

***From Targets to Treatments: Bridging Autoimmune Research to Advance Understanding of Alopecia Areata***

**Alopecia Areata Research Summit  
Thursday, December 4 & Friday, December 5, 2014  
Hyatt Regency Bethesda, Maryland**

**Program**

**THURSDAY, DECEMBER 4<sup>TH</sup>**

Breakfast

7:30 AM – 8:00 AM

Session 1 – Introduction & Overview

8:00 AM – 8:50 AM

8:00 AM – 8:05 AM

Dory Kranz, NAAF; David A. Norris, MD; Julian Mackay-Wiggan, MD, MS; Jeffrey Frelinger, PhD

*Introduction*

8:05 AM – 8:15 AM

Steve Katz or Bob Carter, NIAMS

*Welcome*

8:15 AM – 8:35 AM

David A. Norris, MD

*Overview of alopecia areata and progress from preceding summits: what we have learned and where we are headed*

8:35 AM – 8:50 AM

Discussion (led by Dr. Norris)

Session 2 – Functional Genetics, Genomic Research & Rationally Selected Targets for Treatment

8:50 AM – 10:35 AM

Moderator: TBD

8:50 AM – 9:05 AM

Angela M. Christiano, PhD, Columbia University

*Alopecia areata GWAS studies: discoveries, connections and implications*

Ricardo Cibotti, NIAMS

*NIAMS funding opportunities: the critical role of a Registry in genomic research*

*Surprise award to Madeleine Duvic for Alopecia Areata Registry, Biobank and Clinical Trials Network*

9:10 AM – 9:25 AM

Julian Mackay-Wiggan, MD, PhD, Columbia University

*Clinical trials exploring the efficacy of rationally selected therapies in alopecia areata*

9:30 AM – 9:40 AM

**Speaker suggested by AARDA**

*Common drugs to treat autoimmune diseases*

9:45 AM – 9:55 AM

Ricardo R. Cibotti, PhD, NIAMS

*NIAMS funding opportunities: the critical role of a Registry in genomic research*

10:00 AM – 10:10 AM

Linda Wicker, PhD, CU Cambridge Institute for Medical Research

*Discovering genes that influence the development of type 1 diabetes and other autoimmune diseases*

10:15 AM – 10:25 AM

LTC Jon Meyerle, MD, Uniformed Services University of the Health Sciences

*The DOD Serum Repository: experience with melanoma and developing an approach for alopecia areata*

10:25 AM – 10:50 AM

Discussion

Break (All Posters Open for Viewing)

10:50 AM – 11:00 AM

Session 3 – Developing a Clinical Research Platform: Biomarkers, Early Detection & Prevention

11:00 AM –

Moderator: TBD

11:00 AM – 11:10 AM

Ali Jabbari, MD, PhD, Columbia University

*Update on alopecia areata biomarker studies*

11:15 AM – 11:25 AM

Thomas A. Waldmann, MD, NIH, NCI Cytokine Immunology

Or Raphael Clynes, MD, PhD, Columbia University

*Measurement of IL-15R alpha/IL-15 in patients with alopecia areata*

11:30 AM – 11:40 AM

Dennis Roop, PhD, University of Colorado

*Using alopecia areata patients' sera to identify antigens that are targets of alopecia areata patients' autoantibodies*

11:45 AM – 11:55 AM

Ralf Paus, MD, University of Luebeck

*Clonotype analysis of alopecia areata-specific CD8 T-lymphocytes*

12:00 PM – 12:10 PM

Gerald T. Nepom, MD, PhD, UW/Benaroya Research Institute/Immune Tolerance Network

*Molecular genetic mechanisms triggering autoimmune diseases and predicting response to therapy*

12:15 PM – 12:25 PM

Judith A. James, MD, PhD, University of Oklahoma

*Diagnostic and preventive research in other autoimmune diseases and development of detection algorithms for alopecia areata*

12:25 PM – 12:50 PM

Discussion

Lunch, Presentation, Networking & Discussion

12:50 PM – 1:30 PM

Director of the National Institutes of Health: Francis S. Collins, MD, PhD

*The Accelerating Medicines Partnership*

1<sup>st</sup> Backup: Anthony S. Fauci, MD, Director of NIAID

2<sup>nd</sup> Backup: Stephen I. Katz, MD, PhD, Director of NIAMS

Session 4 – Immunology & Autoimmunity: Implications for Future Alopecia Areata Research

1:30 PM – 3:20 PM

Moderator: TBD

1:30 PM – 1:40 PM

Noel Rose, MD, PhD, Johns Hopkins

*The importance of epitope mapping and epitope mimicry in autoimmune disease understanding and treatment development*

1:45 PM – 1:55 PM

Yehuda Shoenfeld, MD, PhD, Sheba Medical Center for Autoimmune Diseases

*Epitopes, autoimmunity, and infectious triggers*

2:00 PM – 2:10 PM

Timothy G. Behrens, MD, Genentech

*Bringing immunology to clinical relevance*

2:15 PM – 2:25 PM

Luis A. Diaz, MD, University of North Carolina

*Skin immunity and immunology*

2:30 PM – 2:40 PM

Kurt Griffin, MD, PhD, Sanford Research/University of South Dakota

*Immunology of type 1 Diabetes*

2:45 PM – 2:55 PM

Daniel Rotrosen, MD, Director of NIAID Division of Allergy, Immunology, and Transplantation (DAIT)

*Update on DAIT support, the Human Immune Phenotyping Centers and other resources*

2:55 PM – 3:20 PM

Discussion

Break (All Posters Open for Viewing)

3:20 PM – 3:30 PM

Session 5 – Evaluation of Animal Model Technologies and Implications for the Future

3:30 PM – 4:50 PM

Moderator: John P. Sundberg, DVM, PhD

3:30 PM – 3:40 PM

Yosef Rafaeli, PhD, University of Colorado

Or Amos Gilhar, MD, Technion Israel Institute of Technology

*Engineered mouse models: advantages and challenges of existing grafting model*

3:45 PM – 3:55 PM

Lishan Su, PhD, University of North Carolina

*Humanized mouse model to study immunopathogenesis and implications for alopecia areata*

4:00 PM – 4:10 PM

Richard A. Flavell, PhD, RFS, Yale

*Use of transgenic and gene-targeted mice to study innate and adaptive immunity*

4:15 PM – 4:25 PM

Jonathan W. Yewdell, MD, PhD, NIAID

*Understanding the interaction between the immune system and viruses using mouse infection models*

Backup: Thomas A. Wynn, PhD NIAID

*Transgenic and knockout mouse models to dissect the mechanisms of fibrosis*

4:25 PM – 4:50 PM

Discussion

Break (All Posters Open for Viewing)

4:50 PM – 5:00 PM

Session 6 – New Directions: Microbiome

5:00 PM – 6:00 PM

Moderator: TBD

5:00 PM – 5:10 PM

Yasmine Belkaid, PhD, NIAID

*Relationship of the skin and gut in the development and management of autoimmune and inflammatory diseases*

5:15 PM – 5:25 PM

David Artis, PhD, University of Pennsylvania

*Pathways that regulate innate and adaptive immune cell function*

5:30 PM – 5:40 PM

Lita M. Proctor, PhD, NHGRI

*The Human Microbiome Project*

5:40 PM – 6:00 PM

Discussion

Cocktails, Networking & Poster Presentations

6:00 PM – 6:45 PM

At this time, Drs. (names) will be present to answer questions at their poster displays which are available for viewing throughout the meeting.

Dinner & Presentation

7:00 PM – 7:50 PM

Maria Beckett

*The need for a treatment: a patient's perspective*

## **FRIDAY, DECEMBER 5<sup>TH</sup>**

Breakfast

7:30 AM – 8:00 AM

Session 7 – Understanding the Importance of Burden of Disease Studies and Assessing the Need for Alopecia Areata

8:00 AM – 9:25 AM

Moderator: TBD

8:00 AM – 8:10 AM

Rick Kittles, PhD, University of Illinois

*Studying race and genetic health disparities in autoimmune diseases*

8:15 AM – 8:30 AM

Mary-Margaret Chren, MD, UCSF

*What we know about alopecia areata epidemiology, burden of disease and natural history*

8:35 AM - 8:45 AM

Siobhán O'Connor, MD, MPH, CDC

*Infectious etiologies of chronic diseases: integrating laboratory science, epidemiology and surveillance to define causal links between recognized and novel infectious agents and chronic syndromes*

8:50 AM – 9:00 AM

Antonella Tosti, MD, University of Miami

*Alopecia areata and comorbid conditions*

9:00 AM – 9:25 AM

Discussion

Break (All Posters Open for Viewing)

9:25 AM – 9:40 AM

Session 8 - Engaging Biopharma in alopecia areata research

9:40 AM – 11:50 AM

Moderator: TBD

9:40 AM – 9:50 AM

James A. Solomon, MD, PhD, Ameriderm

*Uniform Alopecia Areata Clinical Trials Protocol*

9:55 AM – 10:05 AM

June Zhao, AstraZeneca

*Working alopecia areata into product life cycle management*

10:10 AM – 10:20 AM

Christopher P. Austin, MD, NCATS

*Lessons from NCATS about bridging academia and biopharmaceutical industry in service of research*

10:25 AM – 10:35 AM

Katherine Needleman, MS, PhD, RAC, FDA Orphan Grants Program

*Making the case that universalis and totalis are medically distinct from alopecia areata patchy and qualify for Orphan Drug Status*

10:40 AM – 10:50 AM

Maren T. Scheuner, MD, MPH, VA Health Services

*Engaging the nation's largest healthcare system (the VA) in alopecia areata clinical research*

10:55 AM – 11:05 AM

Janet Woodcock, MD, FDA CDER

*Clinical endpoints for disease, the FDA experience. PFDDI, process for autoimmune treatment review and potential to move alopecia areata from dermatology*

11:05 AM – 11:35 AM

Discussion

Break (All Posters Open for Viewing)

11:35 AM – 11:50 AM

11:50 AM – 12:50 PM

Lunch & Session 9: Group Breakouts

(Co-chairs meet to develop summary and future directions)

1. Immunology & autoimmunity  
Group Leader: Yewdell (Belkaid as backup)
2. Genetics & clinical research  
Group Leader: Gary Nepom (Rick Kittles or Luis Diaz as backup)
3. Animal models  
Group Leader: Lishan Su or Richard Flavell
4. Microbiome  
Group Leader: TBD
5. Epidemiology, natural history & burden of disease  
Group Leader: TBD

12:50 PM – 1:30 PM

Breakout Reports

1. Immunology & autoimmunity  
Group Leader: TBD
2. Genetics & clinical research  
Group Leader: TBD
3. Animal models  
Group Leader: TBD
4. Microbiome  
Group Leader: TBD
5. Epidemiology, natural history & burden of disease  
Group Leader: TBD

Break (All Posters Open for Viewing)

1:30 PM – 1:40 PM

Session 10 - Summary & Future Directions

1:40 PM – 2:45 PM

1:40 PM – 1:55 PM

David A. Norris, MD

*Meeting summary, outcomes and charting a course for future research*

2:00 PM – 2:15 PM

Jeffrey Frelinger, PhD

*Immunology and autoimmunity assignments and action plan*

2:20 PM – 2:35 PM

Julian Mackay-Wiggan, MD, MS

*Clinical assignments and action plan*

2:35 PM – 2:45 PM

Discussion

Keynote Address & Meeting Close

2:45 PM – 3:15 PM

Rear Admiral Boris D. Lushniak, MD, MPH

Acting United States Surgeon General