 PM
Abstract #1018: Pathophysiology of itch in bullous pemphigoid
T. Hashimoto1, 2, C. Kursewicz3, R. Fayne1, S. Nanda1, S. Shah1, L. Nattkemper1, H. Yokozeki1, G. Yosipovitch1
1Department of Dermatology and Cutaneous Surgery, University of Miami, Miami, Florida, United States, 2Department of Dermatology, Tokyo Medical and Dental University, Tokyo, Japan
Chinese Society for Investigative Dermatology (CSID) Research Forum
Sponsored by Shenzhen Kangzhe Pharmaceutical Co., Ltd

SATURDAY, MAY 11, 2019
1:00 PM - 4:00 PM
WALDORF ROOM

1:00 PM
Opening Remarks and Welcome:
Gang Wang, MD/PhD*; Qianjin Lu, MD/PhD**; and
Sam Hwang, MD/PhD***
*President, (CSID), Vice President, Chinese Society of
Dermatology (CSD); Professor and Chairman, Dept. of
Dermatology, Xijing Hospital, Fourth Military Medical University
** President, CSD, Professor and Chairman, Dept. of
Dermatology, The 2nd Xiangya Hospital, Central South University
***Professor and Chair, Dept. of Dermatology, UC Davis School of
Medicine

1:05 PM
Keynote Lecture: “Publishing in the JID”
Mark Udey, MD/PhD, Editor, Journal of
Investigative Dermatology, Professor of
Medicine and Dermatology, Co-director of the
Physician Scientist Training Program of the
Department of Medicine, Washington
Univ. School of Medicine, St. Louis, MO

1:20 PM
Abstract #143 - Molecular targeting of the DNA binding
domain of TOX protein results in selective inhibition of
cutaneousT cell lymphoma cells
Author List: Y. Huang, V. Agrawal , Mi. Su, A. Cherkasov, Y. Zhou
Institution(s): Univ. of Toronto, Univ. of British Columbia Cities: Vancouver, Toronto

1:32 PM
Abstract #20 - Profile of BP180 and BP230-specific IgE
autoantibodies in bullous pemphigoid
Author List: Y. Shi, H. Yuan, J. Zheng, M. Pan
Institution(s): Rui Jin Hospital, Shanghai Jiao Tong University School of Medicine City: Shanghai

1:44 PM
Abstract #39 - Increased frequency of CD4+ tissue resident
memory T cells in skin lesion of lupus erythematosus and the
underlying mechanism
Author List: H. Wu, Q. Li, M. Zhao, Q. Lu
Institution(s): Second Xiangya Hospital, Central South University City: Changsha

1:56 PM
Abstract #78 - Neutrophil extracellular traps contribute to the
pathogenesis of bullous pemphigoid by activating of B cells
Author List: H. Fang, S. Shao, G. Wang
Institution(s): Xijing Hospital, Fourth Military Medical University City: Xi'an, Shaanxi Province

2:08 PM
Abstract #260 - Use of antibiotics in preschool age
predicts atopic and allergic skin diseases in adolescents: A
retrospective cohort study
Author List: M. Shen, Y. Xiao, J. Li, X. Chen
Institution(s): Xiangya Hospital, Central South University City: Changsha

2:20 PM
Abstract #389 - Chromatin accessibility signatures in human
blood CD4+ T and CD19+ B cells
Author List: L. Liu, H. Huang, W. Li, L. Wen, F. Zhou, X. Yin, X. Zhang
Institution(s): Institute of Dermatology, First Affiliated Hospital, Anhui Medical University Anhui Medical University, Ministry of Education, China Japan Friendship Hospital University of Michigan Cities: Hefei, Beijing, Ann Arbor

2:32 PM
Aging suppresses skin-derived SDF1 to promote scarless
wound healing
Author List: T. Leung
Institution(s): University of Pennsylvania City: Pennsylvania

2:38 PM
Abstract #32 - IL-1b is essential for anti-galectin3 antibody
induced cutaneous vasculitis in systemic lupus erythematosus
Author List: Z. Shi, G. Tan, L. Wang
Institution(s): Sun Yat-sen Memorial Hospital, Sun Yat-sen
University City: Guangzhou

2:44 PM
Abstract #53 - Molecular mechanism of miR-145/Smad3
pathway mediated by active vitamin D in Lupus Nephritis
Author List: Y. Ding, X. He
Institution(s): Hainan Institute of Dermatology, Hainan
Provincial Hospital of Skin disease, the Second Xiangya
Hospital, Central South University City: Haikou

2:50 PM
Abstract #83 - Increased T follicular helper-like cells and
tertiary lymphoid structures in the skin lesions of discoid
lupus erythematosus
Author List: Q. Li, Q. Lu, H. Wu
Institution(s): Second Xiangya Hospital, Central South University, Hunan Key Laboratory of Medical Epigenomics City: Changsha, Hunan

CONTINUED
CONTINUED

Chinese Society for Investigative Dermatology (CSID) Research Forum
Sponsored by Shenzhen Kangzhe Pharmaceutical Co., Ltd

SATURDAY, MAY 11, 2019
1:00 PM - 4:00 PM
WALDORF ROOM

CONTINUED

2:56 PM
Abstract #109 - Circulating T follicular helper subsets, Tfh2 cells, and interleukin-21 in bullous pemphigoid
Author List: T. Yan, S. Li, Y. Zuo, L. Lin
Institution(s): The University of Hong Kong, Shenzhen Hospital, Peking Union Medical College Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Shenyang Pharmaceutical University
Cities: Shenzhen, Beijing, Shenyang, Liaoqing

3:02 PM
Abstract #328 - Expression of MRGPRX2(B2) on mast cells is upregulated in the skin lesion of atopic dermatitis
Author List: X. Luo, H. Wang, X. A. Chen, L. Feng
Institution(s): Children's Hospital of Chongqing Medical University
City: Chongqing

3:08 PM
Abstract #356 - Minocycline inhibits keratinocyte proliferation via modulating Ca2+/lysosome/IL1α system
Author List: Q. Chen, M. Jiang, L. Xiang, Z. Li
Institution(s): Huashan Hospital, Fudan Univ., Shanghai General Hospital, Jiaotong Univ.
City: Shanghai

3:14 PM
Abstract #513 - NLRP3-dependent innate cytokine IL-1β in keratinocytes promotes immune response of CD4 and CD8 T cells in vitiligo patients
Author List: S. Li, P. Kang, W. Zhang, Q. Zhang, X. Yi, G. Wang, T. Gao, C. Li
Institution(s): Fourth Military Medical University
City: Xi'an

3:20 PM
Abstract #653 - Identification of an Inflammation-regulated gene TNFAIP3 in Chronic actinic dermatitis
Author List: Y. Chen, W. Wu, M. Man, L. He
Institution(s): First Affiliated Hospital of Kunming Medical University
City: Kunming

3:26 PM
Abstract #736 - UVA-induced photoaging inhibits autophagic degradation by impairing lysosomal function and cathepsins expression in dermal fibroblasts
Author List: Q. Xu, Y. Huang, Y. Li, Y. Zheng, W. Lai
Institution(s): Third Affiliated Hospital of Sun Yat-sen University
City: Guangzhou, Guangdong

3:32 PM
Abstract #744 - Exosome-mediated miR-4655-3p contributes to UV-radiation induced bystander effects by targeting E2F2
Author List: Y. Chen, B. Zhou, D. Luo
Institution(s): Nanjing Medical University
City: Nanjing

3:38 PM
Abstract #801 - In vivo modeling of vitiligo associated ZMIZ1 gene identified by genome-wide association study
Author List: Y. Sun, F. Zhang
Institution(s): Shandong Provincial Institute of Dermatology and Venereology
City: Jinan, Shandong

3:44 PM
Abstract #810 - Expression of activity-induced Cytidine Deaminase in melanoma and its correlation with the BRAF mutation and clinicopathological features
Author List: X. Kang, Y. Wang, J. Liang, Z. Lei
Institution(s): People's Hospital of Xinjiang Uygur Autonomous Region
City: Urumqi, Xinjiang

3:50 PM
Abstract #007-Upregulation of miR-941 in peripheral CD14+ monocytes enhances osteoclast activation and osteolysis in patients with psoriatic arthritis: a potential diagnostic biomarker and treatment target
Author List: H. Lin, C. Lee, C. Hong
Institution(s): Kaohsiung Chang Gung Memorial Hospital and Kaohsiung Veterans General Hospital
City: Kaohsiung

3:56 PM
Closing Remarks:
Sam Hwang, MD, PhD; Gang Wang, MD, PhD; and Qianjin Lu, MD, PhD
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<table>
<thead>
<tr>
<th>PAGE</th>
<th>TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>121-124</td>
<td>SID Governance</td>
</tr>
<tr>
<td>125</td>
<td>ESDR 2019 Meeting</td>
</tr>
<tr>
<td>126</td>
<td>JSID 2019 Meeting</td>
</tr>
<tr>
<td>127</td>
<td>TSID 2019 Meeting</td>
</tr>
<tr>
<td>128</td>
<td>KSID 2020 Meeting</td>
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</table>
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Presented for distinguished service to investigative cutaneous medicine.

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<thead>
<tr>
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<th>Recipient</th>
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<tr>
<td>1967</td>
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<td>R. Rox Anderson</td>
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<td>Amy Paller</td>
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#### 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.

<table>
<thead>
<tr>
<th>Year</th>
<th>Recipient</th>
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<tr>
<td>1993</td>
<td>Alvan Feinstein</td>
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<td>Roger Perlmutter</td>
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<td>2017</td>
<td>James Bradner</td>
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Julius Stone Lectureship
This lecture is intended to promote the advancement of knowledge in immunology as it relates to the skin and skin disease.

1999 Eli Gilboa
1999 Stephen Johnston
1999 Jeffrey Trent
2000 Nigel Bunnett
2000 Ronald Crystal
2000 Ralph Steinman
2001 Roland Martin
2002 Gerald Crabtree
2003 Adrian Hayday
2005 Polly Matzinger
2006 Alexander Rudensky
2007 Donald Y. M. Leung
2009 Jamey Marth
2010 Rafi Ahmed
2011 Casey Weaver
2012 Rebecca Buckley
2014 Alice P. Pentland
2015 Arlene H. Sharpe
2016 John O’Shea
2017 Bruce Beutler

William Montagna Lectureship
This annual award is intended to honor and reward young active investigators. Primary emphasis is given to researchers in skin biology.

1975 Kenneth Halprin
1976 Frank Parker
1977 Arthur Eisen
1978 Irma Gigli
1979 Marvin Karasek
1980 Irwin Freedberg
1981 Stephen Katz
1982 John Parrish
1983 Douglas Lowy
1984 Gerald Lazarus
1985 Eugene Bauer
1986 Georg Stingl
1987 Jouni Uttio
1988 Stuart Yuspa
1989 Tung-Tien Sun
1990 Karen Holbrook
1991 Luis Diaz
1992 Dennis Roop
1993 Ervin Epstein, Jr.
1994 John Stanley
1995 Elaine Fuchs
1996 Thomas Kupper
1997 Barbara Gilchrest
1998 Robert Modlin
1999 Fiona Watt
2000 Thomas Luger
2001 Peter Elias
2002 Kathleen Green
2003 Masayuki Amagai
2004 Akira Takashima
2005 Paul Khavari
2006 Richard Gallo
2007 George Cotsarelis
2008 Pierre Coulombe
2009 Angela Cristiano
2010 W. H. Irwin McLean
2011 John McGrath
2012 Howard Chang
2013 Andrzej Dlugosz
2014 Xiao-Jing Wang
2015 Hensin Tsao
2016 Anthony Oro
2017 Sarah Miller
2018 Valerie Horsley

Herman Beerman Lectureship
This lecture is given by a distinguished medical scholar, traditionally from fields other than dermatology.

1961 Rene Dubos
1962 Hans Selye
1963 Rupert Billingham
1964 Curt Stern
1965 Albert Szent-Gyorgyi
1966 Jerome Gross
1967 G.J.V. Nossal
1968 John Buettner-Janusch
1969 Henry Kunkel
1970 Norman Wassells
1971 Aiden Breathnach
1972 Frank Dixon
1973 H. Hugh Fudenberg
1974 Charles Cochrane
1975 David Katz
1976 Bert O’Malley
1977 Russell Ross
1978 Hilary Koprowski
1979 Michael Brown
1980 Phil Leder
1981 Pedro Cuatrecasas
1982 Frank Ruddle
1983 Lawrence Lichtenstein
1984 Robert Gallo
1985 Thomas Waldmann
1986 Torsten Wiesel
1987 Leroy Hood
1988 Joseph Goldstein
1989 Pierre Chambon
1990 Ronald Herberman
1991 K. Frank Austen
1992 Bert Vogelstein
1993 Charles Janeway, Jr.
1994 Solomon Snyder
1995 Eric Lander
1996 Irving Weissman
1997 Michael Karin
1998 Günter Blobel
1999 Philippa Marrack
2000 Robert Langer
2001 William Haseltine
2002 Ronald DePinho

Eugene M. Farber Lectureship
This lecture is presented by an investigator whose work is relevant to expanding our insights into the pathophysiology and treatment of psoriasis.

2003 Thomas Jessell
2004 Robert Weinberg
2005 Timothy Ley
2006 Amrita Sehgal
2007 Stuart Schreiber
2009 Daniel Kastner
2010 Raymond Schinazi
2011 Jennifer Lippincott-Schwartz
2012 Mina Bissell
2013 Allan Balmain
2014 Hopi Hoekstra
2015 Drew M. Pardoll
2016 Tom Misteli
2017 Alan J. Korman
2018 Rob Knight

Alfred M. Kligman/Phillip Frost Leadership Lecture & Award
This award is made to an individual in acknowledgment of significant contributions to the understanding of structure and function of skin in the past five years.

2008 Jouni Uttio
2009 Stephen Katz
2010 John R. Stanley
2011 Peter Elias
2012 Robert Lavker
2013 Elaine Fuchs
2014 Robert Modlin
2015 Kathleen J. Green
2016 Cheng-Ming Chuong
2017 Thomas Kupper
2018 Paul Khavari
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BORDEAUX, FRANCE
18—21 SEPTEMBER 2019
WWW.ESDR.ORG
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**44th JSID**

**Dates** November 8 (Fri.) - 10 (Sun.) 2019

**President** Daisuke Sawamura, M.D., Ph.D.
Department of Dermatology, Hirosaki University Graduate School of Medicine

**Venue** Hotel Aomori
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Dermatological research in a new era

**Secretary-General** Hajime Nakano, M.D., Ph.D.

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Taiwanese Society for Investigative Dermatology (TSID)
http://www.tsid.org.tw/en
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the Korean Society for
Investigative Dermatology

MARCH 27(Fri)-28(Sat), 2020
Yonsei University, Sinchon Campus
Baekyangnuri, The Commons
Seoul, Korea

The Korean Society for Investigative Dermatology(KSID)
http://eksid.re.kr/
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