

FOCiS[®] 2017

CHICAGO JUNE 14-17

Precision in Immunology



SCIENTIFIC
PROGRAM





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Thank you to the FOCIS 2017 Travel Award Supporters:



Dear Colleagues,

Welcome to the 17th annual meeting of the Federation of Clinical Immunology Societies, FOCIS 2017. I am particularly excited about this year's meeting. The scientific program reflects the core tenets of FOCIS by bridging the gap between basic and clinical immunology and discussing novel translational therapies.

We value the participation of each of you who have touched FOCIS in one way or another over the past 17 years, and we hope that you will join us as we move into the future. FOCIS introduced individual membership in 2012, and I invite you to join FOCIS and collaborate with us to promote education, research and patient care around the theme of translational immunology. Memberships run on a calendar year basis and are available at the conference. At FOCIS 2017, membership also gains you exclusive access to a Members-only Lounge complete with a complimentary espresso bar as well as a festive Members-only Reception at Kitty O'Sheas on Thursday, June 16.

Please join me in extending my most heartfelt thanks to the members of the FOCIS 2017 Scientific Program Committee for their time, energy and expertise. I hope you enjoy the fruits of their labor – FOCIS 2017. Welcome to Chicago!



Sincerely,

Jeffrey Bluestone, PhD, FOCIS President
University of California, San Francisco

FOCIS 2017 SUPPORTERS

ACKNOWLEDGEMENTS:

FOCIS gratefully acknowledges the support that allows FOCIS to fulfill its mission to foster interdisciplinary approaches to both understand and treat immune-based diseases, and ultimately to improve human health through immunology.

EXHIBITORS:

- Arcus Biosciences**
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- Science Immunology**

MOBILE APP

Use your mobile phone/tablet to view the program, make a personal schedule, view the exhibits and much more!





FOCIS 2017 GENERAL INFORMATION

FOCIS 2017 PROGRAM COMMITTEE



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EVALUATIONS:

Daily online evaluations are available through the mobile app. Delegates will also receive an email reminder and link to the evaluations daily during the meeting. Delegates are asked to complete an evaluation for each session attended. If you are eligible for a travel award, you must complete the evaluations before receiving a reimbursement.

CME CERTIFICATES AND CERTIFICATES OF ATTENDANCE:

In the past, FOCIS has made it possible for meeting participants to obtain CME credit for attending the annual meeting. In order to enable all those involved in the research and treatment of immune-mediated diseases to participate in the exchange of ideas that contribute to the forward motion of the field, FOCIS will not offer CME credit for FOCIS 2017. Certificates of attendance will be available upon request.

EXHIBIT HALL HOURS:

Located in Stevens Salon A (lower level)
Wednesday, June 14 4:00 pm – 7:45 pm
Thursday, June 15 8:00 am – 7:00 pm
Friday, June 16 8:00 am – 7:30 pm

POSTER HALL HOURS:

Located in Stevens Salon A (lower level)
Wednesday, June 14 4:00 pm – 7:45 pm
Thursday, June 15 8:00 am – 7:00 pm
Friday, June 16 8:00 am – 7:30 pm

POSTER SET-UP AND TAKE-DOWN HOURS:

Wednesday, June 14	Set-up:	12:00 pm – 12:45 pm
	Take-down:	7:45 pm – 8:00 pm
Thursday, June 15	Set-up:	7:00 am – 8:00 am
	Take-down:	7:00 pm – 7:15 pm
Friday, June 16	Set-up:	7:00 am – 8:00 am
	Take-down:	7:30 pm – 7:45 pm

REGISTRATION AND SPEAKER CHECK-IN HOURS:

Located in Normandie Lounge (2nd Floor)
Tuesday, June 13 1:00 pm – 5:00 pm
*FOCISed Course Registration Located on 3rd Floor (7:00 am – 12:00 pm) - Williford Foyer
Wednesday, June 14 7:00 am – 5:00 pm
Thursday, June 15 7:00 am – 5:00 pm
Friday, June 16 7:00 am – 5:00 pm

SPEAKERS:

Speakers are asked to report to the speaker check-in area located at the Registration Desk (Normandie Lounge, 2nd Floor) of the Hilton Chicago Hotel at least 24 hours prior to the start of their session.

PHOTOGRAPHY POLICY:

Please refrain from photography in the sessions and poster hall.

RELEASE:

Registration and attendance at, or participation in, FOCIS meetings and other activities constitutes an agreement by the registrant to FOCIS' use and distribution (both now and in the future) of the registrant or attendee's image or voice in photographs, videotapes, electronic reproductions and audio tapes of such events and activities.

You're Invited to join FOCIS



Member Perks at FOCIS 2017

Grow your network

Member Lounge

Normandie Lounge
open daily during FOCIS 2017

Work, relax and mingle

Member Reception

Kitty O'Sheas
Thursday, June 15, 7:00 - 8:00 p.m.

Join FOCIS
at the Registration Desk



**Advanced Course in Basic
& Clinical Immunology**

February 18-21, 2018

The Scott Resort & Spa
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FOCIS



SCIENTIFIC PROGRAM

Tuesday, June 13

7:00 am – 12:00 pm

FOCISed Course Registration Open

Williford ABC Foyer (3rd Floor)

8:00 am – 5:15 pm

Basic Immunology in Medicine: Update 2017

(separate registration required)

Williford A (3rd Floor)

7:30 am – 4:30 pm

Computational Immunology Course

(separate registration required)

Williford C (3rd Floor)

1:00 pm – 5:00 pm

Registration Desk Open

Normandie Lounge (2nd Floor)



Wednesday, June 14

7:00 am – 5:00 pm

Registration Desk Open

Normandie Lounge (2nd Floor)

7:30 am – 5:00 pm

Cancer Immunity and Immunotherapy Course

(separate registration required)

Stevens Salon A-5 (lower level)

Member Society Symposia

(included in FOCIS 2017 registration)

8:00 am – 10:00 am

IL-1b in Health and Disease

Organized by the Canadian Society for Immunology (CSI)

Stevens Salon A-1 (lower level)



sitc
Society for Immunotherapy of Cancer

CANADIAN SOCIETY FOR IMMUNOLOGY

8:00 am **Overview on IL-1beta in Health and Autoinflammatory Disease**

Kelly Brown, PhD, University of British Columbia

8:30 am **Clinical Phenotypes of Autoinflammatory Diseases**

Rosie Scuccimarrì, MD, McGill University

9:00 am **Regulation of Inflammation During Ontogeny**

Pascal Lavoie, MD, PhD, University of British Columbia

9:30 am **Inflammasomes and Cell Death Pathways in Inflammatory Diseases and Cancer**

Maya Saleh, PhD, McGill University

8:00 am – 12:00 pm

Cytokines and Interferons in Basic and Clinical Immunology: Reports from the ICIS

Organized by the International Cytokine and Interferon Society

Stevens Salon A-2 (lower level)

ICIS International Cytokine & Interferon Society

8:00 am **Welcome and Introductions**

Curt M. Horvath, PhD, Northwestern University

8:10 am **Clinical Development of Cancer Immuno-therapeutics Targeting Chemokine Receptors and T Cells**

Kouji Matsushima, MD, PhD, University of Tokyo

8:35 am **The Pro-Inflammatory Cytokine Response in Necrotizing Enterocolitis**

Misty Good, MD, MS, Washington University

9:00 am **IL-17A Controls Expression of IL-17 Lineage Cytokines through a Negative Feedback Loop Involving IL-24, and Limits Autoimmune Disease**

Rachel R. Caspi, PhD, National Institutes of Health

9:25 am **Description of the IFN Receptor Pathway Signaling and Its Relevance to Cancer**

Leonidas C. Platanias, MD, PhD, Northwestern University

10:00 am Coffee Break

10:30 am **Highly Disregulated Type I IFN System in Multiple Sclerosis**

Anthony T. Reder, University of Chicago

10:55 am **Specific Detection of IFN α and IFN β Signaling Complexes on Human Cells**

Mark R. Walter, PhD, University of Alabama at Birmingham

11:20 am **Negative Regulation of Type I IFN Signaling by Phosphorylation of STAT2 on T387**

Yuxin Wang, PhD, Cleveland Clinic Foundation

11:45 am Closing Remarks

8:00 am – 12:00 pm

Monitoring Immunotherapy in Cancer

Organized by the Italian Society of Immunology, Clinical Immunology and Allergology (SIICA)

Stevens Salon C-1 (lower level)



8:00 am **Immune Monitoring in Cancer: What Did We Learn from Animal Models?**

Gilberto Filaci, PhD, Università degli Studi di Genova

9:00 am **How Easy Can We Detect Markers of Immune Response in Cancer? A Single Center Experience in NSLC Patients Undergoing Therapy with Anti-immune Checkpoint Drugs**

Raffaele De Palma, MD, PhD, Second University of Naples

10:00 am **28-Color, 30-Parameter Flow Cytometry to Dissect the Complex Heterogeneity of Tumor Infiltrating Lymphocytes in Human Cancer**

Enrico Lugli, PhD, Humanitas

11:00 am **Effectively Rendering Functional Single Cell Immune Monitoring Assays Ready for Use in Clinical Trials**

Sylvia Janetzki, MD, ZellNet Consulting



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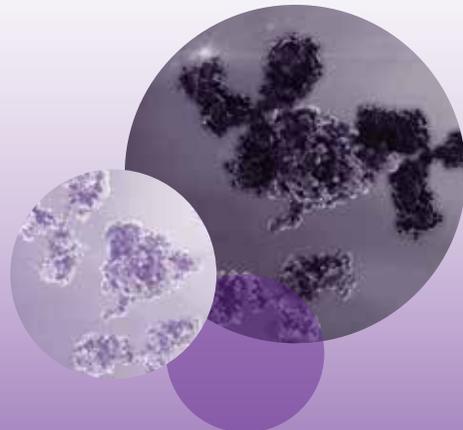
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SCIENTIFIC PROGRAM

Wednesday, June 14 (continued)

8:00 am – 12:00 pm

Translational Immunology at the NIH: A Look at the Future Organized by the National Institutes of Health Immunology Interest Group (IIG)

Stevens Salon C-2 (lower level)



8:00 am The Coming of Age of JAK Inhibitors: From Targets to Treatments

Massimo Gadina, PhD, National Institutes of Health

8:30 am An Immunodeficiency and Autoimmunity Disease Caused by Mutations in BACH2

Behdad Afzali, PhD, National Institutes of Health

9:00 am Altered Dendritic Cell Function in Autoimmune Diabetes

Kristin Tarbell, PhD, National Institutes of Health

9:30 am IL-18 at the Intersection of Auto- and Hyper-inflammation

Scott Canna, MD, National Institutes of Health

10:00 am Coffee Break

10:15 am Primary Biliary Cholangitis: The Dark Side of Interferon-gamma

Howard Young, PhD, National Institutes of Health

10:45 am Application of Heterodimeric IL-15 Cytokine in Cancer Immunotherapy

Cristina Bergamaschi, PhD, National Cancer Institute

11:15 am The γ_c Family of Cytokines: Immunodeficiency, STAT Tetramerization, and the Fine-tuning of Cytokine Signals

Warren Leonard, MD, National Institutes of Health

The AMP RA/Lupus Network: Deconstructing RA and SLE Through Single Cell Analysis

Organized by the Accelerating Medicines Partnership (AMP)

Stevens Salon C-3 (lower level)



8:00 am Approach and Goals of the RA/Lupus Network

Michael Brenner, MD, Brigham and Women's Hospital

8:15 am Developing Standard Operating Procedures for RA Target Tissue Processing and Analysis Across the Network

Deepak Rao, MD, PhD, Brigham and Women's Hospital

8:30 am Patient Selection for RA Phase 1 and Synovial Biopsy Program

Jennifer Anolik, MD, PhD, University of Rochester

8:50 am CyTOF as an Approach for Deconvolution of Immune Cell Infiltrates in the Synovium and Blood

Jim Lederer, PhD, Brigham and Women's Hospital

9:10 am Insights into RA Pathogenesis from Single Cell Transcriptomics of Synovial Tissue

Kamil Slowikowski, Harvard University

9:40 am Integrating Immune Insights Learned from Phase 1 and Anticipating Technical and Clinical Approaches for RA AMP Phase 2

Michael Brenner, MD, Brigham and Women's Hospital

10:00 am Coffee Break

10:15 am Developing Standard Operating Procedures for SLE Target Tissue Processing and Analysis Across the Network

Celine Berthier PhD, University of Michigan

10:30 am Patient Selection and Characteristics for SLE Phase 1

Jill Buyon MD, New York University

10:45 am Insights from Comparison of the Renal and Skin Single Cell Transcriptome in SLE

Jill Buyon MD, New York University
Tom Tuschl, PhD, Rockefeller University

11:15 am Cellular and Molecular Heterogeneity in Lupus Nephritis

Arnon Arazi, PhD, Broad Institute

11:45 am Integrating Immune Insights Learned from Phase 1 and Anticipating Technical and Clinical Approaches for SLE AMP Phase 2

Deepak Rao, MD, PhD, Brigham and Women's Hospital

8:00 am – 12:00 pm

Exosomes and Cross-presentation in Transplantation

Organized by the American Society for Transplantation, The Transplantation Society, and American Society for Histocompatibility and Immunogenetics

Stevens Salon C-4 (lower level)



8:00 am Apoptosis in Exosome Generation

Marie Josée Herbert, PhD, University of Montreal

8:30 am Transfer of Donor Exosomes: A Novel System to Promote Allo-reactivity in Transplantation

Adrian Morelli, MD, PhD, University of Pittsburgh

9:00 am Tissue Specific Exosomes as Biomarkers

Prashanth Vallabhajosyula, MD, University of Pennsylvania

9:30 am Exosomal Profiling in Lung Transplantation

Thalachallour Mohanakumar, PhD, St. Joseph's Hospital and Medical Center

PLEASE JOIN US

on Thursday, June 15, 2017

To honor this year's

Lupus Insight Prize recipient

Lunch will be served

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The Lupus Research Alliance unites the global lupus community in bold determination to free the world of lupus through the power of science.

We will transform the lives of people affected by lupus as we welcome and embrace a new scientific era, pioneer innovation, push the frontiers of knowledge, enlist diverse new scientific talent, and lead the drive to new treatments, prevention and cure.



SCIENTIFIC PROGRAM

Wednesday, June 14 (continued)

12:00 pm – 2:00 pm

FOCIS Centers of Excellence Fusion: Careers. Collaboration. Connection.

(Invitation Only)

Boulevard AB (2nd Floor)

12:45 pm – 4:45 pm

Type I Interferon Pathogenic Mediator and Therapeutic Target

Organized by the American College of Rheumatology (ACR)

Stevens Salon A-1 (lower level)



12:45 pm **Plasmacytoid Dendritic Cells – Regulation and Role in Autoimmune Disease Pathogenesis**

Boris V. Reizis, PhD, Columbia University

1:30 pm **Immune Dysfunction and Tissue Pathology Mediated by Type I Interferon: Studies in Murine Lupus Models**

Dwight H. Kono, MD, The Scripps Research Institute

2:15 pm **Type I Interferon in the Immunopathogenesis of Chronic Virus Infection**

David G. Brooks, PhD, University of California, Los Angeles

3:00 pm Coffee Break

3:30 pm **Type I Interferons in Inflammatory Myopathies**

Steven A. Greenberg, MD, Brigham and Women's Hospital

4:15 pm **Opportunities for Therapeutic Targeting of Type I Interferon**

Mary K. Crow, MD, Hospital for Special Surgery

12:45pm – 5:00 pm

Update on Animal Models and Pre-clinical Targets for Immune Mediated Uveitis

Organized by the American Uveitis Society (AUS)

Stevens Salon A-2 (lower level)



12:45 pm **Introduction and Welcome**

12:50 pm **Mirroring the Clinical and Immunological Complexity of Autoimmune Uveitis in Animal Models**

Rachel Caspi, PhD, National Institutes of Health

1:15 pm **The Role for PD-1 in Experimental Autoimmune Uveitis**

Lynn Gordon, MD, PhD, University of California, Los Angeles

1:40 pm **Dysregulation of Innate Pathways in Ocular Autoimmunity**

Holly Rosenzweig, PhD, Oregon Health and Science University

2:05 pm **Ontogeny and Characterization of Eye Macrophages in Health and Disease**

Daniel Saban, PhD, Duke University

2:25 pm

Multimodal Non-invasive for Quantitative Assessment of Inflammation in Animal Models of Uveitis

Kathryn Pepple, MD, PhD, University of Washington

2:50 pm

Coffee Break

3:20 pm

Chasing Immune Cells in the Eye: From Mouse to Man

Colin Chu, PhD, University of Bristol

3:45 pm

Therapeutic Targeting of Pathogenic Lymphocytes that Mediate Uveitis

Charles Egwuagu, PhD, MPH, National Institutes of Health

4:10 pm

Predicting the Future of Uveitis Treatment: Top Targets and Therapies on the Horizon

Phoebe Lin, MD, PhD, Casey Eye Institute

4:45 pm

Panel Discussion

12:45 pm – 4:45 pm

Molecular Signatures: Providing Clues for Management and Therapy in Transplantation, Autoimmune Disease and Cancer

Organized by the Association of Medical Laboratory Immunologists (AMLI) and the American Society for Histocompatibility and Immunogenetics (ASHI)

Stevens Salon C-1 (lower level)



12:45 pm

Introduction

Barbara Detrick, PhD, Johns Hopkins University

12:55 pm

Biomarkers of Transplant Injury

Elaine Reed, PhD, University of California, Los Angeles

1:30 pm

Gene Expression Profiling of the Tumor Microenvironment as a Biomarker for Anti-tumor Immunity

Thomas F. Gajewski, MD, PhD, University of Chicago

2:05 pm

New Molecular Markers for Type 1 Diabetes

Martin J. Hessner, PhD, Medical College of Wisconsin

2:40 pm

Antibodies and Graft Injury

Chris Wiebe, MD, University of Manitoba

3:15 pm

Coffee Break

3:30 pm

Dendritic Cell Based Immunotherapy in Cancer

Willie Hildebrand, PhD, University of Oklahoma

4:05 pm

Strategies for Therapy in SLE and RA Based on Laboratory Evaluation of the Interferons

Timothy B. Niewold, MD, Mayo Clinic

12:45pm – 3:30 pm

Immune Cells as Therapies

Organized by the American Society for Blood and Marrow Transplantation (ASBMT) and the Center for International Blood and Marrow Transplant Research (CIBMTR)

Stevens Salon C-2 (lower level)





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SCIENTIFIC PROGRAM

Wednesday, June 14 (continued)

- 12:45 pm Introduction**
Marcela Maus, MD, PhD, Massachusetts General Hospital
- 1:00 pm Update on CD19 CAR T Cells in B Cell Malignancies**
Stephen Grupp, MD, PhD, Children's Hospital of Philadelphia
- 1:30 pm CAR T Cells in Non-B Cell Hematologic Malignancies**
Marcela Maus, MD, PhD, Massachusetts General Hospital
- 2:00 pm CAR T Cells in Solid Tumors**
Prasad Adusumilli, MD, Memorial Sloan Kettering Cancer Center
- 2:30 pm Managing Complications of CAR T Cell Therapies**
Sarah Nikiforow, MD, PhD, Dana Farber Cancer Institute
- 3:00 pm Panel Discussion**

12:45pm – 4:45 pm

Insights into the Immunology of Chronic Fatigue Syndrome

Organized by the Division of Allergy, Immunology & Transplantation, National Institute of Allergy and Infectious Diseases, National Institutes of Health
Stevens Salon C-3 (lower level)

- 12:45 pm Welcome and Objectives**
Joseph Breen, PhD, National Institutes of Health and Vicky Whittemore, PhD, National Institute of Neurological Disorders and Stroke

- 12:50 pm The Public Health Problem of ME/CFS**
Elizabeth Unger, MD, Centers for Disease Control and Prevention

- 1:15 pm Evidence of T Cell Activity in ME/CFS**
Mark Davis, PhD, Stanford University

- 1:45 pm Immunological Characterization of ME/CFS Cases and Controls from the UK ME/CFS Biobank**
Eleanor Riley, PhD, University of London

- 2:35 pm Coffee Break**

- 2:55 pm Pathobiology of ME/CFS**
Ian Lipkin, MD, Columbia University

- 3:35 pm Circulating Cytokine Signatures Associated with ME/CFS Severity and Duration**
Jose Montoya, MD, Stanford University

- 4:15 pm Question/Answer Forum**

5:30 pm – 6:15pm

Opening Keynote Address: Tracking the Fate of Natural Killer Cells During Viral Infection

Lewis Lanier, PhD, University of California, San Francisco
Grand Ballroom (2nd Floor)

Chair: Jeffrey Bluestone, PhD, University of California, San Francisco



6:15 pm – 7:45 pm

Opening Reception

Stevens Salon A (lower level)

Network with attendees while visiting exhibits and posters with authors present. Complimentary hors d'oeuvres and wine served.

Thursday, June 15

7:00 am – 5:00 pm

Registration Desk Open

Normandie Lounge (2nd Floor)

8:00 am – 5:45 pm

Posters Available for Viewing (authors optional)

Stevens Salon A (lower level)

8:00 am – 9:30 am

T Cell Subsets and Their Responses to Pathogens and Autoantigens

Grand Ballroom (2nd Floor)

Chair: Elaine Reed, PhD, University of California, Los Angeles

- 8:00 am Energy Induction in Self-reactive CD4 T-Cells Generates FoxP3+ Treg Progenitors**

Daniel Mueller, MD, University of Minnesota

- 8:30 am T Cell and Innate Subsets in Chronic Immune Mediated Disease**

Vijay Kuchroo, PhD, Brigham and Women's Hospital

- 9:00 am Is Narcolepsy an Autoimmune Disease?**

Federica Sallusto, MD, Institute for Research in Biomedicine

9:30 am – 10:00 am

Networking Break

Stevens Salon A (lower level)

10:00 am – 11:30 am

Fueling the Immune Response

Grand Ballroom (2nd Floor)

Chair: Angela Colmone, PhD, Science Immunology

- 10:00 am Understanding the Crosstalk Between Lipid Metabolism and Innate Immunity**

Steven Bensinger, MD, PhD, University of California, Los Angeles

- 10:30 am Fueling T Cell in Immunity**

Jeff Rathmell, PhD, Vanderbilt University

- 11:00 am Immunometabolism of Regulatory T Cells**

Laurence Turka, MD, Harvard University

11:30 am – 1:00 pm

Lunch Break

Delegates on their own for lunch

11:45 am – 1:00 pm

Biologend Industry Workshop

Stevens Salon A-1 (lower level)

Beckman Coulter Industry Workshop

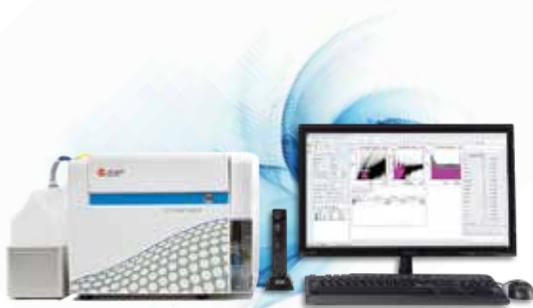
Stevens Salon A-5 (lower level)



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Thursday, June 15 (continued)

11:45 am – 1:00 pm

Lupus Insight Prize Award

Presented by the Lupus Research Alliance

Boulevard AB (2nd Floor)



1:00 pm – 2:45 pm

Strategies for Antigen Specific Tolerance

Stevens Salon A-1 (lower level)

Chair: Daniel Rotrosen, MD, National Institutes of Health

1:00 pm **Next Generation Regulatory T Cell Therapy**

Megan Levings, PhD, University of British Columbia

1:25 pm **Abstract Presentation: Transient Antibody Targeting of CD45RC Induces Transplantation Tolerance and Potent Donor Antigen-specific Regulatory Cells (Poster # T.83)**

Ignacio Anegón, MD, Nantes University

1:40 pm **Antigen-based Immunotherapy for Type 1 Diabetes**

Mark Peakman, PhD, King's College London

2:05 pm **Abstract Presentation: The Effects of Oral Insulin in Individuals at Risk of Type 1 Diabetes: A TrialNet Randomized Clinical Trial (Poster # T.68)**

Carla Greenbaum, MD, Benaroya Research Institute

2:20 pm **Antigen-specific Tolerance in Allergic Disease**

Mark Larche, PhD, McMaster University

1:00 pm – 2:45 pm

Macrophage Subsets in Normal and Abnormal Human Immune Function

Stevens Salon A-2 (lower level)

Chair: Tim Niewold, MD, Mayo Clinic

1:00 pm **Macrophages in Tissue Repair, Regeneration, and Fibrosis**

Thomas A. Wynn, PhD, National Institute of Allergy and Infectious Diseases

1:25 pm **Abstract Presentation: Hematoma-infiltrating Macrophages Transition from Inflammatory to Reparative Programs in Intracerebral Hemorrhage Patients (Poster # T.58)**

Michael Askenase, PhD, Yale University

1:40 pm **Modulation of Innate Immune Receptor Outcomes in Human Disease**

Clara Abraham, MD, Yale University

2:05 pm **Abstract Presentation: Cross-talk Between MS Disease-relevant B Cell Subsets and Microglia/macrophage: Implication in MS Disease Progression (Poster # T.4)**

Hanane Touil, PhD, McGill University

2:20 pm **Epigenetics of Tissue Resident Macrophages in Health and Disease**

Christopher Glass, MD, PhD, University of California, San Diego

1:00 pm – 2:45 pm

Microbiome/Immune Interactions

Stevens Salon A-5 (lower level)

Chair: Alexander Chervonsky, MD, PhD, University of Chicago

1:00 pm **Microbiota and Cancer**

Laurence Zitvogel, MD, PhD, Institut Gustave Roussy

1:25 pm **Abstract Presentation: A Human Gut Commensal as a Cross-reactive Trigger of Autoantigen-specific CD4+ Memory T Cells in Antiphospholipid Syndrome (Poster # T.28)**

Carina Dehner, MD, Yale University

1:40 pm **Influence of Microbial Metabolites on Disease Pathogenesis**

Thaddeus Stappenbeck, MD, PhD, Washington University

2:05 pm **Abstract Presentation: Bacterial Dysbiosis Associates with Functional Intraepithelial Lymphocyte Changes in Inflammatory Bowel Disease and Spondyloarthritis (Poster # T.29)**

Neha Ohri, MD, MS, Mount Sinai Hospital

2:20 pm **Regulation of Allergic Responses to Food by Commensal Bacteria**

Cathryn Nagler, PhD, University of Chicago

2:45 pm – 3:00 pm

Networking Break

Stevens Salon A (lower level)

3:00 pm – 4:45 pm

Oral Abstract Sessions

Environmental Effects on the Immune System

Stevens Salon A-1 (lower level)

Chair: James Lord, MD, PhD, Benaroya Research Institute

3:00 pm **Metabolite Regulation of Human T Cell Immunity (Poster # T.45)**

Maria Matias, MSc, University of Montpellier

3:13 pm **Molecular and Cellular Mechanisms for B Cell Defects in Elderly and Obese Subjects (Poster # T.49)**

Bonnie Blomberg, PhD, University of Miami, James Lord, MD, PhD, Benaroya Research Institute

3:26 pm **Aging of Adaptive Immunity Driven by Chronic Antigen Exposition has a Major Impact on the Course of Regenerative Processes Which are Overlooked in Our Commonly Used Mouse Models (Poster # T.50)**

Hans-Dieter Volk, Charité University

3:39 pm **Comparison of IgA+ Plasma Cells in the Intestinal Mucosa Compartment Versus the Periphery in a Healthy Kenyan Cohort (Poster # T.46)**

Tian Sun, University of Toronto

3:52 pm **Autophagic Memory in Stress Experienced Human T Cells (Poster # T.27)**

Pavanish Kumar, PhD, SingHealth Translational Immunology and Inflammation Centre



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SCIENTIFIC PROGRAM

Thursday, June 15 (continued)

- 4:05 pm** **Distinct Role of Estrogen Receptor α Agonist and Antagonist on Urinary Tract Infection Outcome in Bladder Versus Kidney (Poster # T.44)**
Ayantika Sen, MS, Oklahoma State University
- 4:18 pm** **Gut-derived TNF as Risk Factor for the Development of Sacroiliac Inflammation (Poster # T.18)**
Karlijn Debusschere, DVM, Ghent University
- 4:31 pm** **Tolerance Induction by Teplizumab is Modulated by Gut Microbiota (Poster # T.32)**
Elke Gulden, PhD, Yale University
- 3:00 pm – 4:45 pm**
Cellular Mechanisms in Autoimmunity
Stevens Salon A-2 (lower level)
Chair: Jonathan Maltzman, MD, PhD, Stanford University
- 3:00 pm** **The Paracaspase MALT1 Plays a Central Role in the Pathogenesis of Rheumatoid Arthritis (Poster # T.16)**
Elisabeth Gilis, MSc, Ghent University
- 3:13 pm** **Unaffected Relatives of Systemic Lupus Erythematosus (SLE) Patients are Discerned by Soluble Mediators, Autoantibodies, and Connective Tissue Disease Questionnaire Scores from SLE Patients and Controls in a Confirmatory Cohort (Poster # T.37)**
Melissa Monroe, MD, PhD, Oklahoma Medical Research Foundation
- 3:26 pm** **B Cell Specific TLR9 Modulates Disease in Murine Lupus (Poster # T.20)**
Jeremy Tilstra, MD, PhD, University of Pittsburgh
- 3:39 pm** **Role and Regulation of CD11chi T-bet+ B Cells in SLE (Poster # T.41)**
Shu Wang, Medimmune LLC
- 3:52 pm** **Myositis from Mouse to Man: New Insight from a Unique Experimental Paradigm (Poster # T.19)**
Olivier Boyer, Inserm U1234
- 4:05 pm** **T Cell Recognition of Hybrid Insulin Peptides in Human Subjects with Type 1 Diabetes (Poster # T.78)**
David Arribas-Layton, MS, Benaroya Research Institute
- 4:18 pm** **Broad Repertoire of Autoreactive T Cells from the Islets of Donors with Type 1 Diabetes (Poster # T.79)**
Sally Kent, PhD, University of Massachusetts
- 4:31 pm** **Identification and Functional Characterization of T Cell Reactive to Citrullinated Tenascin-C in HLA-DRB1*0401-Positive Rheumatoid Arthritis Patients (Poster # T.17)**
Jing Song, Benaroya Research Institute

- 3:00 pm – 4:45 pm**
Therapeutic Immunomodulation
Stevens Salon A-5 (lower level)
Chairs: Amit Bar-Or, MD, University of Pennsylvania
- 3:00 pm** **Modulating IL-6/STAT3 Signaling Pathway for Multiple Sclerosis Therapy (Poster # T.4)**
Saba Aqel, BS, Ohio State University
- 3:15 pm** **Interleukin-34, a New and Potent Regulatory Cytokine Involved in Treg Function and Transplant Tolerance (Poster # T.88)**
Carole Guillonneau, PhD, Nantes University
- 3:30 pm** **Selective Expansion of PD-1+TIGIT+ CD4 T Cells Following Depletion of CD2high Cells with Alefacept in Recent Onset T1D (Poster # T.74)**
Duangchan Suwannasaen, PhD, Benaroya Research Institute
- 3:45 pm** **Perturbations within the T Cell Immunome in Polyarticular Juvenile Idiopathic Arthritis Patients Who Relapse Upon Withdrawal of Biologic Therapy (Poster # T.26)**
Jing Yao Leong, PhD, Singapore Health Services Pte Ltd
- 4:00 pm** **Complement C1q Limits Osteoarthritis Pathology by Regulating Macrophage Activation (Poster # T.25)**
Bryan Cannon, MSc, Stanford University
- 4:15 pm** **Initial Data from a Phase 2 Multiple Ascending Dose Clinical Trial of SEL-212 Indicates That the Addition of Tolerogenic Nanoparticles to Pegylated Uricase Enables Sustained Control of Serum Uric Acid in Symptomatic Gout Patients (Poster # T.65)**
Earl Sands, MD, Selecta Biosciences
- 4:30 pm** **T Cell Immunotherapies Trigger Innate Immunity and Aseptic Inflammation Leading to Potent Anti-tumor and Off-targets Effects (Poster # T.53)**
Daniel Hirschhorn Cymerman, PhD, Memorial Sloan Kettering Cancer Center
- 3:00 pm – 5:00 pm**
Principles of Flow Cytometry for Immune Monitoring Course
Boulevard AB (2nd Floor)
Co-Sponsored by NIAID's Development of Sample Sparking Assays Program
- Panel Discussion: Standard Guidelines for Flow Cytometry Gating*
Panelists: Janet Staats, BS, Duke University
Anagha Divekar, PhD, Biologend, Inc.
J. Philip McCoy, PhD, National Institutes of Health
Holden Maecker, PhD, Stanford University
- 5:00 pm – 5:05 pm**
Presentation of the FCE Fusion Award
Grand Ballroom (2nd Floor)
Megan Levings, PhD, University of British Columbia



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SCIENTIFIC PROGRAM

Thursday, June 15 (continued)

5:05 pm – 5:10 pm

Presentation of the C. Garrison Fathman Fellows Fund Trainee Travel Award

Grand Ballroom (2nd Floor)

Megan Levings, PhD, University of British Columbia

5:00 pm – 5:55 pm

Keynote Address: Dissecting the Tumor Ecosystem with Single Cell Genomics

Aviv Regev, PhD, Broad Institute

Grand Ballroom (2nd Floor)

Chair: Maria-Grazia Roncarolo, MD, Stanford University

5:55 pm – 7:00 pm

Exhibits and Poster Reception

Stevens Salon A (lower level)

Network with attendees while visiting exhibits and posters with authors present. Complimentary hors d'oeuvres and wine served.

7:00 pm – 8:00 pm

FOCIS Member Reception (FOCIS members only)

Kitty O'Sheas (lobby level)

Join us for hors d'oeuvres, drinks and fun! Let FOCIS show you how much we value you!

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Congratulations!

Elisabeth Gilis, Ghent University

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Friday, June 16

7:00 am – 5:00 pm

Registration Open

Normandie Lounge (2nd Floor)

7:30 am – 6:15 pm

Posters Available for Viewing

(authors optional)

Stevens Salon A (lower level)

8:00 am – 9:30 am

Cancer Immunotherapy: Have We Reached a Checkpoint or the End?

Grand Ballroom (2nd Floor)

Chair: Arlene Sharpe, MD, PhD, Harvard University

8:00 am

Anti-PD-1 in Cancer Immunotherapy: State of the Art and What Lies Ahead

Suzanne Topalian, MD, Johns Hopkins University

8:30 am

Immune Checkpoint Blockade in Cancer Therapy: New Insights and Opportunities

James Allison, PhD, MD Anderson Cancer Center

9:00 am

Measuring the T-Cell Repertoire in Checkpoint Inhibitor-induced Cancer Regression

Drew Pardoll, MD, PhD, Johns Hopkins University

9:30 am – 10:00 am

Networking Break

Stevens Salon A (lower level)

9:55 am – 10:00 am

Scientific Program Committee Awards Presentation

Grand Ballroom (2nd Floor)

10:00 pm – 11:30 pm

Genomics in Health and Disease

Grand Ballroom (2nd floor)

Chair: Ignacio Anegon, MD, Nantes University

10:00 am

Identification of New Syndromic Forms of Severe Combined Immune Deficiency

Luigi Notarangelo, MD, National Institutes of Health

10:30 am

Genomic Analyses of Primary Immunodeficiencies Yield Precision Medicine Treatments

Michael J. Lenardo, MD, National Institute of Allergy and Infectious Disease

11:00 am

Genetic and Genomic Approaches to Asthma Gene Discovery

Carole Ober, PhD, University of Chicago

11:30 am – 1:00 pm

Lunch Break

Delegates on their own for lunch

11:45 am – 1:00 pm

Lunch Programs

NIH Grant Applications: Common Pitfalls and Tips for Writing Successful Applications

Stevens Salon A-1 (lower level)

Rising Stars Showcase Symposium

Stevens Salon A-5 (lower level)

Chairs: Angela Colmone, PhD, Science Immunology and Priscilla Kelly, PhD, Science

11:45 am

The Role of Baff3 DC in the Recruitment of Tumor-specific Effector T Cells

Stefani Spranger, PhD, Massachusetts Institute of Technology

12:00 pm

Human CD8+CD45RClowFoxp3+ Tregs with High Tolerogenic Activity in Humanized Mice and Defined Alloantigen Specificity

Carole Guillonueau, PhD, Université de Nantes

12:15 pm

IL-33 and ST2: Therapeutic Targets and Emerging Biomarkers in Solid Organ and Bone Marrow Transplantation

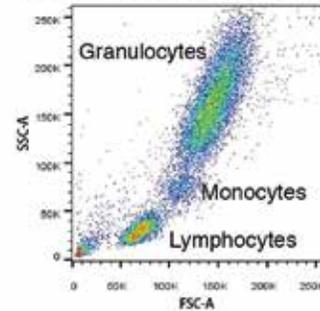
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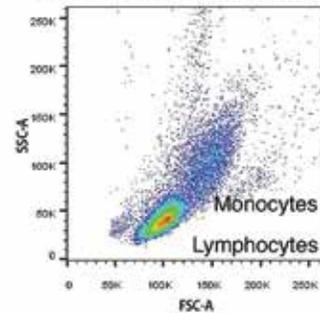
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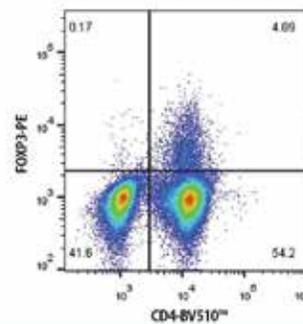
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SCIENTIFIC PROGRAM

Friday, June 16 (continued)

12:30 pm **Massively Multiplexed Single Cell Analysis in Human Immune Homeostasis**
Seth Bendall, PhD, Stanford University

1:00 pm – 2:45 pm

Alarmins as Immune Targets

Stevens Salon A-1 (lower level)

Chair: Megan Sykes, MD, Columbia University

1:00 pm **Environmental Effects on Immunity and Asthma and Atopy Risk: Lessons from Amish and Hutterite Farm Children**
Anne Sperling, PhD, University of Chicago

1:25 pm **Abstract Presentation: Expression and Regulation of Amphiregulin in Human Regulatory T Cells (Poster # F.20)**
Avery Lam, PhD, University of British Columbia

1:40 pm **Neutrophils as Players and Therapeutic Targets in Systemic Autoimmunity**
Mariana Kaplan, MD, National Institute of Arthritis and Musculoskeletal and Skin Diseases

2:05 pm **Abstract Presentation: Increased Levels of Sputum Antibodies to a Subset of Citrullinated Peptide Antigens Correlate with Sputum Neutrophil Extracellular Trap Levels in Subjects At-risk for Future RA (Poster # F.11)**
Kristen Demoruelle, MD, University of Colorado

2:20 pm **Coincident Detection Mechanism in Tissue Repair Responses**
Carla Rothlin, PhD, Yale University

1:00 pm – 2:45 pm

Genetic & Epigenetic Control of Immune Responses

Stevens Salon A-2 (lower level)

Chair: David A. Hafler, MD, Yale University

1:00 pm **ATAC-ing Gene Regulatory Variation in the Blood**
William Greenleaf, PhD, Stanford University

1:25 pm **Abstract Presentation: Exhaustion-associated de Novo DNA Methylation Restrains PD-1 Blockade-Mediated T-Cell Rejuvenation (Poster # F.68)**
Hazem Ghoneim, PhD, St. Jude Children's Research Hospital

1:40 pm **Drivers and Targets of Immunity in Humans**
Nir Hacohen, PhD, Harvard University

2:05 pm **Abstract Presentation: Rapid Functional Characterization of Rare and Common Immune Variants (Poster # F.30)**
Theodore Roth, University of California, San Francisco

2:20 pm **Engineering Human T Cell Circuitry**
Alex Marson, MD, PhD, University of California, San Francisco

1:00 pm – 2:45 pm

Manipulating T Follicular Helper Cells and the Germinal Center

Stevens Salon A-5 (lower level)

Chair: Terri Laufer, MD, University of Pennsylvania

1:00 pm **Assessing the Engines of Affinity Maturation to Vaccines: Germinal Centers and Tfh Cells**
Shane Crotty, PhD, La Jolla Institute for Allergy and Immunology

1:25 pm **Abstract Presentation: Adenosine Deaminase (ADA) as an Adjuvant Molecule for Human HIV-1 Vaccine (Poster # F.55)**
Virginie Tardif, Drexel University

1:40 pm **Dissecting in Situ Adaptive Cell Networks in Human Inflammation**
Marcus Clark, MD, University of Chicago

2:05 pm **Abstract Presentation: Sequencing the Plasmablast Antibody Repertoire at Serial Time Points Reveals Affinity Maturation that Drives Epitope Spreading in Rheumatoid Arthritis (Poster # F.14)**
Serra Elliott, PhD, Stanford University

2:20 pm **T Follicular Regulatory Cells**
Arlene Sharpe, MD, PhD, Harvard University

2:45 pm – 3:15 pm

Networking Break

Stevens Salon A (lower level)

3:15 pm – 5:15 pm

Oral Abstract Sessions

Precision Immunology

Stevens Salon A-1 (lower level)

Chair: William Robinson, MD, PhD, Stanford University

3:15 pm **The 10,000 Immunomes Project: A Data Resource of Human Immunology (Poster # F.27)**
Kelly Zalocusky, PhD, University of California, San Francisco

3:30 pm **Altered IL-2 and IL-7 Networks in T1D are Revealed Through Systems Analyses (Poster # F.77)**
S. Alice Long, PhD, Benaroya Research Institute

3:45 pm **Impact of Age, Sex and Genetics on Transcriptional Immune Responses to Bacterial, Viral and Fungal Challenges (Poster # F.35)**
Darragh Duffy, Institute Pasteur

4:00 pm **Low Natural Killer Cells Counts are Associated with Relapse After Imatinib Discontinuation in Chronic Myeloid Leukemia Patients: The IMMUNOSTIM Study (Poster # F.65)**
Antoine Toubert, MD, PhD, Hôpital Saint-Louis

4:15 pm **Distinct Single Cell Gene Expression Signatures of Monocyte Subsets Differentiate Between TNF-alpha Inhibitor Treatment Response Groups in Rheumatoid Arthritis (Poster # F.9)**
Theresa Wampler Muskardin, MD, Mayo Clinic

4:30 pm **B Cell Subsets as Potential Biomarkers for Fingolimod Treatment in Multiple Sclerosis (Poster # F. TBD)**
Rui Li, MD, PhD, University of Pennsylvania

4:45 pm **Phosphatidylinositol 3-Kinase Delta Gain of Function (GOF) Mutations Cause Impaired B Cell Development and Function (Poster # F.60)**
Alisa Kane, PhD, Garvan Institute



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SCIENTIFIC PROGRAM

Friday, June 16 (continued)

5:00 pm **DOCK8 Deficient Germinal Center B Cells Rescued by a Vav-Bcl2 Transgene Undergo Affinity Maturation (Poster # F.57)**
Katrina Randall, MBBS, PhD, Australian National University

3:15 pm – 5:15 pm
The Forefront of Immune Regulation
Stevens Salon A-2 (lower level)

Chair: Megan Sykes, MD, Columbia University

3:15 pm **Suppression of Regulatory T Cells by Exosomes in Multiple Sclerosis (Poster # F.1)**
Kimitoshi Kimura, MD, National Institute of Neuroscience

3:30 pm **Long Non-coding RNA and Methylome Profiles of Human Regulatory T Cells in Health and Disease (Poster # F.43)**
Laura Passerini, PhD, San Raffaele Hospital

3:45 pm **Rebooting Autoimmunity after Autologous Hematopoietic Stem Cell Transplantation in Systemic Sclerosis Patients by Newly-generated Regulatory T- and B-Cells (Poster # F.18)**
Lucas Arruda, PharmD, MSc, University of São Paulo

4:00 pm **Distinct Alloimmune Stimulatory Profile of Monocyte-derived Dendritic Cells and CD40L-stimulated B Cells (Poster # F.80)**
Linda Lee, PhD, University of California, San Francisco

4:15 pm **Tolerance Induction with Hematopoietic Stem Cell for Kidney Transplantation (Poster # F.45)**
Hyojun Park, Samsung Medical Center

4:30 pm **Designing the Next Generation of Chimeric Antigen Receptors for Regulatory T Cell Therapy (Poster # F.74)**
Leonardo Ferreira, University of California, San Francisco

4:45 pm **Generation of Powerful Human Tolerogenic Dendritic Cells by LV-mediated Human IL-10 Gene Transfer (Poster # F.47)**
Michela Comi, PhD, San Raffaele Hospital

5:00 pm **Permissive Epigenetic Marks at Regulatory T Cell Signature Genes in Fetal Naïve CD4+ T Cells Prime their Differentiation into Regulatory T Cells (Poster # F.70)**
Melissa Ng, University of California, San Francisco

3:15 pm – 5:15 pm
Late Breaking Science
Stevens Salon A-5 (lower level)

Chair: Jordan Pober, MD, PhD, Yale University

3:15 pm **Identification of Unconventional Immunosuppressive CD4+Foxp3-PD-1hi T Cells as a Biomarker of Immune Checkpoint Blockade Activity (Poster # F.64)**
Roberta Zappasodi, Memorial Sloan Kettering Cancer Center

3:30 pm **Phenotypic and Functional Defects Underlie Ineffective Control of EBV in Patients with Distinct Primary Immunodeficiencies (Poster # F.56)**
Emily Edwards, Garvin Institute of Medical Research

3:45 pm **The Epigenetic Landscape of T Cell Subsets in SLE Identifies Known and Potential Novel Drivers of the Autoimmune Response (Poster # F.8)**
Jozsef Karman, Syros Pharmaceuticals

4:00 pm **Enhancer Connectome in Primary Human T Cells Reveals Target Genes of Autoimmune Disease-associated DNA Elements (Poster # F.24)**
Ansuman Satpathy, Stanford University

4:15 pm **Enhancing Adoptive Cancer Immunotherapy with V γ 2V δ 2 T Cells through Pulse Zoledronate Stimulation (Poster # TBD)**
Craig Morita, University of Iowa

4:30 pm **Modulation of Cbl-b in CD8+ T Cells Induces IFN- γ Dependent Resistance Against Regulatory T Cell Immune Suppression (Poster # F.63)**
Douglas Chung, Princess Margaret Hospital

3:15 pm – 5:15 pm
Principles of Flow Cytometry for Immune Monitoring Course
Williford A (3rd Floor)

3:15 pm **Curiox System for Luminex**
Phil McCoy, PhD, National Institutes of Health

3:45 pm **High-throughput Assays of Antibody Specificity**
Ben Larman, PhD, Johns Hopkins University

4:15 pm **Analysis of Transcriptomes with Immune Repertoire**
Steven Bosinger, PhD, Emory University

4:45 pm **A Miniaturized Whole Blood Cell Analysis System**
Holden Maecker, PhD, Stanford University

5:30 pm – 5:40 pm
State of FOCIS
Grand Ballroom (2nd Floor)
Jeffrey Bluestone, PhD, University of California, San Francisco

5:40 pm – 6:25 pm
Robert B. Nussenblatt Presidential Lecture: Decoding Rules of Tissue Immunity for Targeted Immunotherapy
Frank Nestle, MD, Sanofi
Chair: Kevan Herold, MD, Yale University

6:25 pm – 7:30 pm
Exhibits and Poster Reception
Stevens Salon A (lower level)
Network with attendees while visiting exhibits and posters with authors present. Complimentary light hors d'oeuvres & wine served.

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SCIENTIFIC PROGRAM

Saturday, June 17

8:00 am – 9:30 am

Cell Signaling

Grand Ballroom (2nd Floor)

Chair: Jordan Pober, MD, PhD, Yale University

8:00 am **Regulating Basal and Inducible TCR Signaling**

Arthur Weiss, MD, PhD, University of California, San Francisco

8:30 am **Cell Signaling Pathways Controlling HIV Infection and Latency**

Jonathan Karn, PhD, Case Western Reserve University

9:00 am **New Insights into B Cell Responses During Viral Infection**

Facundo Batista, PhD, Massachusetts General Hospital

9:30 am – 10:00 am

Networking Break

Grand Ballroom Foyer (2nd Floor)

10:00 am

Cellular Immune Therapies

Grand Ballroom (2nd Floor)

Chair: Maria-Grazia Roncarolo, PhD, Stanford University

10:00 am **Next-Gen T Cell-based Cancer Immunotherapies**

Nicholas Restifo, MD, National Institutes of Health

10:30 am **Regulatory Cellular Therapy in Renal Transplantation: The Phase IIb TWO Study**

Fadi Issa, MRCS, MSc, DPhil, University of Oxford

11:00 am **Virus T Cells Post-transplant: Broadening Applicability**

Catherine M. Bollard, MD, Children's Research Institute

11:30 am – 1:00 pm

Lunch Break

Delegates on their own for lunch

1:00 pm – 2:45 pm

Tissue Resident Immune Cells: Targets for Immune Therapies

Williford A (3rd Floor)

1:00 pm **Molecular Programming of Tissue-resident Lymphocytes**

Laura K. Mackay, PhD, University of Melbourne

1:25 pm **Abstract Presentation: Chemotaxis of Terminally Differentiated CD8⁺ Cells (Temra) to the Sites of Sterile Infection: IL8-Receptors as an Answer?**

Iuliia Kotko, Charite University

1:40 pm **Resident Memory T Cells in Peripheral Tissues**

Thomas Kupper, MD, Brigham and Women's Hospital

2:05 pm

Abstract Presentation: Tissue-reservoirs of Anti-viral T Cell Immunity in Persistent Human CMV Infection

Michelle Miron, BA, Columbia University

2:20 pm

Human Circulating and Tissue-resident T Cells

Donna Farber, PhD, Columbia University

1:00pm – 2:45 pm

Dissecting Single Cell and Tissue Heterogeneity at the Genome and Immune Level

Williford B (3rd Floor)

Chair: Peter Linsley, PhD, Benaroya Research Institute

1:00 pm

A Defined Structure for the Immune System that Reflects Immune Surveillance and Mechanistic Processes

Garry Nolan, PhD, Stanford University

1:25 pm

Abstract Presentation: Core Transcriptional and Functional Signatures Define Human Tissue-resident Memory T Cells in Lymphoid and Mucosal Sites

Brahma Kumar, Columbia University

1:40 pm

Sequencing Antibody Repertoires to Decipher Pathogenic Mechanisms in Rheumatoid Arthritis

William Robinson, MD, PhD, Stanford University

2:05 pm

Abstract Presentation: T Cell Library Assay Identified Functional ZnT8-specific Memory CD8⁺ T Cells in Patients with Type 1 Diabetes

Hideki Ogura, Yale University

2:20 pm

Single Cell Analysis of Inflammatory Central Nervous Disease

David Hafler, MD, Yale University

1:00pm – 2:45 pm

Next Generation Cytokine Modulation, Effector Tregs

Williford C (3rd Floor)

Chair: Brian Kotzin, MD

1:00 pm

Control of Effector Treg Maintenance and Function

Daniel Campbell, PhD, Benaroya Research Institute

1:25 pm

Abstract Presentation: IL-17A Dampens Autoimmune Disease by Inhibiting the Expression of IL-17 Lineage Cytokines through a Negative Feedback Loop Involving IL-24

Wai Po Chong, National Institutes of Health

1:40 pm

Impact of IL-27 on Infection-induced Inflammatory Processes

Christopher A. Hunter, PhD, University of Pennsylvania

2:05 pm

Abstract Presentation: IL-2 Therapy Restores Regulatory T Cell Dysfunction Induced by Calcineurin Inhibitors

Gavin Whitehouse, MD, King's College London

2:20 pm

Genomic Views of Lymphocyte Activation and Differentiation

John O'Shea, MD, National Institutes of Health

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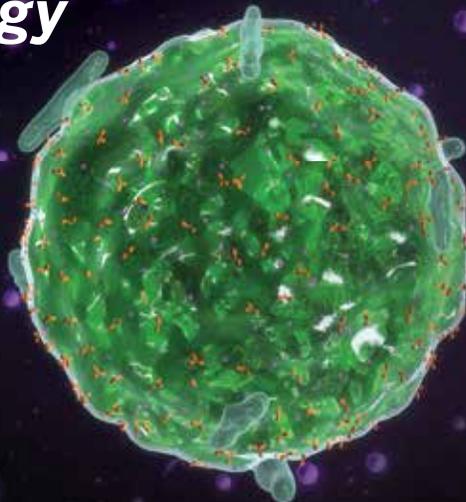
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 Sands, Earl: Selecta Biosciences, Inc. (2)
 Topalian, Suzanne: Abbvie (1), Aduro (4, 5, 6), Amgen (1), Bristol-Myers Squibb (5, 6), Compugen (4, 6), Five Prime Therapeutics (1, 4), ImaginAb (1), Jounce Therapeutics (4), MedImmune (1), Merck (1), Neximmune (4), Pfizer (1), Potenza Therapeutics (1, 4, 5, 6), Sanofi (1), Tizona LLC (4)
 Turka, Laurence: Third Rock Ventures (2, 4)

Key:

1 – Consultant / Advisor, 2 – Employee, 3 – Lecture Fees
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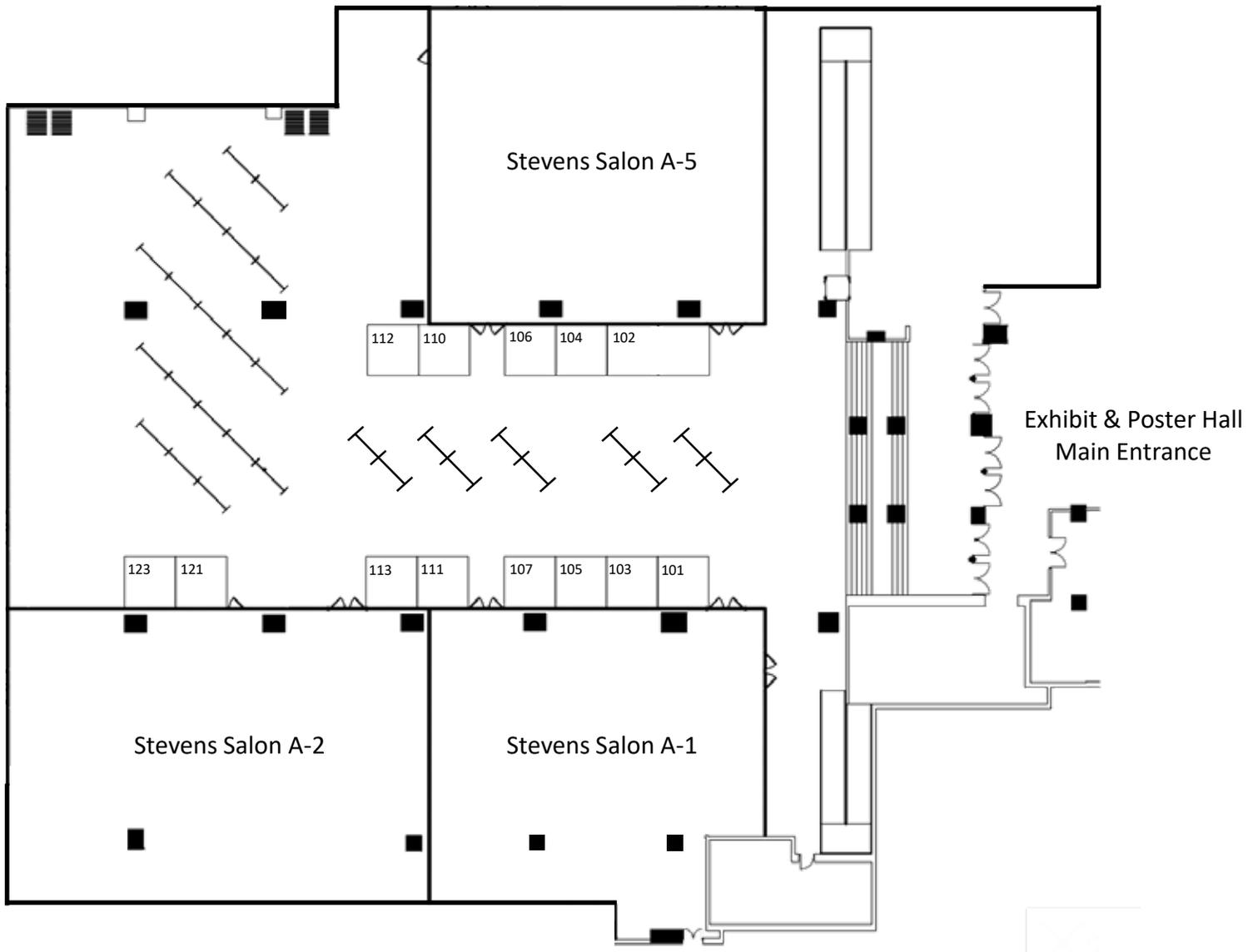
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Learn more about our clinical pipeline at Kadmon.com.





EXHIBITOR LISTING & FLOOR PLAN



Organization	Booth	Room Locations
Arcus Biosciences	107	Lower Level Stevens Salon A (1-5)
Beckman Coulter	105	Stevens Salon C (1-4)
BioLegend	102	Lobby Level Hotel Lobby
Cellular Technology Limited	110	Hotel Restaurants
FOCIS	112	Kitty O'Sheas
Immudex	113	2nd Floor Boulevard AB
iRepertoire, Inc.	101	Grand Ballroom
JPT Peptide Technologies	121	Grand Foyer
Merck	106	Normandie Lounge
Myriad RBM	111	3rd Floor PDR 2-6
Nanostring Technologies	123	Williford A
Science Immunology	104	Williford B
		Williford C

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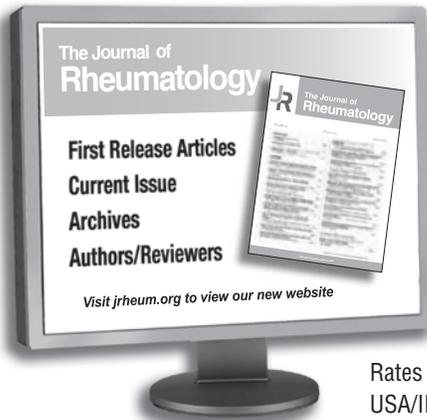
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