ALOPECIA AREATA RESEARCH SUMMIT

Building & Crossing the Translational Bridge

FINAL PROGRAM GUIDE

Monday, November 14 – Tuesday, November 15, 2016
New York Academy of Medicine, New York City, USA

Summit Co-Chairs

Angela M. Christiano, PhD
Columbia University Medical Center, New York, NY

John E. Harris, MD, PhD
University of Massachusetts Medical School, Worcester, MA

Maria K. Hordinsky, MD
University of Minnesota Medical School, Minneapolis, MN

Hosted By

National Alopecia Areata Foundation
MONDAY, NOVEMBER 14

9:00 AM – 11:00 AM Poster Set-Up: Presenters Hang Posters
Periodicals Room Third Floor

All accepted abstracts are required to prepare a poster.

11:00 AM – 11:25 AM Opening Session
Room 20 Second Floor
Moderator: Angela M. Christiano, PhD • Columbia University Medical Center, New York, NY

Welcome Address
NAAF President & CEO, Dory Kranz, will welcome participants and Summit Co-Chairs, Drs. Maria Hordinsky, John Harris and Angela Christiano will summarize meeting objectives.

Building an Ecosystem to Enable, Encourage and Support New Products for AA
William D. Ju, MD • President, Advancing Innovations in Dermatology, Inc.
Mechanisms for bringing together a broad range of stakeholders that share common interests in product innovation to increase the number of impactful therapies for skin diseases such as alopecia areata.

DISCUSSION

11:25 AM – 12:55 PM Session 1 – Setting the Stage & Raising the Bar
Room 20 Second Floor
Moderator: Julian Mackay-Wiggan, MD, MS • Columbia University Medical Center, New York, NY

Current Treatments for Alopecia Areata
Maria K. Hordinsky, MD • University of Minnesota Medical School, Minneapolis, MN
Options available to treat pediatric and adult alopecia areata, including the risk/benefit ratio of current and evolving choices will be presented with the understanding that there is currently no treatment approved by the FDA for this disease.

Current State of Research and Summary of Preceding Summits
David A. Norris, MD • University of Colorado School of Medicine, Aurora, CO
Summary of outcomes resulting from the past five research summits and overview of the current state of alopecia areata research.

Update on Genetics and Immunology of Alopecia Areata
Angela M. Christiano, PhD • Columbia University Medical Center, New York, NY
An update on genetic and immunological studies in alopecia areata since GWAS evidence, in conjunction with gene expression profiling, pointed to key members of the interferon-gamma pathway regulated in part by Janus kinases (JAKS), which led to early clinical trials with existing JAK inhibitors.

Revisiting the Role of Immune Privilege in Alopecia Areata Pathobiology
Ralf Paus, MD, FRSB • University of Manchester, United Kingdom
Defined tissue compartments of the hair follicle, namely the anagen hair bulb and the stem cell-harboring bulge zone, enjoy a relative state of immune privilege. The protection and restoration of hair follicle immune privilege remains the most fundamental prophylactic and therapeutic challenge in alopecia areata management.

Madeleine Duvic, MD • University of Texas MD Anderson Cancer Center, Houston, TX
To date, the Registry has epidemiology and quality-of-life data from 11,180 self-registered patients with 4,196 well-characterized samples of DNA, lymphoblast lines, and sera for future research studies.
The NAAF Registry, Version 2.0
Amelia Wall Warner, PharmD • Founder and CEO, Global Specimen Solutions

NAAF is implementing changes that will help increase patient participation and collection as well as make samples available to researchers in a compliant environment.

DISCUSSION

12:55 PM – 1:35 PM LUNCH & KEYNOTE
Moderator: Angela M. Christiano, PhD • Columbia University Medical Center, New York, NY

Identifying a Small Molecule Blocking Antigen Presentation in Autoimmune Thyroiditis
Yaron Tomer, MD, FACP • Albert Einstein College of Medicine, Montefiore Medical Center, Bronx, NY

Understanding the importance of the immunological synapse in the etiology of autoimmune thyroid diseases (AITD) have paved the way to blocking antigen presentation as a novel therapeutic approach to AITD.

DISCUSSION

1:35 PM – 2:55 PM Session 2 – Tools of the Trade: Clinical Trial Design & Outcome Measures
Moderator: James A. Solomon, MD, PhD • Ameriderm Research, Ormond Beach, FL

SALT II: A New Visual Aid for Assessing Hair Loss in Alopecia Areata
Elise A. Olsen, MD • Duke University Medical Center, Durham, NC

Presentation of new visual aid (SALT II) for the assessment of scalp hair loss in alopecia areata.

Using Computer Vision to Quantitate Pediatric Alopecia Areata
Leslie A. Castelo-Soccio, MD, PhD • CHOP, University of Pennsylvania School of Medicine, Philadelphia, PA

Developing a standardized and automated image quantification of alopecia areata in pediatric patients.

Updates on the Use of the Alopecia Areata Symptom Impact Scale (AASIS)
Tito R. Mendoza, PhD, MS, MEd • University of Texas MD Anderson Cancer Center, Houston, TX

Psychometric update to the Alopecia Areata Symptom Impact Scale using a participant sample that is more than twice the preliminary sample and future directions.

Pediatric Clinical Trial Design
Amy S. Paller, MD • Feinberg School of Medicine, Northwestern University, Chicago, IL

Important factors to consider when conducting pediatric trials to optimize recruitment and retention.

Clinical Trials, Epidemiology and Biostatistics in Skin Disease
Joel M. Gelfand, MD, MSCE • University of Pennsylvania Perelman School of Medicine, Philadelphia, PA

Discussion of methodological approaches, as well as their strengths and limitations, for conducting patient oriented research.

DISCUSSION
## Session 3 – Success Stories: Lessons from Clinical Studies with JAK Inhibitors

**Room 20**  
**Second Floor**

**Moderator:** Jerry Shapiro, MD • New York University Langone Medical Center, New York, NY

### Update on Clinical Research in Alopecia Areata

Julian Mackay-Wiggan, MD, MS • Columbia University Medical Center, New York, NY

Results from two open label clinical trials assessing the JAK inhibitors ruxolitinib and tofacitinib indicate the potential benefit of JAK inhibitors in the treatment of alopecia areata.

### Cleveland Clinic’s Alopecia Areata Tofacitinib Treatment Results, A Retrospective Therapeutic Study

Wilma F. Bergfeld, MD • Cleveland Clinic, Cleveland, OH

Results from Cleveland Clinic’s alopecia areata tofacitinib retrospective study indicate tofacitinib to be a viable treatment for severe alopecia areata with variation in efficacy and dosing.

### Safety and Efficacy of Oral Tofacitinib Citrate in Severe Alopecia Areata — Results from the Stanford/Yale Trial

Justin M. Ko, MD, MBA • Stanford University School of Medicine, Redwood City, CA

Review of the results and experience from dual-site clinical trial of oral tofacitinib in patients with severe alopecia areata with clinical observations and insights from off-label treatment.

### Tofacitinib for the Treatment of Alopecia Areata and Variants in Adults and Adolescents

Brett A. King, MD, PhD • Yale School of Medicine, New Haven, CT

Results and insights of tofacitinib treatment of 90 adults and 13 adolescents.

### Abstract #006 | A Study of INCB018424 Phosphate Topical Cream in Subjects with AA - Open-Label Treatment Period

Elise A. Olsen, MD • Duke University Medical Center, Durham, NC

Review of clinical data for topical JAK inhibition in psoriasis and implications for other dermatologic conditions including alopecia areata.

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## DISCUSSION

**4:35 PM – 4:45 PM BREAK**

**4:45 PM – 6:00 PM Session 4 – Emerging Technologies & Targets**  
**Room 20**  
**Second Floor**

**Moderator:** George Cotsarelis, MD • Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA

### Biomarkers for Alopecia Areata and Deployment into Clinical Trials

Ali Jabbari, MD, PhD • Columbia University Medical Center, New York, NY

Report on the utility of the Alopecia Areata Disease Activity Index (ALADIN) biomarker tool to track disease status and potentially predict disease response early in the course of treatment of patients with moderate to severe alopecia areata in two open label clinical trials.
Alopecia Areata Reversal by Interleukin-7 Receptor Blockade via Upregulation of the PD-1 Signaling Pathway
Zhenpeng Dai, PhD • Columbia University College of Physicians & Surgeons, New York, NY

Understanding the pathogenic role of Interleukin 7 pathway and its receptor IL-7Rα in alopecia areata and the potential therapeutic implications.

Non-Conventional T-cells in the Pathogenesis of Alopecia Areata
Amos Gilhar, MD • Technion-Israel Institute of Technology, Haifa, Israel

Elucidating the role of non-conventional T cells and the innate immune system in the pathogenesis of alopecia areata.

Hair Follicle Regeneration and Pathophysiology: Lessons from Live Imaging
Pantelis Rompolas, PhD • University of Pennsylvania Perelman School of Medicine, Philadelphia, PA

Using novel imaging technologies to understand the biological basis of hair regeneration and investigate better therapeutic approaches to address hair loss.

Hype or Hope? Data Review of Micro-Needling and Platelet Rich Plasma Therapy
Jerry Shapiro, MD • New York University Langone Medical Center, New York, NY

Evaluation of safety, efficacy and feasibility data of Platelet Rich Plasma (PRP) injections in treating androgenic alopecia and the potential implications for alopecia areata.

**DISCUSSION**

6:00 PM – 6:30 PM
COCKTAILS, NETWORKING & POSTER VIEWING RECEPTION
Periodicals Room
Third Floor

Scientific posters will be on display in the Periodicals Room on the Third Floor for informal presentations and discussion. Cocktails and hors d’oeuvres will be served.

001 Androgen Excess in Alopecia Areata, an Unexpected Finding
Wilma F. Bergfeld, MD • Cleveland Clinic, Cleveland, OH

002 Parathyroid Hormone-Related Peptide and the Hair Cycle
Robert Gensere, MD, PhD • Tufts Medical Center/The Floating Hospital for Children, Boston, MA

003 Treatment Futility, Patient-Provider Communication and Disease Acceptance in Severe AA
Kristina Gorbatenko-Roth, PhD • University of Wisconsin-Stout, Menomonie, WI

004 A Promising Safe Botanical Cutaneous Solution for the Treatment of Scalp AA in Pediatric Population
Saad Harti, MBA • Legacy Healthcare, SA, Switzerland

005 The Psychological Impacts of Alopecia Areata: Semi-Structured Interviews with Dermatologists
Salman T. Hussain, MPH • Dartmouth Institute for Health Policy & Clinical Practice, Lebanon, NH

006 A Study of INCB018424 Phosphate Topical Cream in Subjects with Alopecia Areata - Open-Label Treatment Period
Elise A. Olsen, MD • Duke University Medical Center, Durham, NC

007 A Sub-network of Signaling Protein Complexes in AA May Provide New Molecular Candidates for Pharmacologic Targeting
Adam G. Schrum, PhD • Mayo Clinic College of Medicine, Rochester, MN

008 Gaps in the Dermatologic Literature Regarding Alopecia Areata among African Americans
James A. Solomon, MD, PhD • Ameriderm Research Group, Ormond Beach, FL

009 Prevalence of Alopecia Areata Differs by Race in Two Large Cohorts
Jordan M. Thompson, BS • Warren Alpert Medical School, Brown University, Providence RI
### MONDAY, NOVEMBER 14

**6:30 PM – 7:30 PM**  
**DINNER & KEYNOTES**

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<th>Time</th>
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| **6:30 PM – 7:30 PM** | DINNER & KEYNOTES | Library Room  
Third Floor | Dory Kranz, MA • National Alopecia Areata Foundation, San Rafael, CA |

**What Treatment Means to Me: A Patient’s Perspective**  
Angela Rodgers, MD • Contra Costa Regional Medical Center, Martinez, CA

*Exploration of studies on the mental health burden of living with alopecia areata as well as real responses to the question: “Why would a treatment for alopecia areata be meaningful?”*

**Rules of Engagement in Drug Development: Activating the Patient Voice**  
Eleanor M. Perfetto, PhD, MS • Senior Vice President of Strategic Initiatives, National Health Council, Washington, DC

*Recent advances in patient engagement in research, including patients’ and advocates’ roles in patient focused-drug development (PFDD) and patient-reported outcomes (PROs).*

**DISCUSSION**

**7:30 PM – 9:30 PM**  
**Session 5 – Industry Roundtable**

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| **7:30 PM – 9:30 PM** | Session 5 – Industry Roundtable | Library Room  
Third Floor | William D. Ju, MD • President, Advancing Innovations in Dermatology, Inc. |

This panel is designed as an open exchange between panel experts and audience members. The objective is to learn how various stakeholders can work together to support new products for alopecia areata and engage the patient voice in therapeutic development.

**Panelists**

**Neal Walker, DO, FAAD, MBA**  
*President and CEO*  
Aclaris Therapeutics, Inc.

Dr. Neal Walker is President & Chief Executive Officer of Aclaris. He is a board-certified dermatologist and serial entrepreneur with over 19 years of experience in the biopharmaceutical industry. Prior to founding Aclaris, he was co-founder, President and CEO of Vicept Therapeutics (acquired by Allergan). Dr. Walker began his pharmaceutical industry career at Johnson & Johnson and has co-founded and led a number of life science companies. Dr. Walker received his MBA from The Wharton School, University of Pennsylvania. He also co-founded and serves on the Board of Directors of the Dermatology Summit, Dermatology Innovation Forum, and Advancing Innovation in Dermatology.

**J. David Owens, BSc**  
*President and CEO*  
BiologicsMD

J. David Owens is President & CEO of BiologicsMD and brings over 33 years of pharmaceutical and biotechnology management experience to the company. Mr. Owens joined BiologicsMD in June 2013 and led the refocusing and expansion of the company’s strategic direction. Previously, Mr. Owens was the Chief Business Officer and an investor for Novira Therapeutics, Inc., a privately held antiviral drug discovery company acquired by Johnson & Johnson in 2015. Prior to Novira, Mr. Owens held executive positions as Senior Vice President, and Business Unit Head of the Surgical Products Division at King Pharmaceuticals (now part of Pfizer) and prior to that as Vice President of Global Marketing & Medical Affairs at Aventis Pharma (now part of Sanofi). Earlier in his career, Mr. Owens held commercial operations roles at Genentech, Merck and Abbott Labs. Mr. Owens is a graduate of the University of Wisconsin, School of Pharmacy and a former Registered Pharmacist.

**Roger Tung, PhD**  
*Co-Founder, President and CEO*  
Concert Pharmaceuticals

Roger D. Tung, Ph.D. is a Concert co-founder and has served as President and Chief Executive Officer and as a member of the Board of Directors since April 2006. Before Concert, Dr. Tung was a founding scientist at Vertex, a pharmaceutical company, where he was employed from 1989 to 2005, most recently as its Vice President of Drug Discovery. Prior to Vertex, he held various positions at Merck, Sharp & Dohme Research Laboratories, a global healthcare provider, and The Squibb Institute for Medical Chemistry. During his career Dr. Tung has overseen the discovery of five drugs approved for the treatment of HIV, hepatitis C, and cystic fibrosis and was an inventor of several of them. Dr. Tung received a B.A. in Chemistry from Reed College and a Ph.D. in Medicinal Chemistry at the University of Wisconsin-Madison.
Thomas G. O’Riordan, MD  
Senior Director, Clinical Research  |  Gilead Sciences, Inc.
Dr. O’Riordan has an MD from the University College Dublin and is Board-certified in internal medicine, pulmonary disease, and critical care medicine. He was on faculty at the University of Miami and at Stonybrook University, New York prior to joining Gilead Sciences in 2008 where he is a Senior Director, Clinical Research, in the Inflammation and Respiratory Therapeutic Areas. At Gilead, Dr. O’Riordan is interested in the role of Janus Kinase (JAK) inhibitors in the treatment of alopecia areata.

Richard L. Leff, MD  
Group VP, Drug Development  |  Incyte Corporation
Dr. Richard Leff is Group Vice President of Drug Development at Incyte Corporation. Dr. Leff is a rheumatologist with 20 years of industry experience leading medical teams in clinical development of drugs for the treatment of arthritis and other diseases. He is highly experienced in early and late stage drug development, due diligence and successful in-licensing, US launch and promotions, worldwide development and regulatory interaction. After earning his MD from Yale University, Dr. Leff completed a post-doctoral fellowship in rheumatology at the National Institutes of Health.

Saad Harti, MBA  
President  |  Legacy Healthcare
Saad Harti founded Legacy Healthcare (Switzerland) in 2007, a biopharma start-up pioneering the discovery and development of botanical-based drugs. Prior to Legacy, Saad has set-up novel medicine access program in Africa and Asia. Saad has a financial and marketing background.

Michael Sierra, PhD  
Vice President, LEO Science & Tech Hub  |  LEO Pharma Inc.
Dr. Michael Sierra is Vice President of LEO Science & Tech Hub. He has more than 24 years of drug discovery experience working in the pharmaceutical industry. Dr. Sierra earned his Bachelor of Science in Chemistry from Ohio Northern University and his Doctorate in Chemistry from Wayne State University.

Elena Peeva, MD, MSc, FACP  
Executive Director, Inflammation & Immunology Clinical Research  |  Pfizer, Inc.
Dr. Elena Peeva is Executive Director of Inflammation & Immunology Clinical Research at Pfizer. Dr. Peeva is a Board Certified rheumatologist with a decade of industry experience in research and clinical development of therapeutics for autoimmune and inflammatory diseases. After earning her MD and Master of Medical Sciences from the University of Skopje in the Republic of Macedonia, Dr. Peeva completed her residency in internal medicine at SUNY Stony Brook University Hospital and fellowship in rheumatology at Albert Einstein College of Medicine in New York. Dr. Peeva was an attending physician for 8 years before joining the industry. She is a practicing physician and currently holds an associate professor appointment at Albert Einstein College of Medicine.

Geert Cauwenbergh, Dr., Med. Sc.  
President and CEO  |  RXi Pharmaceuticals Corp
Dr. Geert Cauwenbergh is President and CEO of RXi Pharmaceuticals Corp. Prior to joining RXi, Dr. Cauwenbergh served as Chairman and CEO of Barrier Therapeutics Inc., a publicly traded biopharmaceutical company he founded in 2001 that focused on dermatology drug development. Barrier was acquired by Stiefel Laboratories Inc. in 2008. Prior to founding Barrier, Dr. Cauwenbergh held a number of ascending senior management positions at Johnson & Johnson, where he was employed for 23 years. Dr. Cauwenbergh received his doctorate in medical sciences from the Catholic University of Leuven, Faculty of Medicine (Belgium), where he also completed his masters and undergraduate work.

TUESDAY, NOVEMBER 15

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<th>Time</th>
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<tr>
<td>7:00 AM – 7:30 AM</td>
<td>BREAKFAST</td>
<td>20 Second Floor</td>
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<td>7:30 AM – 7:50 AM</td>
<td>Session 6 – Introduction &amp; Review of First Day</td>
<td>20 Second Floor</td>
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Moderator: Angela M. Christiano, PhD  •  Columbia University Medical Center, New York, NY

Review and Summary of Day One Discussions
David A. Norris, MD  •  University of Colorado School of Medicine, Aurora, CO
TUESDAY, NOVEMBER 15

7:50 AM – 9:10 AM  Session 7 – What Lies Beneath: Elusive Alopecia Areata Auto-Antigens  Room 20  Second Floor

Moderator: Ralf Paus, MD, FRSB • University of Manchester, United Kingdom

Regulation of Skin immunity by the Hair Follicles
Keisuke (Chris) Nagao, MD, PhD • Center for Cancer Research, National Cancer Institute, Bethesda, MD
Understanding the roles that hair follicles play during immune regulation in the skin to gain further insight into the pathomechanisms of inflammatory diseases such as alopecia areata.

Identification of Antigenic Mimotopes Recognized by AA-Specific Human CD8+ T Cells in Situ
Marta Bertolini, PhD • University of Münster, Germany
Identifying disease-specific T-cell receptors (TCRs) may serve as a basis for TCR-specific lymphocyte elimination immunotherapy in alopecia areata and provide prognostic biomarkers.

Identifying Pathogenic T cell Receptor Sequences in Alopecia Areata
Annemieke de Jong, PhD • Columbia University Medical Center, New York, NY
High throughput T cell receptor sequencing of scalp and blood samples from AAP and AU patients provides novel insights in T cell dynamics in alopecia areata.

Large Scale Epitope Identification Screen and Its Potential Application to the Study of Alopecia Areata
Alessandro Sette, Dr. Biol. Sci. • La Jolla Institute for Allergy & Immunology, La Jolla, CA
Innovative methods to identify specific epitopes and associated antigens from a variety of different disease applications and strategies to apply this technological framework to the study of alopecia areata.

Similarities between Type 1 Diabetes and Alopecia Areata
Teresa P. DiLorenzo, PhD • Albert Einstein College of Medicine, Bronx, NY
Type 1 diabetes and alopecia areata are organ-specific autoimmune diseases sharing a number of striking similarities. Careful consideration of these may forward the clinical and research goals of both fields.

DISCUSSION

9:10 AM – 10:15 AM  Session 8 – Just Skin Deep: Immunology of the Skin  Room 20  Second Floor

Moderator: John E. Harris, MD, PhD • University of Massachusetts Medical School, Worcester, MA

T Cells, Dendritic Cells, Autoimmunity and the Hair Follicle
Daniel Kaplan, MD, PhD • University of Pittsburgh, Pittsburgh, PA
Findings highlight the important function of keratinocytes in determining the epidermal occupancy of dendritic cells and resident memory T cells and provide a potential therapeutic target to deplete these cells in disease states.

Regulatory T Cells in Skin Facilitate Hair Follicle Stem Cell Differentiation
Michael D. Rosenblum, MD, PhD • University of California, San Francisco, CA
Understanding the role of regulatory T cells in hair follicle biology and establishing a mechanistic link between tissue resident immune cells and epithelial skin cells.

Making and Breaking Tolerance: New Insight into Skin Dendritic Cell Function
Niroshana Anandasabapathy, MD, PhD • Brigham & Women’s Hospital, Harvard Medical School, Boston, MA
Homeostatic maintenance of self-tolerance by skin dendritic cells may be a critical step to prevent autoimmune disease, offering new therapeutic targets and pathways promoting this activity.
Commensal Bacteria Control Plasmacytoid Dendritic Cell Recruitment and Activation into Inflamed Skin
Michel Gilliet, MD • CHUV - Hospital of Beaumont, Lausanne, Switzerland

Skin microbiota plays a central role in initiating inflammation in the skin by recruiting and activating plasmacytoid dendritic cells.

DISCUSSION

10:15 AM – 10:30 AM BREAK

10:30 AM – 11:50 AM Session 9 – Genes, the Hair Follicle & the Microenvironment
Moderator: Angela M. Christiano, PhD • Columbia University Medical Center, New York, NY

Nutritional Factors Potentially Influencing Hair Growth and Alopecia
George Cotsarelis, MD • Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA

Proposed mechanisms for the effect of nutritional deficiencies on hair growth and alopecia will be discussed.

Mesenchymal Niche Control of Hair Follicle Formation, Growth and Regeneration
Michael Rendl, MD • Icahn School of Medicine at Mount Sinai, New York, NY

Regulation of stem cells and progenitors by signals from dermal papilla cells is essential for embryonic hair follicle formation, postnatal hair growth, and regeneration during the adult hair cycle.

The Role of MicroRNAs in Alopecia Areata
Natalia V. Botchkareva, MD, PhD • University of Bradford, Bradford, United Kingdom

Unravelling the role of miR-486 and miR-451 in the control of hair follicle immune privilege by protecting the hair follicle from the cytotoxicity induced by pro-inflammatory cytokines.

Commensal Microbes and Hair Follicle Morphogenesis Coordinately Drive Treg Migration into Neonatal Skin
Tiffany C. Scharschmidt, MD • University of California, San Francisco, CA

Understanding the mechanisms mediating the abrupt accumulation of regulatory T cells into neonatal skin which are responsible for establishing tolerance to skin commensal microbes.

Advancing RNA Chemistry towards Modulation of Gene Expression in Skin
Anastasia Khvorova, PhD • University of Massachusetts Medical School, Worcester, MA

Overview of recent advances in chemistry allowing for efficient delivery and modulation of gene expression in skin, both locally and systemically, and the potential of this technology for the treatment of alopecia areata.

DISCUSSION

11:50 AM – 12:55 PM Session 10 – Understanding the Commonalities Across Autoimmune Diseases
Moderator: Daniel Rotrosen, MD • National Institute of Allergy and Infectious Diseases, Rockville, MD

Comorbidities Present in the Alopecia Areata Registry, Biobank & Clinical Trials Network
Lynn M. Petukhova, PhD • Columbia University Medical Center, New York, NY

Evaluation of comorbid autoimmune diseases among patients and family members enrolled in the Alopecia Areata Registry, Biobank & Clinical Trials Network.
### Understanding Parallels between Vitiligo and Alopecia Areata

John E. Harris, MD, PhD • University of Massachusetts Medical School, Worcester, MA

Vitiligo and alopecia areata are both common, T cell-driven autoimmune diseases of the skin. Recognizing similarities and differences between these diseases will promote a more complete understanding of their pathogenesis as well as the development of new treatments.

### Neuronal Type 2 Cytokine Signaling Critically Regulates Chronic Itch in the Setting of Atopic Dermatitis

Brian S. Kim, MD, MTR • Washington University School of Medicine, St. Louis, MO

Uncovering the cellular and molecular mechanisms that mediate chronic itch and what this may tell us about alopecia areata.

### Cytokine Targeted Therapeutics: Lessons from Atopic Dermatitis and Other Inflammatory Skin Diseases

Emma Guttman-Yassky, MD, PhD • Icahn School of Medicine at Mount Sinai Medical Center, New York, NY

Different pathways might drive the inflammation in alopecia areata and clinical trials utilizing narrow-targeted therapeutics will be able to elucidate the role of each cytokine pathway in the disease phenotype.

### DISCUSSION

12:55 PM – 2:15 PM LUNCH & PRESENTATIONS

- Moderator: Angela M. Christiano, PhD • Columbia University Medical Center, New York, NY

<table>
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<tr>
<th>ABSTRACT #009</th>
<th>Prevalence of Alopecia Areata Differs by Race in Two Large Cohorts</th>
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<td>Jordan M. Thompson, BS • Warren Alpert Medical School, Brown University, Providence RI</td>
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<tr>
<th>ABSTRACT #007</th>
<th>A Sub-network of Signaling Protein Complexes in AA May Provide New Molecular Candidates for Pharmacologic Targeting</th>
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<td>Adam G. Schrum, PhD • Mayo Clinic College of Medicine, Rochester, MN</td>
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<tr>
<th>KEYNOTE</th>
<th>Unifying Immunology with Informatics and Multiscale Biology</th>
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<td>Joel Dudley, PhD • Icahn School of Medicine at Mount Sinai, New York, NY</td>
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Solving key problems in genomics and precision medicine through the development and application of translational and biomedical informatics methodologies.

### DISCUSSION

2:15 PM – 3:20 PM Session 11 – Challenges & Opportunities: Advancing Drugs to Patient Care

- Moderator: Maria K. Hordinsky, MD • University of Minnesota Medical School, Minneapolis, MN

<table>
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<tr>
<th>Topical and Microneedle Drug Delivery Aimed at the Hair Follicle and Deeper Dermis</th>
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<td>Bozena B. Michniak-Kohn, PhD • Ernest Mario School of Pharmacy, Piscataway, NJ</td>
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Developing drug delivery systems (nanosphere formulations and microneedle arrays) that target actives to hair follicles and deeper dermis.

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<th>Inflammatory Biomarkers: Interrogating Biology and Informing Clinical Trials</th>
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<tr>
<td>Raphael A. Clynes, MD, PhD • Columbia University Medical Center, New York, NY &amp; Bristol-Myers Squibb Co., Princeton, NJ</td>
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Identification of informative biomarkers predictive of an individual’s clinical course and potential for response to specific therapies would effectively guide clinical management, increasing the success rate of treatment while minimizing unnecessary exposure in patients unlikely to respond.
Repurposing Drugs for Alopecia Areata: The Vytorin Experience
Antonella Tosti, MD • University of Miami, Miami, FL

*Review of the literature and report of personal experience on treatment with statins in alopecia areata.*

What’s New on the Horizon? Unconventional Therapies on the Rise
Natasha A. Mesinkovska, MD, PhD • NAAF/UC Irvine School of Medicine, Orange, CA

*Review of some unconventional therapies gaining popularity among the alopecia areata patient community, and the potential benefits from well-designed clinical studies.*

**DISCUSSION**

3:20 PM – 4:25 PM Session 12 – Regulatory Matters & Funding Opportunities

**Moderator:** David A. Norris, MD • University of Colorado School of Medicine, Aurora, CO

Patient-Focused Drug Development Initiative
Dory Kranz, MA • National Alopecia Areata Foundation, San Rafael, CA

*Overview of FDA’s Patient Focused Drug Development (PFDD) Initiative, how the patient voice informs drug benefit-risk assessment, and preparing for the 2017 PFDD meeting for alopecia areata.*

Orphan Drug Designation
Devanand Jillapalli, MD • Office of Orphan Products Development, FDA, Silver Spring, MD

*Overview of FDA’s Orphan Drug Designation Program and qualification criteria for drug and disease.*

NIAMS Funding Opportunities
Ricardo R. Cibotti, PhD • National Institute of Arthritis and Musculoskeletal and Skin Diseases, Bethesda, MD

*A comprehensive review of current NIAMS funding opportunities to support clinical and basic research in alopecia areata.*

PCORI: Engaging Patients in Clinical Trials & Outcomes Research
Kara Odom Walker, MD, MPH, MSHS • Patient-Centered Outcomes Research Institute, Washington, DC

*Overview of the Patient-Centered Outcomes Research Institute (PCORI), how PCORI views Patient-Centered Outcomes Research and how this is related to PCORI’s major funding mechanisms.*

**DISCUSSION**

4:25 PM – 4:35 PM BREAK

4:35 PM – 5:00 PM Closing Session

**Meeting Summary, Outcomes and Action Plan**
Angela M. Christiano, PhD • Columbia University Medical Center, New York, NY

**ADJOURN**

5:00 PM – 7:00 PM Poster Dismantling

Posters that are not removed by the dismantling time will be discarded.
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