

## Pediatric Dermatology at the SID

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**Wednesday, April 26, 2017**

### **International Pachyonychia Congenita Consortium (IPCC) Meeting 2017 New Horizons in Keratoderma Research**

**8:00 am – 1:00 pm**

**C123-124**

- 9:00 am Pain in PC – why is it a problem and what can we do about it?  
*Michael Polydefkis*
- 9:30 am Keratins at the crossroads of itch and mechanotransduction  
*Thomas Magin*
- 10:00 am Break
- 10:15 am Special Guest Lecture – How does palmoplantar epidermis know that it is palmoplantar? Molecular mechanisms controlling development and maintenance of ridged skin.  
*Howard Chang*

### **8<sup>th</sup> Pan-Pacific Skin Barrier Symposium (PAPSBRs)**

**9:00 am-4:30 pm**

**A105-106**

- Session One “Ichthyosis” – Chairs: Drs. A. Ishida-Yamamoto and S. Sano
- 9:15 am Plenary Talk #1, Eicosanoid derivatives in ichthyosis vulgaris and atopic dermatitis  
*Dr. M. Schmuth*
- 9:45 am Platform #1, Mutations in the Epidermal Fatty Acid and Ceramide Metabolic Pathway Reveal Functions of the CLE  
*D. Crumrine*
- 10:00 am Platform #2, Cellular and metabolic basis for the ichthyotic phenotype in ichthyin deficiency  
*Dr. E. Mauldin*
- 10:15 am Platform #3, Cold-sensing ameliorated ichthyosis in a patient with Dorfman-Chanarin syndrome  
*Dr. K. Nakajima*
- Session Four “Atopic Dermatitis” – Chairs: Drs. L. Ma and H.J. Kim
- 1:45 pm Plenary Talk #5, Cutaneous biological responses to external stimuli  
*Dr. K. Kabashima*
- 2:15 pm Platform #8, 11beta-hydroxysteroid dehydrogenase 1 expression in the skin might have a role in the occurrence of AD  
*Dr. S.J. Choe*
- 2:30 pm Platform #9, Incomplete secretion of KLK7 and upregulated LEKTI are related to hyperkeratosis in stratum corneum in AD  
*Dr. M. Kishibe*

2:45 pm Platform #10, A randomized trial of a barrier lipid replacement strategy for the prevention of atopic dermatitis and allergic sensitization: PEBBLES pilot study  
*Dr. A. Lowe*

**American Acne & Rosacea Society**

**12:00 pm-3:00 pm**

**Oregon Ballroom 203**

12:15 pm Abstract #181, Global Skin Disease Morbidity and Mortality: An Update from the Global Burden of Disease Study 2013  
*Chante Karimkhani Aksut, MD*

12:30 pm Abstract #586, Inflammatory Gene Expression in Keratinocytes Is Regulated by HAC8 and HDAC9 and Is Modulated by Metabolites from the Microbiome  
*James Sanford, PhD*

12:45 pm Abstract #601, Phenotype and Functions of Ribotype-Specific Th17 Cells Targeted Propionibacterium Acnes  
*George Agak, PhD*

1:00 pm Abstract #641, SIG-1459 and SIG-1460: Novel Anti-Acne Phytlyl-Cysteine Compounds  
*Edwardo Perez*

1:45 pm Abstract #878, Influence of Bovine Milk Oligosaccharides on Sebocyte Lipid Content and Inflammatory Mediators  
*Raja Sivamani, MD*

2:00 pm Abstract #166, Development of a Novel Self-Administered Screening Tool for Early Identification of Hidradenitis Suppurativa  
*Virginia Moye, MD, MPH*

2:15 pm Abstract #384, iPledge Disproportionately Affects Women, Minorities, and Low-Income Patients: A Retrospective Cohort Study  
*Fan Di Xia, AB*

2:30 pm Abstract #338, Acne Core Outcomes Research Network (ACORN) Reaches Consensus on Outcomes to Measure  
*Diane Thiboutot, MD*

**State-of-the-Art Plenary Lectures**

**5:00 pm – 7:00 pm**

**Oregon Ballroom 201-202**

5:00 pm Lecture I  
Chimeric Immunoreceptor T cells for Pemphigus: Fighting Autoimmunity with Immunity  
*Aimee Payne, MD/PhD*

5:30 pm Lecture II  
Identification of Hair Shaft Progenitors that Create a Niche for Hair Pigmentation and Graying  
*Lu Le, MD/PhD*

6:00 pm President's Welcome  
*Angela Christiano, PhD*

6:15 pm American Skin Association Awards  
6:30 pm Dermatology Foundation  
6:35 pm Albert M. Kligman / Phillip Frost Leadership Lecture  
Memory T Cells and Protective Immunity: Lessons from the Smallpox Vaccine  
*Thomas S. Kupper, MD*

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**Thursday, April 27, 2017**

**Pediatric Dermatology at the SID**

**7:00 am – 8:00 am**

**A105-106**

7:00 am Welcome and Overview: Pediatric Dermatology at SID  
*Megha Tollefson, MD*  
7:15 am Something New Under the Sun for Tuberous Sclerosis Complex  
*Thomas Darling, MD/PhD*  
7:40 am Abstract #483, Rare constitutional variants influence phenotype of somatic cutaneous vascular malformations  
*Jenna Streicher, MD, et al.*  
7:50 am Discussion and Concluding Remarks

**Plenary Session I**

**8:00 am – 9:00 am**

**Oregon Ballroom 201-202**

**Presiders: Daniel Kaplan, MD/PhD and Ethan Lerner, MD/PhD**

8:00 am Abstract #649, Gut microbiota plays a role in the development of alopecia areata.  
*L. Nair, Z. Dai and AM. Christiano.*  
8:12 am Abstract #408, Discovery of differential RNA binding and regulation by the APOL4 protein to disease-linked psoriasis CDSN gene variants using RaPID.  
*JD. Ransohoff, M. Ramanathan and PA. Khavari.*  
8:24 am Abstract #484, Efficient in vivo gene editing using ribonucleoproteins in skin stem cell of recessive dystrophic epidermolysis bullosa mouse model.  
W. Wu, Z. Lu, F. Li, W. Wang, N. Qian, J. Duan, Y. Zhang, F. Wang and T. Chen.  
8:36 am Abstract #798, Targeting metabolic vulnerabilities of MDSCs to enhance the anti-tumor activity of D-1 blockade in melanoma.  
*B. Zheng, S. Kim, M. Li and S. Trousil.*  
8:48 am Abstract #934, CD301b+ macrophages activate proliferation of CD29+;CD34+;Sca1+ fibroblasts through multiple secreted factors during wound healing.  
*B. Shook, G. Rivera Gonzalez, R. Wasko and V. Horsley.*

**Eugene M. Farber Lecture**

**9:00 am – 9:30 am**

**Oregon Ballroom 201-202**

From Genetic Discovery to Personalized Outcomes in Psoriasis

*Jonathan Barker, MD*

**Naomi M. Janof Lecture**

**9:30 am – 10:00 am**

**Oregon Ballroom 201-202**

Targeting the Epigenome in Cutaneous and Disseminated Malignancies

*James Bradner, MD*

**Clinical Scholars Program Session I**

**Base Pairs to Bedside-Personalized Medicine**

**10:15 am – 12:00 pm**

**Oregon Ballroom 201-202**

- 10:20 am Abstract # 515, Mutations in KLHL24 add to the molecular heterogeneity of epidermolysis bullosa simplex  
*JY. W. Lee, L. Liu, C. Hsu, S. Aristodemou, L. Ozoemena, M. Ogboli, C. Moss, AE. Martinez, JE. Mellerio and J. McGrath.*
- 11:05 am Genetic investigation of rare skin disorders reveals novel pathways for disease pathogenesis  
*Keith Choate, MD/PhD*

**Aclaris Sponsored Symposium**

**You Don't Know JAK: Development of JAK inhibitors in Dermatology**

**12:00 pm - 1:45 pm**

**Oregon Ballroom 201-202**

- 12:35 pm See Spots Disappear: JAK Inhibitors in Vitiligo and Beyond  
*John Harris, MD/PhD*
- 12:45 pm Scratch that Itch: JAK Inhibitors in Pruritus  
*Brian S. Kim, MD/MTR*
- 12:55 pm Hair Raising Experiences: JAK Inhibitors in Alopecia  
*Julian Mackay-Wiggan, MD/MPH*
- 1:05 pm JAK hammers: Topical Delivery for JAK Inhibitors  
*Vijendra Nalamothu, PhD*

**debra of America's EB Symposium**

**12:00 pm – 2:00 pm**

**B117-119**

- 12:15 pm Keynote Lecture, What's new in EB Research: Clinical & Basic Science Advances  
*John McGrath, MD*
- 12:45 pm Development of New Technologies for EB Diagnosis & Treatment  
Moderator: Jouni Uitto, MD/PhD  
Abstracts presented by:

Mahla Zahabiyon, Abstract #521  
Ignacia Fuentes, Abstract #512  
Amir Saeidian, Abstract #509  
Jonathan O'Keeffe Ahern, Abstract #532

1:05 pm Gene Editing & CRISPr Based Approaches for EB  
Moderator: Katsuto Tamai, MD/PhD  
Abstracts presented by:  
Sean McGrath, Abstract #527  
Joanna Jackow, Abstract #858  
Shota Takashima, Abstract #480  
Julie Reichelt, Abstract #535

1:25 pm Advances in Skin Cancer Research in EB  
Moderator: John McGrath, MD  
Abstracts presented by:  
Tran Nguyen, Abstract #097  
Andrew South, Abstract #122

### **Concurrent Mini-Symposium 2**

#### **Clinical Research: Pathophysiology and Therapeutics**

**2:00 pm – 4:30 pm**

**Oregon Ballroom 203**

2:24 pm Abstract #329, Subcutaneous transplantation of allogenic mesenchymal stromal cells ameliorates intractable ulcers in recessive dystrophic epidermolysis bullosa patients.  
*K. Tamai, Y. Kikuchi, L. Zhang, Y. Komurasaki, T. Yamaoka and Y. Kaneda*

2:48 pm Abstract #331, An open label clinical trial of the JAK inhibitor tofacitinib for alopecia areata.  
*A. Jabbari, J. Cerise, JC. Chen, F. Sansaricq, R. Clynes, AM. Christiano and J. Mackay-Wiggan*

3:00 pm Abstract #320, An open label clinical trial of Abatacept (CTLA4-Ig) for alopecia areata.  
*F. Sansaricq, J. Mackay-Wiggan, A. Jabbari, AM. Christiano and R. Clynes*

3:24 pm Abstract #275, Oral vitamin D3 5000IU as an adjuvant in the treatment of atopic dermatitis: A randomized controlled trial.  
*K. Sanchez Armendariz, A. Garcia Gil, J. Contreras Ruiz, M. Karam Orante and J. Dominguez Cherit*

### **Concurrent Mini-Symposium 3**

#### **Interdisciplinary Spotlight: Frontiers in Atopic Dermatitis**

**2:00 pm – 4:30 pm**

**B113-116**

3:00 pm Abstract #580, Neuronal IL-4R and JAK1 signaling mediate chronic itch.

- L. Oetjen, M. Mack, T. Whelan, C. Guo, L. Yang, S. Hamilton, P. Wang, H. Niu, J. Feng, A. Xu, S. Tripathi, J. Luo, J. Brestoff, A. Shaffer, C. Hsieh, R. Gereau, M. Miller, H. Hu, S. Davidson, Q. Liu and B. Kim.*
- 3:12 pm Abstract #526, Targeted sequencing of filaggrin identifies novel loss-of-function mutations in pediatric African American patients with severe atopic dermatitis.  
*M. Mathyer, A. Quiggle, S. Bayliss, C. Wong, S. Denil, J. Common and C. de Guzman Strong.*
- 3:24 pm Abstract #625, Differential diversity of staphylococcal strains shapes cutaneous response in atopic dermatitis.  
*A. Byrd, C. Deming, S. Cassidy, O. Harrison, W. Ng, S. Conlan, Y. Belkaid, J. Segre and H. Kong.*
- 3:36 pm Abstract #313, A pathogenic role for Th22/IL-22 in atopic dermatitis is established by a placebo- controlled trial with an anti IL-22/ILV-094 mAb.  
*E. Guttman-Yassky, S. Khattri, PM. Brunner, A. Neumann, K. Malik, J. Fuentes-Duculan, S. Garcet, M. Suarez-Farinas, M. Lebwohl and JG. Krueger.*
- 3:48 pm Abstract #709, Nitric oxide-releasing topical therapeutic agent for atopic dermatitis.  
*K. McHale, J. Gil, S. Davis, S. Hollenbach and N. Stasko.*

**Friday, April 28, 2017**

**Pediatric Dermatology at the SID**

**7:00 am – 8:00 am**

**A105-106**

- 7:00 am Introduction and Welcome  
*Amy Paller, MS/MD*
- 7:05 am Abstract #238, Association between pediatric psoriasis and cardiovascular risk in US children  
*Jonathan Silverberg, MD/PhD/MPH, et al.*
- 7:15 am Autoinflammation in Psoriasis  
*Johann Gudjonsson, MD/PhD*
- 7:40 am Abstract #073, Th17 and Th22 polarization in ichthyosis blood correlates with disease severity and highlights its systemic nature  
*Tali Czarnowicki, MD/MSc, et al.*
- 7:50 am Discussion and Concluding Remarks

**Plenary Session II**

**8:00 am – 9:00 am**

**Oregon Ballroom 201-202**

**Presiders: Nicole Ward, PhD and Victoria Werth, MD**

- 8:00 am Abstract #222, Completed suicide in patients with hidradenitis suppurativa: A population analysis in the United States.

*A. Garg, H. Pomerantz, M. Midura, V. Papgermanos, A. Strunk, J. Merson and A. Alloo*

8:36 am Abstract #197, Influence of FLG mutations and TSLP polymorphisms on atopic dermatitis onset age.  
*J. Wan, N. Mitra, OJ. Hoffstad and DJ. Margolis*

**Stephen Rothman Memorial Award**

**9:00 am – 9:15 am**

**Oregon Ballroom 201-202**

Honoring Amy Paller, MS/MD

**Julius Stone Lecture**

**9:15 am – 9:45 am**

**Oregon Ballroom 201-202**

Automated Discovery of Genetic Diseases by Saturation Mutagenesis in Mice  
*Bruce Beutler, MD*

**State-of-the-Art Plenary Lectures**

**9:45 am – 10:45 am**

**Oregon Ballroom 201-202**

9:45 am Lecture III  
Border Patrol and Melanoma: Keeping the Peace at a Cost?  
*Niroshana Anandasabapathy, MD/PhD*

10:15 Lecture IV  
3D Bioprinting- An Emerging Paradigm in Tissue Engineering  
*Pankaj Karande, PhD*

**International Eczema Council at the SID Meeting**

**12:00 pm – 1:30 pm**

**Oregon Ballroom 204**

12:10 pm Abstract #256, Increased interleukin-19 expression in cutaneous T-cell lymphoma as well as atopic dermatitis.  
*Oka Tomonori et al.*

Abstract #623, Cutaneous acquisition of Staphylococcus quorum- sensing agr mutations protects against atopic dermatitis development.  
*Yuumi Nakamura et al.*

Abstract #642, The serum proteomic signature of pediatric AD suggests early Th2/Th17 skewing and an inverse correlation of disease severity with Th1 markers.

*Patrick Brunner et al.*

12:45 pm Special Presentation: The precise control of skin barrier homeostasis  
*Masayuki Amagai*

1:10 pm Abstract #296, Bleach baths promote early induction of inflammatory pathway genes with no effect on skin bacterial dysbiosis in AD subjects.  
*Sara Knowlden et al.*

Abstract #251, Treatment interruption did not impact efficacy or long-term safety of dupilumab: A phase 3 open-label trial.  
*Lisa Beck et al.*

**International Psoriasis Council Symposium:  
Scientific and Clinical Advances in Psoriasis: 2017 and Beyond  
12:00 pm – 1:30 pm**

**B113-116**

1:05 pm Abstract #190, Pediatric psoriasis is an independent risk factor for comorbidity development  
*Megha Tollefson, MD*

**Medical Dermatology Society at the Society For Investigative Dermatology  
12:00 pm – 1:45 pm**

**A105-106**

12:05 pm Abstract #189, Psoriasis age of onset: Effect on treatment outcomes in the PSOLAR registry.  
*Sanminder Singh*

12:29 pm Abstract #656, Changes of lesional and non-lesional skin microbiome in the treatment course of atopic dermatitis.  
*Jung-Im Na, PhD*

1:16 pm Abstract #308, Bone marrow/cord blood transplantation (BMCBT) ameliorates symptoms in some, but not all, subtypes of severe generalized junctional epidermolysis bullosa  
*Jakub Tolar, MD/PhD*

**Concurrent Mini-Symposium 6  
Clinical Research: Patient Outcomes Research  
2:00 pm – 4:30 pm**

**Oregon Ballroom 204**

2:48 pm Abstract #334, Direct-access online care for the management of atopic dermatitis: A randomized controlled clinical trial examining patient quality of life.

*H. Kornmehl, S. Singh, M. Johnson and A. Armstrong.*

3:24 pm Abstract #377, Type VII collagen (C7) expression and chimerism after bone marrow/cord blood transplantation (BMCBT) for severe generalized recessive dystrophic epidermolysis bullosa (RDEB).

*J. Tolar, J. McGrath, M. Osborn, D. Keene, M. Riddle, K. Hook, M. Hordinsky, M. Marinkovich, D. Woodley, M. Chen, R. Tryon, T. DeFor, C. Ebens, K. Tamai, A. Hovnanian, B. Blazar and J. Wagner.*

**Concurrent Mini-Symposium 7  
Genetic Disease, Gene Regulation and Gene Therapy  
2:00 pm – 4:30 pm**

**B113-116**



- 2:00 pm Abstract #519, Phase I/IIa clinical trial for recessive dystrophic epidermolysis bullosa using genetically corrected autologous keratinocytes.  
*Z. Sibrashvili, N. Nguyen, E. Gorell, K. Loutit, Y. Dutt-Singh, J. Nazaroff, P. Khuu, L. Furukawa, H. Lorenz, T. Leung, D. Keene, K. Rieger, PA. Khavari, A. Lane, JY. Tang and M. Marinkovich.*
- 2:12 pm Abstract #493, Identification of a novel causative gene responsible for autosomal recessive congenital ichthyosis.  
*Y. Shigehara, S. Okuda, R. Hayashi, H. Nakai, R. Abe, A. Ghani Kibbi, M. Kurban and Y. Shimomura.*
- 2:24 pm Abstract #495, Ichthyosis molecular fingerprinting shows profound Th17-skewing and a unique barrier gene expression pattern.  
*H. He, T. Huynh, E. Ibler, K. Malik, G. Tran, H. Esaki, JG. Krueger, AS. Paller and E. Guttman-Yassky.*
- 2:36 pm Abstract #474, Stabilizing mutations of KLHL24 ubiquitin ligase cause loss of keratin 14 and human skin fragility.  
*C. Feng, Z. Lin, S. Li, H. Wang, Y. Yang and X. Tan.*
- 2:48 pm Abstract #514, Somatic mutations in nevus comedonicus identify nek9 as a determinant of follicular keratinocyte cell fate.  
*J. Levinsohn, J. Sugarman, J. McNiff, I. Freiden, R. Antaya and K. Choate.*
- 3:00 pm Abstract #513, GNA14 somatic mutation causes congenital and sporadic vascular tumors by MAPK activation.  
*Y. Lim, A. Bacchiocchi, J. Qiu, A. Bruckner, L. Bercovitch, D. Narayan, J. McNiff, C. Ko, L. Robinson-Bostom, R. Antaya, R. Halaban and K. Choate.*
- 3:12 pm Abstract #525, Determinants of intra-individual transcriptional homogeneity in inflammatory responses at anatomically separate sites.  
*LC. Tsoi, J. Yang, Y. Liang, MK. Sarkar, X. Xing, MA. Beamer, A. Aphale, K. Raja, J. Kozlow, S. Getsios, JJ. Voorhees, JM. Kahlenberg, JT. Elder and JE. Gudjonsson.*
- 3:24 pm Abstract #485, Genetic signature to assess risk of psoriasis subtypes through machine learning approach.  
*MT. Patrick, PE. Stuart, K. Raja, JE. Gudjonsson, T. Tejasvi, JJ. Voorhees, DD. Gladman, RP. Nair, JT. Elder and LC. Tsoi.*
- 3:36 pm Abstract #502, Sex bias in response to an NRF2 inducer in a pachyonychia congenita model.  
*ML. Kerns, J. Hakim, A. Zieman and PA. Coulombe.*
- 3:48 pm Abstract #492, SNPs within the MHC associated with atopic dermatitis are located within miRNA sequences.  
*P. Clark, N. Chitnis, M. Kamoun, B. Johnson, DJ. Margolis and D. Monos.*
- 4:00 pm Abstract #522, Integrative analysis of gene expression data and rare copy number variants in alopecia areata.  
*L. Petukhova, AV. Patel, R. Severin, L. Bian, M. Verbitsky, S. Sanna-Cherchi, J. Cerise, A. Jabbari and AM. Christiano.*
- 4:12 pm Abstract #501, Plasma PPI is the major, but not exclusive, cause of ectopic mineralization in pseudoxanthoma elasticum.  
*J. Zhao, J. Kingman, J. Uitto and Q. Li.*

**North American Hair Research Society Scientific Meeting and Annual General Meeting**  
**6:00 pm – 8:30 pm** **Oregon Ballroom 203**

Abstract #494, Congenital generalized hypertrichosis with a copy number variation on chromosome 17q24.

*Hayashi Ryota, K. Yoshida, R. Abe, N. Yoshida and Y. Yoshida.*

Abstract #052, Identification of pathogenic T cell subsets in human alopecia areata.

*Annemieke du Jong, A. Jabbari, Z. Dai, L. Xing, D. Lee, V. Price, M. Duvic, D. Norris, M. Hordinsky, J. Mackay-Wiggan, R. Clynes and AM. Christiano.*

Abstract #712, A small molecule modulator of the wnt pathway (SM04554) as a potential topical treatment for androgenetic alopecia (AGA).

*Vishal Deshmukh, M. Pedraza, C. Barroga, J. Seykora and Y. Yazici.*

Abstract #081, Analysis of the paired TCR alpha- and beta-chains of single, intralesional CD8+T-cells in alopecia areata patients.

*Marta Bertolini, S. Altendorf, Y. Uchida, D. Below, R. Kelsch, Q. Zhou, A. Rossi, K. Dornmair and R. Paus.*

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**Saturday, April 29, 2017**

**Plenary Session III**

**8:00 am – 9:00 am**

**Oregon Ballroom 201-202**

**Presiders: Ponciano Cruz, MD and Paul Nghiem, MD/PhD**

8:00 am Abstract #299, Gentamicin therapy induced functional type VII collagen in recessive dystrophic epidermolysis bullosa patients harboring nonsense mutations.

*M. Chen, J. Cogan, Y. Hou, D. Keene and D. Woodley.*

8:36 am Abstract #629, Staphylococcus aureus drives atopic dermatitis-like skin inflammation via IL-36-induced IL-17 responses.

*H. Liu, N. Archer, C. Dillen, Y. Wang, A. Ashbaugh, R. Ortines, S. Lee, R. Miller, M. Marchitto, G. Nunez and L. Miller.*

**William Montagna Lecture**

**9:00 am – 9:30 am**

**Oregon Ballroom 201-202**

From Morphogenesis to Disease: A Wnt'ers Tale  
*Sarah Millar, PhD*

**Herman Beerman Lecture**

**9:30 am – 10:00 am**

**Oregon Ballroom 201-202**

How to Make Antibodies for Tumor Immunotherapy  
*Alan J. Korman, PhD*

## Clinical Scholars Program Session II

### Emerging Immunotherapies

10:15 am – 12:00 pm

Oregon Ballroom 203

- 10:50 am Psoriasis – where are we and where are we heading  
*Johann E. Gudjonsson, MD/PhD*

## Concurrent Mini-Symposium 12

### Clinical Research: Epidemiology of Skin Diseases

12:30 pm – 3:00 pm

Oregon Ballroom 203

- 12:30 pm Abstract #216, A new mortality prediction tool for Stevens-Johnson syndrome/toxic epidermal necrolysis.  
*RG. Micheletti and MH. Noe.*
- 12:42 pm Abstract #164, Changes in the geographic distribution of atopic dermatitis on the body with age.  
*TT. Schwartz, DJ. Margolis and K. Abuabara.*
- 1:06 pm Abstract #198, Black children less likely to receive outpatient care for eczema than whites, but show signs of more severe disease: A cross-sectional analysis of the medical expenditure panel surveys.  
*DB. Shin, AH. Fischer, DJ. Margolis and J. Takeshita.*
- 2:06 pm Abstract #194, Decreasing prevalence of tanning bed use in the US: Data from the 2010, 2013, and 2015 National Health Surveys.  
*AH. Fischer, S. Kang and A. Chien.*
- 2:42 pm Abstract #213, Initial explorations into genotype-phenotype correlations in psoriasis: The homozygous recessive model.  
*M. Milliken, B. Feng, K. Duffin and G. Krueger.*

## Concurrent Mini-Symposium 13

### Epidermal Structure and Barrier Function

12:30 pm – 3:00 pm

Oregon Ballroom 204

- 2:42 pm Abstract #463, GJA1 mutations causing erythrokeratoderma variabilis et progressiva display increased connexin hemichannel activity.  
*HM. Khan, L. Boyden, S. Tomita and K. Choate.*

## Concurrent Mini-Symposium 14

### Growth Factors, Cell Adhesion and Matrix Biology

12:30 pm – 3:00 pm

C123-124

- 12:54 pm Abstract #544, A mutation in the desmoglein 1 transmembrane domain abrogates lipid raft targeting and causes severe dermatitis, multiple allergies, and metabolic wasting (SAM) syndrome.  
*J. Lewis, A. Caldara, N. Strong, JK. Wahl, AL. Mattheyses, M. Amagai, T. Sasaki, K. Nakabayashi, K. Hata, Y. Matsubara, A. Kubo, S. Stahley and A. Kowalczyk.*

**Concurrent Mini-Symposium 15**  
**Pharmacology and Drug Development**  
**12:30 pm – 3:00 pm**

**A105-106**

- 12:42 pm Abstract #688, Efficacy of topical Vorinostat in the reversal of alopecia areata.  
*E. Wang, JC. Chen and AM. Christiano.*
- 2:30 pm Abstract #683, Induced DNA repair in xeroderma pigmentosum group C cells by readthrough of premature termination codons.  
*R. Ono, S. Khan, C. Kuschal, D. Tamura, J. Chen, X. Luo, J. DiGiovanna and K. Kraemer.*

**Posters**

<b>Abstract Number</b>	<b>Title</b>
029	Increased expression of stress hormone CRH receptor on circulating monocytes of alopecia areata patients
031	Inducible skin-associated lymphoid tissue (iSALT) is detected in the scalp treated with topical immunotherapy for alopecia areata
045	Exploring a possible role for Indoleamine 2,3-deoxigenase (IDO) and the Host Immune Response in Infantile Hemangioma
047	Vitiligo is maintained by antigen-specific resident memory t cells, which can be targeted to create a durable treatment response
050	Alopecia areata is reversed by IL-7Ra blockade via upregulation of the PD-1 signaling pathway
052	Identification of pathogenic T cell subsets in human alopecia areata
058	Non-lesional atopic dermatitis skin shares similar T cell clones with lesional tissues
073	Th17 and Th22 polarization in ichthyosis blood correlates with disease severity and highlights its systemic nature
076	An overview of social media posts related to psoriasis patients' perspectives towards Humira®
122	Mutational landscape of highly malignant recessive dystrophic epidermolysis bullosa-associated squamous cell carcinoma
134	The study of basal cell carcinoma nevus syndrome through continuous quality improvement assessment
152	Association between skin tags and metabolic syndrome
153	Topical corticosteroid phobia and fear in atopic dermatitis: A systematic review
164	Changes in the geographic distribution of atopic dermatitis on the body with age
190	Pediatric psoriasis is an independent risk factor for comorbidity development
195	The burden of childhood atopic dermatitis in U.S. primary care settings
204	A real-world study evaluating adequacy of Existing Systemic Treatments for patients

206	Racial/ethnic differences in healthcare utilization and school attendance among children with atopic dermatitis in the Pediatric Eczema Elective Registry
210	Big data provides insight into alopecia areata comorbidities
213	Initial explorations into genotype-phenotype correlations in psoriasis: The homozygous recessive model
217	Epidemiology and management of dermatologic conditions in the pediatric oncology population
219	Natural history of chronic wounds in patients with recessive dystrophic epidermolysis bullosa
221	Does atopic dermatitis remain a disease of the advantaged in adulthood? A national birth cohort study
224	Quality of life in recessive dystrophic epidermolysis bullosa: The AltaVoice patient registry, 2012-2015
228	The prevalence of eczema beyond childhood: A systematic review and meta-analysis of longitudinal studies
231	Prenatal risk factors for PHACE syndrome: a study using the PHACE syndrome international clinical registry and genetic repository
232	New nonsynonymous variants of SPINK5 gene in Japanese atopic dermatitis patients
238	Association between pediatric psoriasis and cardiovascular risk in US children
248	Seasonality of itch: A digital epidemiology time series analysis of real-time data from 2004 to 2016
252	Dysregulation of the innate immune system in lesional and non-lesional skin of patients with pyoderma gangrenosum
256	Increased Interleukin-19 expression in cutaneous T-cell lymphoma as well as atopic dermatitis
257	Pharmacokinetics of SB204 in subjects with acne vulgaris
260	Identification of early predictors of the efficacy of intravenous corticosteroid pulse therapy in rapidly-progressive diffuse alopecia areata patients
261	Assessment of skin parameters of malnourished and well-nourished infants and children
265	Expression of apoptotic markers in Stevens Johnson Syndrome/Toxic Epidermal Necrolysis
267	Deep phenotyping of patients with xeroderma pigmentosum and trichothiodystrophy
272	Structural changes in human skin after topical application of glucocorticoids assessed by in vivo imaging technologies
275	Oral vitamin D3 5000IU as an adjuvant In the treatment of atopic dermatitis: A randomized controlled trial
282	Risk of skin infections with dupilumab for atopic dermatitis: systematic review and meta-analysis of randomized controlled trials
283	Toxic epidermal necrolysis in the setting of acute graft-versus-host disease successfully treated with tumor necrosis factor alpha inhibitors
288	Immune dysregulation in morphea
291	Establishing and validating an ichthyosis severity index

296	Bleach baths promote early induction of inflammatory pathway genes with no effect on skin bacterial dysbiosis in AD subjects
297	Hidradenitis suppurativa lesions contain biologically active IPGM and abnormal epidermal stem cell populations
298	RNA-seq profiling highlights the robust inflammation and Th17-skewing of the non-lesional Asian atopic dermatitis phenotype
299	Gentamicin therapy induced functional type VII collagen in recessive dystrophic epidermolysis bullosa patients harboring nonsense mutations
304	Collagen tripeptide may modulate inflammation in atopic dermatitis
308	Bone marrow/cord blood transplantation (BMCBT) ameliorates symptoms in some, but not all, subtypes of severe generalized junctional epidermolysis bullosa (JEB)
311	Low energy red or blue/red combination LED lights inhibits in vitro the inflammation associated with acne
313	A pathogenic role for Th22/IL-22 in atopic dermatitis is established by a placebo-controlled trial with an anti IL-22/ILV-094 mAb
319	Skin surface temperature detection with thermal imaging camera aids in cellulitis diagnosis
320	An open label clinical trial of Abatacept (CTLA4-Ig) for alopecia areata
325	Analysis of sirolimus treatment response in lymphatic malformations with and without PIK3CA mutation
328	Increased perceived stress in vitiligo patients and its implications in vitiligo pathogenesis
329	Subcutaneous transplantation of allogenic mesenchymal stromal cells ameliorates intractable ulcers in recessive dystrophic epidermolysis bullosa patients
334	Direct-access online care for the management of atopic dermatitis: A randomized controlled clinical trial examining patient quality of life
342	Implementation of a teletriage system improves access to dermatologic care in an underserved clinic: A retrospective review
344	Topical carbamide peroxide for treatment of mild to moderate acne vulgaris
345	Assessment of functional impairment in psoriasis
346	Addressing the under-treatment of patients with psoriasis - Preliminary survey results
351	Dermatologic manifestations of graft-versus-host disease in solid organ transplantation: A single center retrospective clinicopathologic review (1996-2016)
367	Patient and provider satisfaction with teledermatology: A systematic review
369	Comparison of childhood and adolescent melanoma
377	Type VII collagen (C7) expression and chimerism after bone marrow/cord blood transplantation (BMCBT) for severe generalized recessive dystrophic epidermolysis bullosa (RDEB)
378	Treatment of severe alopecia areata with the oral Janus kinase inhibitor, tofacitinib: A retrospective chart review
384	iPledge disproportionately affects women, minorities, and low-income patients: a retrospective-cohort study

385	Standardizing the diagnostic criteria used for atopic dermatitis: a systematic review
386	A systematic review of inclusion criteria for clinical trials of atopic dermatitis
391	DRESS syndrome: A retrospective chart review and evaluation of a high-dose steroid treatment protocol
394	Comparison of EASI and objective-SCORAD assessments in adult atopic dermatitis
397	Predictive modeling of drug response and mechanism of action in alopecia areata clinical trials
399	Serious infections among a large cohort of subjects with systemically-treated psoriasis
403	<i>S. aureus</i> colonization is associated with dysregulation of lipid-related genes in the nonlesional skin of AD subjects
412	Characterization of sensitive skin in a pediatric population
417	A randomized trial of a barrier lipid replacement strategy for the prevention of atopic dermatitis and allergic sensitisation: The PEBBLES pilot study
421	Elevated serum IgE level, but not TARC and LDH, may reflect the impairment of stratum corneum barrier function in healthy individuals; Results of cross-sectional study of 1141 Japanese healthy individuals
422	The distribution and ultrastructure of the touch dome in human hairy skin
424	Sensitive skin is highly frequent in atopic dermatitis and correlates with disease severity markers but not necessarily with skin barrier assessments
430	IFN- $\gamma$ may disrupt skin barrier function through reduction of long-chain fatty acid ceramides in mite-induced dermatitis
439	Mutations in the epidermal fatty acid and ceramide metabolic pathway reveal functions of the Corneocyte-Bound Lipid Envelope (CLE)
446	Early atopic dermatitis biological analysis
458	Cellular and metabolic basis for the ichthyotic phenotype in ichthyin deficiency
464	Dynamic and stable enhancer-promoter contacts regulate epidermal terminal differentiation
465	Role of cortical actin disorganization in keratinocyte proliferation in psoriasis
474	Stabilizing mutations of KLHL24 ubiquitin ligase cause loss of keratin 14 and human skin fragility
483	Rare constitutional variants influence phenotype of somatic cutaneous vascular malformations
484	Efficient in vivo gene editing using ribonucleoproteins in skin stem cells of recessive dystrophic epidermolysis bullosa mouse model
488	Beta-catenin mutational analysis in multiple pilomatricomas
493	Identification of a novel causative gene responsible for autosomal recessive congenital ichthyosis
494	Congenital generalized hypertrichosis with a copy number variation on chromosome 17q24
495	Ichthyosis molecular fingerprinting shows profound Th17-skewing and a unique barrier gene expression pattern

497	Genetic investigation of linear inflammatory disorders
498	Elevated maternal dietary magnesium prevents ectopic mineralization in offspring in a mouse model of generalized arterial calcification of infancy
502	Sex bias in response to an NRF2 inducer in a pachyonychia congenita model
508	Reciprocal regulation of lysyl hydroxylase 3 and type VII collagen secretion: Pathomechanistic link in recessive dystrophic epidermolysis bullosa
509	Disease-targeted next generation sequencing identifies mutations in patients with epidermolysis bullosa
513	GNA14 somatic mutation causes congenital and sporadic vascular tumors by MAPK activation
514	Somatic mutations in nevus comedonicus identify nek9 as a determinant of follicular keratinocyte cell fate
517	Disseminated disease despite low mutant allele fractions: The variable phenotype of mosaic tuberous sclerosis complex
519	Phase I/IIa clinical trial for recessive dystrophic epidermolysis bullosa using genetically corrected autologous keratinocytes
521	Genome-wide single nucleotide polymorphism-based autozygosity mapping facilitates identification of mutations in consanguineous families with epidermolysis bullosa
526	Targeted sequencing of filaggrin identifies novel loss-of-function mutations in pediatric African American patients with severe atopic dermatitis
530	Discovery of novel somatic mutations in patients with lymphatic malformations
532	siRNA based non viral gene therapy for the treatment of epidermolysis bullosa simplex(EBS)
580	Neuronal IL-4Ra and JAK1 signaling mediate chronic itch
620	Possible involvement of interleukin-33 and basophils in the pathophysiology of human atopic dermatitis via ST2 receptor
623	Cutaneous acquisition of Staphylococcus quorum-sensing agr mutations protects against atopic dermatitis development
624	PSMa as a key virulence in Staphylococcus aureus-induced skin inflammation through IL-36 and IL-1 release from keratinocytes
625	Differential diversity of staphylococcal strains shapes cutaneous response in atopic dermatitis
626	Isolation and Identification of the follicular microbiome: Implications for acne research
633	Role of the cutaneous microbiome in the pathogenesis of psoriasis
642	The serum proteomic signature of pediatric AD suggests early Th2/Th17 skewing and an inverse correlation of disease severity with Th1 markers
649	Gut microbiota plays a role in the development of alopecia areata
662	Keeping it topical: Resistance to bacitracin among Staphylococcus and Streptococcus sp. in skin culture isolates and associated patient and isolate characteristics
683	Induced DNA repair in xeroderma pigmentosum group C cells by readthrough of premature termination codons
688	Efficacy of topical Vorinostat in the reversal of alopecia areata



691	The effects of RVT-501 on DNCB-induced atopic dermatitis in NC/Nga mice
693	Dust mite potently activates Th17/Th22 pathways and models multiple inflammatory skin conditions in humans
696	Characteristics of patients (pts) with epidermolysis bullosa (EB) in the phase 3 ESSENCE study of SD-101
699	Dual IL-17A and IL-17F inhibition with bimekizumab provides evidence for IL-17F contribution to immune-mediated inflammatory skin response
706	Small molecule inhibitor of the wnt pathway (SM04755) as a potential topical scleroderma treatment
708	SIG-1451: A topical anti-inflammatory new chemical entity for atopic dermatitis (AD)
709	Nitric oxide-releasing topical therapeutic agent for atopic dermatitis
711	Small molecule wnt pathway inhibitor (SM04755) as a potential topical psoriasis treatment
741	UV stress directs Cockayne Syndrome (CS) B protein to the centrosome to control $\alpha$ -tubulin acetylation and autophagy
770	Treatment of vitiligo with topical janus kinase inhibitor ruxolitinib
802	Treatment of active vitiligo with oral dexamethasone, NBUVB phototherapy and clobetasol cream arrests disease activity and induces repigmentation
810	Topical application of self-delivering RNAi (sd-rxRNA®) compounds for reduction of hyperpigmentation
821	Pigmentation and autophagy in alopecia areata pathogenesis
824	MoleMapper: What's good for users is good for science
828	Dysbiosis of gut microbiota by ampicillin exacerbates vitiligo
848	Cold-sensing ameliorated ichthyosis in a patient with Dorfman-Chanarin syndrome
860	Understanding cellular & molecular responses in the treatment of pediatric lymphatic anomalies
878	Influence of bovine milk oligosaccharides on sebocyte lipid content and inflammatory mediators
885	Human and mouse experiments identify a role for Th1, Th2, and IL-23 cytokine pathways in the pathogenesis of alopecia areata
887	New molecular pathways for skin vascular development
891	Vitamin D receptor expression and nuclear localization are reduced in keloid scars
906	Systemic HMGB1 administration ameliorates cutaneous and non-cutaneous manifestations in a dystrophic epidermolysis bullosa model mouse
927	Oral vitamin D rapidly attenuates inflammation from sunburn: An interventional study