Atopic Dermatitis/Eczema at the 2017 SID Annual Meeting

Updated April 10 2017

(see full program details on SID website for most current info)

WEDNESDAY, April 26, 2017

8th Pan-Pacific Skin Barrier Symposium (PAPSBRS). A105-106. 9:00 am – 4:30 pm

- 1:15 pm **Plenary Talk #4,** Dr. E.H. Choi (Yonsei U Wonju), Stratum corneum acidification and its potential clinical application
- 1:45 pm **Plenary Talk #5,** Dr. K. Kabashima (Kyoto U), Cutaneous biological responses to external stimuli
- 2:15 pm Platform #8, Dr. S.J. Choe (Yonsei U Wonju), 11beta-hydroxysteroid dehydrogenase 1 expression in the skin might have a role in the occurrence of AD
- 2:30 pm Platform #9, Dr. M. Kishibe (Asahikawa Med U), Incomplete secretion of KLK7 and upregulated LEKTI are related to hyperkeratosis in stratum corneum in AD
- 2:45 pm Platform #10, Dr. A. Lowe (U Melbourne, AU), A randomized trial of a barrier lipid replacement strategy for the prevention of atopic dermatitis and allergic sensitization: PEBBLES pilot study
- 3:15 pm **Plenary Talk #6,** Dr. R. Gallo (UC San Diego), Links between barrier function, S. aureus colonization, and Th2 inflammation

Albert M. Kligman/Phillip Frost Leadership Lecture. Oregon Ballroom 201-202. 6:35 - 7:05 pm: Memory T Cells and Protective Immunity: Lessons from the Smallpox Vaccine. *Thomas S. Kupper, MD.*

THURSDAY, April 27, 2017

Pediatric Dermatology Research Alliance/Society for Pediatric Dermatology. Rooms A105 & A106

7:00-8:00 am: *Pediatric Dermatology at the SID.*

Selected ePoster Discussions I: *Moderator Jonathan Silverberg.* Exhibit Hall A Foyer 11:03 am #382 Adult-onset atopic dermatitis is associated with a distinct phenotype. *P. Vakharia, R. Chopra, R. Sacotti, N. Patel, S. Immaneni, R. Kantor, D. Hsu, J. Silverberg.*

Selected ePoster Discussions I: *Moderator Delphine Lee.* Exhibit Hall A Foyer 11:27 am #564: An integrated model of atopic dermatitis biomarkers highlights the systemic nature of the disease. *B. Ungar, S. Garcet, J. Gonzalez, J. Correa Da Rosa, N. Dhingra, A. Shermer, J. Krueger, M. Suarez-Farinas, E. Guttman-Yassky.*

Aclaris Sponsored Symposium: *You Don't Know JAK: Development of JAK inhibitors in Dermatology.* Oregon Ballroom 201-202.

12:00 pm Welcome and Introduction, John Harris, MD/PhD

- 12:05 pm Getting to know JAKs, *Paul Changelian*, *PhD*
- 12:15 pm JAKs be nimble: Building a Better Inhibitor, Jon Jacobsen, PhD
- 12:45 pm Scratch that Itch: JAK Inhibitors in Pruritus, *Brian S. Kim, MD/MTR*
- 1:05 pm JAK hammers: Topical Delivery for JAK Inhibitors, Vijendra Nalamothu, PhD
- 1:30 pm Panel Discussion and Q&A with Presenters

CONCURRENT MINI-SYMPOSIUM 3: *Interdisciplinary Spotlight: Frontiers in Atopic Dermatitis.* B113-116.

2:00 pm #640 Enhancement of Th2 polarization by Trim32 deficiency. Y. Liu, Z. Wang, R. De La Torre, A. Barling, N. Hornick, J. Hanifin, E. Simpson and M. Kulesz-Martin.

- 2:12 pm #624 PSMα as a key virulence in Staphylococcus aureus-induced skin inflammation through IL-36 and IL-1 release from keratinocytes. *S. Nakagawa, Y. Nakamura, G. Nunez and H. Matsue. Chiba*
- 2:24 pm #557 Microbiome controls mast cell differentiation in the skin. *Z. Wang, N. Mascarenhas, L. Eckmann, Y. Miyamoto, X. Sun, T. Kawakami and A. Di Nardo*.
- 2:36 pm #439 Mutations in the epidermal fatty acid and ceramide metabolic pathway reveal functions of the Corneocyte-Bound Lipid Envelope (CLE). *Elias, M. Man and D. Crumrine.*
- 2:48 pm #057 Regulation of lipid-specific T cell activation in human skin. *D. Lee, H. Jiang, W. Zeng, F. Kirscht, T. Kolster, S. Cremers and A. de Jong.*
- 3:00 pm #580 Neuronal IL-4Rα 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 #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 #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 #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 #709 Nitric oxide-releasing topical therapeutic agent for atopic dermatitis. *K. McHale, J. Gil, S. Davis, S. Hollenbach and N. Stasko.*

4:00 pm #748 Tryptophan photoproduct 6-formylindolo[3,2-b]carbazole, FICZ, inhibits atopic dermatitis – A clue for photo-effectiveness to aryl hydrocarbon receptor. *M. Oda, H. Uchi, S. Morino-Koga and M. Furue.*

4:12 pm #155 Air pollution and incidence of eczema in elderly women. W. Schnass, A. Hüls, A. Vierkötter, J. Xia, U. Krämer, J. Krutmann and T. Schikowski.

CONCURRENT MINI-SYMPOSIUM 2: Clinical Research: Pathophysiology and Therapeutics Including studies involving human tissue and human cells that furthers our understanding of skin disease. Oregon Ballroom 203

3:24 pm #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.*

IEC Councilor's meeting (IEC Councilors and Associates only). Rooms B117-119. 4:40 – 6:10 pm *TOPIC: Management of the Itch of AD*.

FRIDAY, April 28, 2017

Pediatric Dermatology Research Alliance/Society for Pediatric Dermatology. Rooms A105 & A106.

7:00–8:00 am *Pediatric Dermatology at the SID.*

PLENARY SESSION II: Oregon Ballroom 201-202.

8:36 am #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. Oregon Ballroom 201-202.

9:00 – 9:15 am. Amy Paller, IEC President

Come See My Poster II: Oregon Ballroom 201-202

10:55 am #424 Sensitive skin is highly frequent in atopic dermatitis and correlates with disease severity markers but not necessarily with skin barrier assessments. *T. Yatagai, T. Shimauchi, H. Yamaguchi, J. Sakabe, M. Aoshima, S. Ikeya, K. Tatsuno, T. Fujiyama, T. Ito and Y. Tokura.*

International Eczema Council (IEC) 12:00-1:30 pm Oregon Ballroom 204

(Lunch served, free registration recommended at <u>www.eczemacouncil.org</u>).

12:00 pm Welcome/Overview of the IEC and Roadmap of AD at the SID *Amy Paller*

12:10-12:45 pm Abstract Presentations

#256: Increased interleukin-19 expression in cutaneous T-cell lymphoma as well as atopic dermatitis. *Oka Tomonori et al. Univ. of Tokyo, Tokyo, Japan*

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

#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. Rockefeller Univ., New York, NY, USA*

12:45 pm **Special Presentation: The precise control of skin barrier homeostasis** *Masayuki Amagai, Keio University, Tokyo, Japan*

1:10-1:30 pm Abstract Presentations

#296: Bleach baths promote early induction of inflammatory pathway genes with no effect on skin bacterial dysbiosis in AD subjects. *Sara Knowlden et al., Univ. of Rochester, Rochester, NY, USA*

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

Selected ePoster Discussions II: *Moderator: Robert Dellavalle.* Exhibit Hall A Foyer 12:48 pm #220 Predictors and cost of hospitalization for atopic dermatitis in US adults and children. *S. Narla, D. Hsu, J. Thyssen, J. Silverberg.*

Selected ePoster Discussions II: *Moderator: Theodora Mauro.* Exhibit Hall A Foyer 12:00 pm #636 Commensal skin bacteria inhibit the capacity of Staphylococcus aureus to induce epidermal serine protease activity in atopic dermatitis. *M. Williams, T. Nakatsuji, R. Gallo.*

12:42 pm #438 Activation of protease-activated receptor 2 leads to impairment of keratinocyte differentiation and tight junction integrity. *M. Henehan; P. Nadeau; A. DeBenedetto.*

12:54 pm #403 S. aureus colonization is associated with dysregulation of lipid-related genes in the nonlesional skin of AD subjects. *C. Kwon, T. Yoshida, S. Knowlden, A. DeBenedetto, J. Myers, D. Leung, S. Gill, J. Thakar, L. Beck.*

American Dermato-Epidemiology Network (ADEN) Symposium. B117-119. 1:00 pm #243 Real world systemic corticosteroid (SCS) utilization patterns and costs in adult patients with atopic dermatitis. *A. Armstrong, W. Wei, R. Miao, M. Patel, A. Huang, L. Wand, J. Chao.*

CONCURRENT MINI-SYMPOSIUM 6: Clinical Research: Patient Outcomes Research Includes meta-analysis of interventional trials, and patient outcomes research. Oregon Ballroom 204

2:48 pm #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.

3:00 pm #383 Establishing severity strata for 5 different patient-reported outcomes in adults with atopic dermatitis. R. Sacotte, P. Vakharia, R. Chopra, N. Patel, S. Immaneni, T. White, R. Kantor, D. Hsu, E. Simpson and J. Silverberg.

CONCURRENT MINI-SYMPOSIUM 7: Genetic Disease, Gene Regulation and Gene Therapy Studies on cutaneous gene expression and genetic diseases including gene therapy. B113-116

2:24 pm #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.*

3:48 pm #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.*

CONCURRENT MINI-SYMPOSIUM 8: *Innate Immunity, Microbiology, Inflammation Studies of cells, receptors and effector molecules of the innate immune response; studies on skin microbes and infectious processes of the skin.* Oregon Ballroom 203 3:12 pm #643 An atopic dermatitis-like flare is mediated by dysbiosis and release of nuclear IL 1α from keratinocytes. *N. Archer, S. Lee, R. Ortines, Y. Wang, H. Liu, R. Miller, C. Dillen, M. Marchitto, A. Ashbaugh, A. Uppal, S. Cai, N. Malhotra, M. Oyoshi, R. Geha and L. Miller.*

IEC Industry Liaison Meeting (invite only-email mjung@eczemacouncil.org) 4:45-5:30 pm *IEC Update. Room B11*

Introducing a New Topical Prescription Treatment Option for Atopic Dermatitis (Pfizer): Oregon Ballroon 201-202

5:00 pm – 5:45 pm. Lawrence Eichenfield, MD Professor of Dermatology and Pediatrics

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6:00-7:00	0 pm, A10!	5-106			

SATURDAY, April 29, 2017

Come See My Poster III: Oregon Ballroom 201-202

10:03 am #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. *E. Akasaka, K. Hara, M. Takahashi, T.*

Fukui, A. Korekawa, H. Nakano, I. Takahashi, S. Nakaji and D. Sawamura.

Selected ePoster Discussions III: *Moderator: Masayuki Amagai*. Exhibit Hall A Foyer 10:45am #001 Malat1 drives differentiation of memory CD8+ T cells. *N. Carter et al.*

CONCURRENT MINI-SYMPOSIUM 12: *Clinical Research: Epidemiology of Skin Diseases* Oregon Ballroom 203

12:42 pm #164 Changes in the geographic distribution of atopic dermatitis on the body with age. *TT. Schwartz, DJ. Margolis and K. Abuabara*.

12:54 pm #221 Does atopic dermatitis remain a disease of the advantaged in adulthood? A national birth cohort study. *K. Abuabara, LL. Kohn and SM. Langan*.

1:06 pm #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*.

1:18 pm #204 A real-world study evaluating adeQUacy of Existing Systemic Treatments for patients with moderate-to-severe Atopic Dermatitis (AD-QUEST): Baseline treatment patterns and unmet needs assessment. W. Wei, E. Ghorayeb, ML. Andria, V. Walker, J. Chao, J. Schnitzer, M. Kennedy, Z. Chen, A. Belland, J. White and JI. Silverberg.

CONCURRENT MINI-SYMPOSIUM 15: Pharmacology and Drug Development Basic and preclinical studies aimed at developing therapeutics, elucidating their mechanisms of action, and identifying biomarkers of drug activity. 105-106 12:54 pm #718 Allergen-loaded microneedle patches efficiently induce Treg cells in atopic dermatitis. C. Park, S. Kim, JU. Shin, J. Kim, Z. Sun and K. Lee.

POSTERS NOT BEING PRESENTED ORALLY

#038 Hyaluronan oligosaccharides induce suppressive effect to chronic allergic dermatitis. *J. Muto et al.*

#058 Non-lesional atopic dermatitis skin shares similar T cell clones with lesional tissues. Brunner P, *R. Emerson et al.*

#073 Th17 and Th22 polarization in ichthyosis blood correlates with disease severity and highlights its systemic nature. *T. Czarnowicki et al.*

#080 IL-9 promotes Th responses in epicutaneous sensitization with protein antigens. *L. Wang et al.*

#082 Systemic atopic dermatitis has different immune signatures. *J. Lee et al.*

#153 Topical corticosteroid phobia and fear in atopic dermatitis: A systematic review. *A. Li et al.*

#173 Systematic review of atopic dermatitis disease definitions in routinely-collected health data. *M. Dizon et al.*

#195 The burden of childhood atopic dermatitis in U.S. primary care settings. *J. Al-naqeeb et al.*

#206 Racial/ethnic differences in healthcare utilization and school attendance among children with atopic dermatitis in the Pediatric Eczema Elective Registry. *J. Takeshita et al.*

#223 Atopic dermatitis is associated with increased risk of serious infections in US children and adults. *S. Narla et al.*

#228 The prevalence of eczema beyond childhood: A systematic review and meta-analysis of longitudinal studies. *A. Yu et al.*

#232 New nonsynonymous variants of SPINK5 gene in Japanese atopic dermatitis patients. *S. Morizane et al.*

#244 Risk of contraindication and drug-drug interaction (DDI) with use of systemic immunosuppressants (IMMs) in adult patients with atopic dermatitis (AD). *A. Armstrong et al.*

#263 Increased interleukin-36γ expression in skin and sera of patients with atopic dermatitis and cutaneous T-cell lymphoma. *S. Otobe et al.*

#282 Risk of skin infections with dupilumab for atopic dermatitis: systematic review and meta-analysis of randomized controlled trials. *A. Drucker et al.*

#298 RNA-seq profiling highlights the robust inflammation and Th17-skewing of the non-lesional Asian atopic dermatitis phenotype. *H. Wen et al.*

#304 Collagent tripeptide may modulate inflammation in atopic dermatitis. A. Hakuta et al.

#385 Standardizing the diagnostic criteria used for atopic dermatitis: a systematic review. *P. Vakharia et al.*

#386 A systematic review of inclusion criteria for clinical trials of atopic dermatitis. R. *Chopra et al.*

#394 Comparison of EASI and objective-SCORAD assessments in adult atopic dermatitis. *R. Chopra et al.*

#409 Profiling of epidermal lipids to identify potential biomarkers of atopic dermatitis. *J. Franco et al.*

#411 Novel filaggrin gene polymorphisms in atopic dermatitis. A. Huang et al.

#415 Air exposure and dehydration down-regulates EGFR and Aquaporin 3 in cultured human skin keratinocytes. *W Zhang et al.*

#417 A randomized trial of a barrier lipid replacement strategy for the prevention of atopic dermatitis and allergic sensitisation: The PEBBLES pilot study. *A. Lowe et al.*

#420 The effects of bathing, showering and petrolatum on skin barrier function. *E. Bolton et al.*

#429 The ratio of sphingosine to sphinganine in the stratum corneum determines lipid lamellar structure packing. *Y Obata et al.*

#430 IFN-γ may disrupt skin barrier function through reduction of long-chain fatty acid ceramides in mite-induced dermatitis. *H. Kanoh et al.*

#437 A suitable Raman microspectroscopy data processing: the key to understand atopic dermatitis in vivo at the molecular level. *L. Verzeaux et al.*

#444 Reactive oxygen species induce Th2 allergic inflammation in the skin by activating PI3K-HIF- α pathway. *J. Choi et al.*

#446 Early atopic dermatitis biological analysis. *G Bellemere et al.*

#533 Array-based sequencing of filaggrin gene for comprehensive detection of disease-associated variants. *C. Wong et al.*

#583 Atopic keratoconjunctivitis spontaneously develop in a mouse model of atopic dermatitis expressing the mouse interleukin-33 gene driven by a keratin 14 promoter. *Y. Imai et al.*

#587 Identification of IL-4 regulated microRNAs in primary keratinocytes. *L. Bao et al.*

#593 Staphylococcal enterotoxin B modifies ovalbumin-induced innate immune responses and skin inflammation in a murine model of atopic dermatitis. *S. Fassbender et al.*

#598 Increased expression of TRPV3 and TRPV4 channel in keratinocytes under Th2 inflammation. *H. Ko et al.*

#617 Basophils release amphiregulin and may contribute to murine models of prurigo reaction and MC903-induced atopic dermatitis-like skin inflammation. *T. Hashimoto et al.*

#620 Possible involvement of interleukin-33 and basophils in the pathophysiology of human atopic dermatitis via ST2 receptor. *Y. Nonomura et al.*

#656 Changes of lesional and non-lesional skin microbiome in the treatment course of atopic dermatitis. *J. Na et al.*

#676 Fluorescence lifetime imaging microscopy (FLIM) as a novel method to assess skin residency of a fluorescent compound: experience with GSK2894512. *A. Alex et al.*

#691 The effects of RVT-501 on DNCB-induced atopic dermatitis in NC/Nga mice. *R. Roeloffs et al.*

#693 Dust mite potently activates Th17/Th22 pathways and models multiple inflammatory skin conditions in humans. *K. Malik et al.*

#695 Topical application of KPI-150, a potent inhibitor of Kv1.3 channels on effector memory T cells, demonstrates preclinical efficacy in atopic dermatitis model. *C. Olsen et al.*

#697 Atopic dermatitis treatment: New insight through 3D in vitro models. *P. Rouaud-Tingue et al.*

#702 Prescriptions for atopic dermatitis: Oral corticosteroids remain commonplace. *T. Alexander et al.*

#708 SIG-1451: A topical anti-inflammatory new chemical entity for atopic dermatitis (AD). *J. Fernandez et al.*

#898 Homeostatic activation of epidermal HSD11b1 affects skin innervation and non-histaminergic itch. *A. Matsumoto et al.*