

OCTOBER 28-31 • 2020

FOCiS[®]



VIRTUAL ANNUAL MEETING
SCIENTIFIC PROGRAM

Dear Colleagues,

Welcome to the 20th Annual Meeting of the Federation of Clinical Immunology Societies, FOCIS 2020, and the first-ever virtual offering of THE meeting in translational immunology.

The FOCIS 2020 Scientific Program is presented by world-renowned leaders from academia and industry presenting new developments in immune therapies, immune diseases, and developing technologies to measure and assess the immune system. Participants will share in best practices for data sharing and assay standardization and the rapid emergence of ever-evolving technologies, and the application of immunological discovery to the challenges facing our global community, that includes the COVID-19 pandemic.

This year FOCIS celebrates its 20th anniversary. Since its inception in 2001, FOCIS has continued to strengthen its interdisciplinary approach to clinical immunology and broaden its scope in pursuit of our mission to improve human health through immunology. In our 20th year, FOCIS has 59 Member Societies and 1,000 individual members bridging multiple disciplines with a common focus on immune-mediated disease. The FOCIS Annual Meeting is the leading forum for researchers and clinicians from a multitude of specialties, along with industry and governmental representatives, to come together and share the latest breakthroughs.

We value the participation of each of you who have contributed to FOCIS' success over the past 20 years, and we know that you will continue to empower the efforts of our community to secure the future of the field. We encourage you to get involved in FOCIS. Join FOCIS as a member and join our efforts to promote education, research, and clinical care through translational immunology.

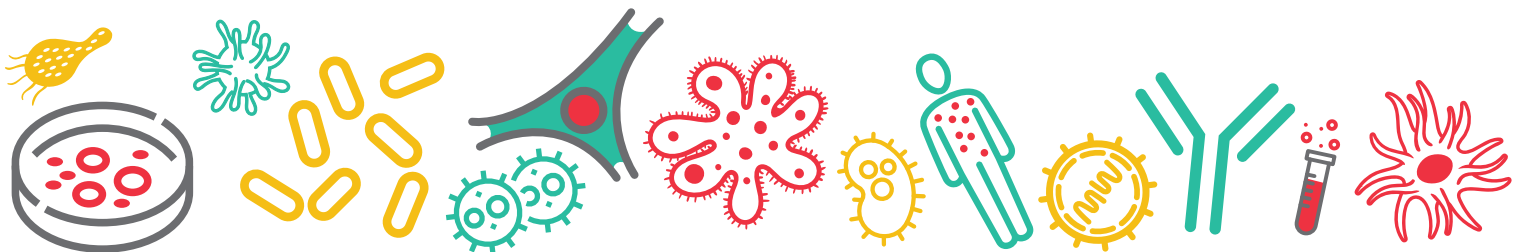
Please join me in extending our most heartfelt thanks to the members of the FOCIS 2020 Scientific Program Committee for their time, energy, and expertise that helped put together a world class line up of speakers and topics. We hope you enjoy the fruits of their labor – FOCIS 2020.

Thank you, once again, for taking part in FOCIS 2020 and for helping to further the mission of FOCIS. Welcome to our virtual meeting!

Sincerely,



Mark Anderson, MD, PhD, FOCIS President
University of California, San Francisco



FOCIS 2020 Supporters

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.

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FOCIS 2020 General Information

Evaluations

Delegates will receive email reminders and links to the evaluations during the meeting. Evaluations are also accessible through the mobile app.

Poster Presentation Hours

Thursday, October 29, 2:30 PM – 4:30 PM PT

Friday, October 30, 2:30 PM – 4:30 PM PT

Release

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OCTOBER 28-31 • 2020

FOCIS

VIRTUAL ANNUAL MEETING




All times listed are in US Pacific Daylight Time (PT), 7 hours behind UTC.

Wednesday, October 28

7:00 am – 4:00 pm

Systems Immunology Course
(separate registration required)

8:00 am – 4:30 pm

Cancer Immunity and Immunotherapy Course
(separate registration required)

Organized in collaboration with



8:30 am – 5:30 pm

Basic Immunology in Medicine: Update 2020 Course
(separate registration required)



7:00 am – 10:20 am

Member Society Symposia

Environmental Effects on Immune Response Diversity

*Chairs: Darragh Duffy, PhD, Stanford University;
Matthew Albert, MD, PhD, Insitro*

Organized by Milieu Interieur in partnership with Myriad RBM



7:00 am Differential Effects of Past and Active Smoking on Innate and Adaptive Immunity
Darragh Duffy, PhD, Institut Pasteur

7:35 am Early Life Microbiome, Immune Printing and Childhood Health
Susan Lynch, PhD, University of California, San Francisco

8:10 am Heterogeneity in Data: A Blessing in Disguise for Accelerating Translational Medicine
Purvesh Khatri, PhD, Stanford University

8:45 am Break

9:00 am Systems Immunology of Natural and Engineered Adjuvants
John Tsang, PhD, National Institutes of Health

9:35 am Study of Natural Immune Variability to Dissect Cytokine Response Pathways
Celine Posseme, Institut Pasteur

9:50 am Immune Variation and Protection Against Infection Following Iatrogenic Exposure to Hepatitis C Virus
Jamie Sugrue, Trinity College Dublin

10:05 am Developing a Whole Blood Stimulation System to Predict Glucocorticoid Responsiveness in Patients with Autoimmune Disease
Madeleine Stimpson, PhD, University of Bristol

7:00 am – 11:00 am

Going Viral: Modulation of Alloresponses by Viral Infections

Chairs: Fadi Issa, DPhil, University of Oxford; Jonathan Maltzman, MD, PhD, Stanford University; Elaine Reed, PhD, University of California, Los Angeles

Organized by



7:00 am Pseudomonas Aeruginosa and Acute Rejection Independently Increase the Risk of Donor-specific Antibodies after Lung Transplantation

Ramsey Hachem, MD, Washington University

7:30 am BK Virus and Alloimmune Responses

Parmjeet Randhawa, MD, University of Pittsburgh Medical Center

8:00 am T cell Responses to CMV in Transplant Recipients

Jonathan Maltzman, MD, PhD, Stanford University

8:30 am Flu Specific B cell Populations in Human Tissue

Anoma Nellore, MD, University of Alabama at Birmingham

9:00 am Break

9:30 am Epigenetic Age in Kidney Transplant Patients as a Tool for Improving Age-related Infectious Complications of Immunosuppression

Joanna Schaeenman, MD, PhD, University of California, Los Angeles

10:00 am Evolutionary Responses to Viral Infections and Impact on Human Health

Shane Grey, PhD, Garvan Institute of Medical Research

10:30 am Question and Answer Period and Wrap Up

7:00 am – 10:45 am

Symposium on Tolerance in Transplantation, Autoimmunity and Cancer

Chairs: Eva María Martínez-Cáceres, MD, PhD, Universitat Autònoma de Barcelona; Ricardo Pujol Borrell, MD, PhD, Hospital Universitari Vall d'Hebron

Organized by



7:00 am Spanish Society of Immunology (SEI) actions on the COVID-19 pandemic

Africa Gonzalez, MD, PhD, University of Vigo

7:30 am Trained Immunity as a Therapeutic Target in Cancer and Transplantation

Jordi Ochando, PhD, Ichan School of Medicine at Mount Sinai

8:15 am Cellular Immunotherapy in Autoimmunity and Multiple Sclerosis

Eva María Martínez-Cáceres, MD, PhD, Universitat Autònoma de Barcelona

8:45 am Negative Checkpoint Receptors in Organ Specific Autoimmunity and Tolerance

Ricardo Pujol Borrell, MD, PhD, Hospital Universitari Vall d'Hebron

9:15 am Immunotherapy in Noninfectious Immuno-mediated Uveitis

José María Ruiz de Morales, MD, PhD, Complejo Hospitalario Universitario de Lejón

9:45 am Identifying Changes in Peripheral Lymphocyte Subpopulations at the Onset of Adult Type 1 Diabetes and their Long-term Evolution

Aina Teniente-Serra, PhD, Hospital Universitari Germans Trias i Pujol

10:00 am The Role of HLA-DR Expression on Monocytes and Sepsis Index as Predictive Sepsis Biomarkers

Bibiana Quirant Sanchez, MBA, Universitat Autònoma de Barcelona

10:15 am Cytokine Profile of COVID-19-related MIS-C Compared with Pre-pandemic Kawasaki Disease and SARS-CoV-2 Specific Immune Complexes Defection in MIS-C

Ana Esteve-Sole, Hospital Sant Joan de Déu

10:30 am Multi-biomarker Integration Enables a Powerful Classification of Long-term Survivors with Normal Allograft Function after Lung Transplantation

Albert Mendoza-Valderrey, Vall d'Hebron Research Institute

11:00 am – 2:30 pm

Member Society Symposia

11:00 am – 2:30 pm

Big Data Immunology in Uveitis

Chairs: Phoebe Lin, MD, PhD, Oregon Health & Science University; Kathryn Pepple, MD, PhD, University of Washington

Organized by **AMERICAN UVEITIS SOCIETY**

11:00 am Introduction

Phoebe Lin, MD, PhD Oregon Health & Science University

11:05 am Utility of Single cell RNA Sequencing in Noninfectious Uveitis

Lynn Hassman, MD, PhD, Washington University

11:25 am Characterization of Sarcoidosis using Metagenomic Deep Sequencing

John Gonzales, MD, University of California, San Francisco

11:45 am Antibiotic Resistance in Azithromycin Treatment in Africa using MDS

Thuy Doan, MD, PhD, University of California, San Francisco

12:05 pm Mass Cytometry Multiplexed Imaging

Valeria Ramaglia, PhD, University of Toronto

12:25 pm Panel Discussion

12:35 pm Break

12:50 pm High Dimensional Profiling and Immune Monitoring of Uveitis Patient

Pulak Nath, PhD, The Jackson Laboratory

1:10 pm Milieu Intérieur: Defining the Boundaries of a Healthy Immune Response for a Better Understanding of Disease

Darragh Duffy, PhD, Institut Pasteur

- 1:30 pm** **Using Crowd-sourced Data in Autoimmunity**
John Tsang, PhD, National Institutes of Health
- 1:50 pm** **Single-cell Repertoire Tracing Identifies Rituximab Refractory B cells during Myasthenia Gravis Relapses**
Roy Jiang, Yale School of Medicine
- 2:10 pm** **Panel Discussion**
- 2:20 pm** **Closing Remarks**
Kathryn Pepple, MD, PhD, University of Washington

11:00 am – 2:30 pm
Endocannabinoids & Phytocannabinoids in Immunity
Chairs: Nicolas Flamand, PhD, Université Laval; Jörg Fritz, PhD, McGill University



- 11:00 am** **Opening Remarks**
- 11:05 am** **Endocannabinoids and the Immune System: Human Leukocytes as Regulators of the Endocannabinoidome Tone and Effects**
Nicolas Flamand, PhD, Université Laval
- 11:50 am** **Role of Cannabinoid 2 (CB2) Receptor in Liver Inflammation/Injury and its Extrahepatic Complications: Promises and Challenges**
Pal Pacher, MD, PhD, National Institutes of Health
- 12:35 pm** **Modulation of Arthritis Pain and Inflammation by the Endocannabinoid System**
Jason McDougall, PhD, Dalhousie University
- 1:20 pm** **Bidirectional Interactions Between the Gut Microbiome and the Endocannabinoidome**
Cristoforo Silvestri, PhD, Université Laval
- 1:50 pm** **Modulation of the Endocannabinoid System Shapes Functions of Group 2 Innate Lymphoid Cells**
Jörg Fritz, PhD, McGill University
- 2:20 pm** **Discussion and Closing Remarks**

11:00 am – 2:10 pm
Immunology at Mucosal Surfaces
Chairs: Rodney Newberry, MD, Washington University; Clara Abraham, MD, Yale University



- 11:00 am** **A Tale of Two Cytokines: IL-17 and IL-22 in Immunity to Oral Mucosal Candidiasis**
Sarah Gaffen, PhD, University of Pittsburgh
- 11:35 am** **The Intramucosal Connection Between the Mouth and the Gut**
Nobuhiko Kamada, PhD, University of Michigan
- 12:10 pm** **Intestinal Tuft Cells: Sentinels and Effectors of the Type 2 Immune Response**
Jakob von Moltke, PhD, University of Washington

- 12:45 pm** **Break**
- 1:00 pm** **Mononuclear Phagocytes Play Coordinated, Non-redundant Roles in Early-stage Recognition of Precancerous Cells**
Claudia Jakubczik, PhD, Dartmouth Geisel School of Medicine
- 1:35 pm** **Immune Modulation by IBD-associated Genes**
Clara Abraham, MD, Yale University

11:05 am – 2:10 pm
Engineering Immunity: Shedding Light on Potential Pathogenic Mechanisms in Autoimmunity, Cancer and Transplantation
Chair: Elaine Reed, PhD, University of California, Los Angeles; Barbara Detrick, PhD, The Johns Hopkins University; Gerald Nepom, MD, PhD, Benaroya Research Institute



- 11:05 am** **Development of NextGen Engineered T cell Therapeutics for Solid Tumors**
Kole Roybal, PhD, University of California, San Francisco
- 11:35 am** **Harnessing the Power of Single-cell Profiling to Decipher the Pathology of Autoimmune Diseases**
Soumya Raychaudhuri, MD, PhD, Broad Institute of MIT and Harvard
- 12:05 pm** **Engineering Immune Tolerance in the Lymph Node**
Jonathan Bromberg, MD, PhD, University of Maryland
- 12:35 pm** **Coffee Break**
- 1:00 pm** **New Era in Treatment of Autoimmune Diseases: Reengineering CAAR-T cells for Immunotherapy in Pemphigus**
Christoph Ellebrecht, MD, University of Pennsylvania
- 1:35 pm** **Engineering CAR Tregs in Transplantation**
Megan Levings, PhD, University of British Columbia





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VIRTUAL ANNUAL MEETING



3:45 PM DEC 3, 2021

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COMPLETE UNDERSTANDING
OF THE CELL _



**THE DIFFERENCE OF
BREAKING THROUGH TO THE
FUTURE OF SINGLE CELL ANALYSIS**



12:30 pm – 2:15 pm

Leukocyte Migration

Chair: Nir Hacohen, PhD, Massachusetts General Hospital

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12:30 pm Inhibition of Neutrophil Migration via Small Molecule Antagonism of the Complement C5a Receptor (C5aR) and Clinical Control of ANCA Vasculitis

Thomas Schall, PhD, ChemoCentryx

12:55 pm Abstract Presentation: Agonist Anti-ChemR23 mAb Blunts Tissue Neutrophil Accumulation and Triggers Chronic Colitis Inflammation Resolution

Vanessa Gauttier, OSE Immunotherapeutics

1:10 pm P2RY8 and S-geranylgeranyl-L-glutathione Guide Human Lymphocyte Migration

Jason Cyster, PhD, University of California, San Francisco

1:35 pm Abstract Presentation: Peripheral T cell Expansion Predicts Tumor Infiltration and Clinical Response

Jane Grogan, PhD, ArsenalBio

1:50 pm Chemokine-rich Platforms Optimize Peripheral T cell Activation in the Skin

Deborah Forwell, PhD, Cornell University

12:30 pm – 2:15 pm

Autoimmunity

Chair: Jacques Banchereau, PhD, The Jackson Laboratory for Genomic Medicine

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12:30 pm Understanding Multiple Sclerosis Pathogenesis using Translational and Reverse-translational Approaches

Jennifer Gommerman, PhD, University of Toronto

12:55 pm Abstract Presentation: Multiple Sclerosis Risk Allele in the HDAC7 Locus Impacts Treg Function

Pierre-Paul Axisa, PhD, Yale University

1:10 pm Translational Research Advances in Alopecia Areata

Angela Christiano, MD, PhD, Columbia University

1:35 pm Abstract Presentation: Exhausted CD8 T Cell Subsets Determine Outcome in Teplizumab Treated Subjects At-Risk for T1D

S. Alice Long, PhD, Benaroya Research Institute

1:50 pm Human Genetics and Drug Discovery in Autoimmunity

Robert Plenge, MD, PhD, Bristol-Myers Squibb

2:15 pm – 2:25 pm

Break

2:25 pm – 4:30 pm

Oral Abstract Sessions

Allergy and Inflammation

Chair: Jordan Pober, MD, PhD, Yale University

2:25 pm Airway Transcriptomic Pathways Underpinning Response to Grass Immunotherapy

Sukharn Bains, MD, Virginia Mason Medical Center

2:40 pm Novel Insights into the Mechanism of Desensitization through Multi-food Oral Immunotherapy with Omalizumab using High Dimensional Mass Cytometry

Monali Manohar, PhD, Stanford University

2:55 pm A Novel Role for Long Noncoding RNAs in Airway Responses to Type 2 Cytokines

Adam Williams, PhD, The Jackson Laboratory for Genomic Medicine

3:10 pm Rate of Dose-related Adverse Events Over Time During a Randomized Phase 2 Peanut Oral Immunotherapy Study

Sayantani Sindher, MD, Stanford University

3:25 pm Break

3:30 pm A Systems Pharmacology Model Approach to Predict Impact of Anti-ST2 Therapy in Severe Asthmatics

Justin Feigelman, PhD, Genentech

3:45 pm Diffuse Lung Disease Emerging during Cytokine Inhibitor Treatment of Systemic Juvenile Idiopathic Arthritis (sJIA)

Vivian Saper, MD, Stanford University

4:00 pm Clinical Use of PSGL-1 Agonist Antibody in Inflammatory Diseases

Shih-Yao Lin, PhD, AltruBio

4:15 pm Human Adipose Tissue-derived Antibodies have "Anti-self" Specificity and an Unusual Mechanism of Stimulation

Bonnie Blomberg, PhD, University of Miami

2:25 pm – 4:15 pm

Autoimmunity

Chair: Betty Diamond, MD, Feinstein Institutes for Medical Research

2:25 pm Distinctive Binding Properties of Patient-derived Monoclonal LGI1-autoantibodies Determine Pathogenicity

Melanie Ramberger, PhD, University of Oxford

2:40 pm Low-dose Interleukin-2 Selectively Expand and Activate Regulatory T cells across 13 Autoimmune Diseases

Michelle Rosenzweig, MD, PhD, Sorbonne Université

2:55 pm Exploring the Potential of Siglec-10 Targeting in Systemic Lupus Erythematosus (SLE)

Maryam Rashidi, MD, PhD, University of Melbourne

3:10 pm Compartmentalization, Persistence and Conserved Shared Motifs of Dominant (Regulatory) T cell Clones in Autoimmune Inflammation

Femke van Wijk, PhD, University Medical Center Utrecht

3:25 pm Break

3:30 pm Teplizumab-mediated Reversal of Declining C-peptide in at Risk Relatives for Type 1 Diabetes (T1D) is Associated with CD4 and CD8 T cell Immunomodulation

Elisavet Serti, PhD, Immune Tolerance Network

3:45 pm Developing Islet Antigen-Specific Chimeric Antigen Receptor for Regulatory T Cell Therapy in Type 1 Diabetes

Emilie Ronin, PhD, University of California, San Francisco

4:00 pm Single-cell Repertoire Tracing Identifies Rituximab Refractory B cells during Myasthenia Gravis Relapses

Ruoyi Jiang, Yale School of Medicine



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2:25 pm – 4:30 pm

Infectious Disease and Host Immunity

Chair: Patrick Wilson, PhD,
University of Chicago



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2:25 pm Infant T cells Exhibit Enhanced TCR Signaling and Reduced Self-renewal during Viral Respiratory Infections

Puspa Thapa, PhD, Columbia University

2:40 pm An Anti-inflammatory Neutrophil Subset Modulate Inflammation during Pneumococcal Pneumonia

Susan Bueno, PhD, Pontificia Universidad Católica de Chile

2:55 pm Early IFN γ Secretion Determines Variability in Downstream IL-12p70 Responses upon TLR4 Activation in Health and Disease

Celine Posseme, Institut Pasteur

3:10 pm Teplizumab-mediated Reversal of Declining C-peptide in at Risk Relatives for Type 1 Diabetes (T1D) is Associated with CD4 and CD8 T cell Immunomodulation

Gisela Canedo, PhD, Pontificia Universidad Católica de Chile

3:25 pm Break

3:30 pm The Unfolded Protein Response Programs T cell Effector Differentiation

Brendan Barton, Case Western Reserve University

3:45 pm Epstein-Barr Virus Peptides Derived from Latent Proteins Prevent NKG2A+ NK cell Inhibition

Berenice Mbiribindi, PhD, Stanford University

4:00 pm Integrated Cross-species Analysis Identifies a Conserved Transitional Dendritic Cell Population

Marcela Alcántara-Hernández, PhD, Stanford University

4:15 pm CMV Responsive TCR Repertoire Evolution Following Solid Organ Transplant

Lauren Higdon, PhD, Stanford University

2:30 pm – 4:30 pm

Poster Presentations with Authors Present

Poster presentations are available for viewing for the duration of FOCIS 2020. During this time, select poster authors will be available live via video chat to meet virtually and discuss their research.

4:30 pm – 5:15 pm

Keynote Address: Future Perspective of Cancer Immunotherapy

Tasuku Honjo, MD, PhD, Kyoto University

Chair: Abul Abbas, MD, University of California, San Francisco

Friday, October 30

All times listed are in US Pacific Daylight Time (PT), 7 hours behind UTC.

7:00 am – 7:45 am

Keynote Address: Human T cell Subsets in Health and Disease

Federica Sallusto, PhD, ETH Zurich

Chair: Mark Anderson, MD, PhD, University of California, San Francisco

8:00 am - 9:30 am

Interferons and Emerging Diseases

Chair: Virginia Pascual, MD, Weill Cornell Medicine



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8:00 am Mechanisms of Intracellular DNA Sensing Through the cGAS-STING Pathway

Andrea Ablasser, PhD, École Polytechnique Fédérale de Lausanne (STING)

8:30 am Immune Responses in, and Animal Models for COVID-19

Stanley Perlman, MD, PhD, University of Iowa

9:00 am NLRs and the Regulation of Interferons

Jennifer Ting, PhD, University of North Carolina

9:30 am – 9:45 am

Break

9:45 am – 11:15 am

Cancer Beyond Checkpoint Inhibitors

Chairs: Jane Grogan, PhD, ArsenalBio

Sponsored by **Science Immunology**



9:45 am Mechanistic Basis of Cancer Immunotherapy: Checkpoints in Context

Ira Mellman, PhD, Genentech Inc.

10:15 am Harnessing the Unique Immune Biology of Cytomegalovirus for the Development of New Vaccines and Immunotherapies

Klaus Frueh, PhD, Oregon Health & Science University

10:45 am Biological Role of Myeloid-Derived Suppressor Cells in Health and Disease

Dmitry Gabrilovich, MD, PhD, AstraZeneca

Congratulations!

Emilie Ronin, PhD, University of California, San Francisco

Winner of the annual C. Garrison Fathman Fellows Fund Trainee Travel Award!

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2:15 pm – 2:25 pm

Break

2:25 pm – 4:30 pm

Oral Abstract Sessions

Cell and Gene Therapy and Transplantation

Chair: Megan Levings, PhD, University of British Columbia

2:25 pm **Chimeric Antigen Receptor Signaling Confers Antitumor Activity to Human Regulatory T cells**
Leonardo Ferreira, PhD, University of California, San Francisco

2:40 pm **Using Precision Genome Editing to Interrogate Regulators of Human Treg Stability**
Avery Lam, University of British Columbia

2:55 pm **Cell Therapy using CD8+Tregs in Human Transplantation**
S  verine Bezie, PhD, University of Nantes

3:10 pm **Optimal toIDCs and their Application Routes for Prevention of Type 1 Diabetes (T1D) in the NOD and NOD/SCID Mouse Models**
David Funda, MD, PhD, Czech Academy of Sciences

3:25 pm **Break**

3:30 pm **Differentiation, Expansion and Stability of in vitro Allo-specific Tr1 Cells with Potential use in Cellular Therapy**
Saul Arteaga, Universidad Nacional Aut  noma de M  xico

3:45 pm **Islet-specific Engineered Regulatory T cells Suppress Proliferation of Pathogenic Effector T Cells and Block Type 1 Diabetes**
Akhilesh Singh, PhD, Seattle Children's Research Institute

4:00 pm **Type 1 Regulatory T Cell-Based Therapy for Pediatric AML**
Molly Uyeda, Stanford University

4:15 pm **Critical Roles of TIGIT+ Human Equivalent of B10 Bregs in Immune Regulation**
Md Mahmudul Hasan, PhD, Mayo Clinic Arizona

2:25 pm – 4:30 pm

Immunomodulation

Chair: Silvia Gregori, PhD, San Raffaele Telethon Institute for Gene Therapy

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2:25 pm **Mosaic Gain-of-function Variants in TLR8 Lead to a Novel X-linked Primary Immunodeficiency with Neutropenia, Lymphoproliferation and Features of Bone Marrow Failure**
Megan Cooper, MD, PhD, Washington University

2:40 pm **Towards Unbiased Diagnostics: Identification of Disease-Associated Immune Subsets by Mass Cytometry and Organoid Technology**
Vincent van Unen, PhD, Stanford University

2:55 pm **Single-cell RNA Sequencing Coupled with B-cell-receptor Sequencing Reveals Clonal Expansion and Differentiation of Activated B cells in Granulomatous Uveitis**
Lynn Hassman, MD, PhD, Washington University

3:10 pm

Inhibition of Human CD38 Ecto-hydrolase Activity with a Biepitopic First-in-class Fully Human mAb that Lacks Effector Function Prevents Acute GvHD in Immune Humanized NSG Mice
Maria Cristina Cuturi, MD, INSERM UMR 1064

3:25 pm **Break**

3:30 pm **Accelerated Germinal Center Reaction by Targeting Vaccine Antigens to Major Histocompatibility Complex II**
Kristian Andersen, PhD, University of Oslo

3:45 pm **Pediatric Acute-onset Neuropsychiatric Syndrome (PANS) is Characterized by a Novel Subset of Monocytes With Markers Associated with Crossing the Blood Brain Barrier (BBB)**
Shamma Rahman, PhD, Stanford University

4:00 pm **Detection of Immunosenescent T Cell Gene Signature in Alzheimer's Disease Subjects**
Dallin Dressman, Columbia University

4:15 pm **Accessible Chromatin in T cell Differentiation States Enriches for Fine-mapped Autoimmune Risk Variants**
John Ray, PhD, Broad Institute

2:25 pm – 4:15 pm

Immuno-oncology

Chair: Wenjun Ouyang, PhD, Amgen

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2:25 pm **High Resolution Tumor Resident B-cell Profiling in Lung Cancer**
Kevin Kramer, Vanderbilt University

2:40 pm **Enrichment of Th17 Cells in Arthritis Associated with Combined PD-1 and CTLA-4 Inhibitor Therapy**
Sang Kim, MD, PhD, MD Anderson Cancer Center

2:55 pm **The Skin in Long-term Melanoma Survivors Maintains Durable Melanoma-reactive Resident Memory CD8 T cells**
Jichang Han, Geisel School of Medicine at Dartmouth

3:10 pm **Thymic Stromal Lymphopoietin Controls Progression of Colorectal Cancers**
Kazushige Obata-Ninomiya, PhD, Benaroya Research Institute

3:25 pm **Break**

3:30 pm **Nanoparticle-enabled in Vivo Innate Immune Stimulation Breaks Peripheral Tolerance and Activates Endogenous Tumor Infiltrating T cells with Broad Antigen Specificities**
Qian Yin, PhD, Stanford University

3:45 pm **Blockade of PD-L1 Leads to Activation of Myeloid Inflammation in Human Cancer**
Alyssa Duffy, Emory University

4:00 pm **Targeting CLL-1 using Chimeric Antigen Receptor T cells (CART) in Acute Myeloid Leukemia**
Mayumi Sugita, MD, Weill Cornell Medicine

2:25 pm – 4:30 pm

Late Breaking Abstract Session

- 2:25 pm** **A Novel Host Transcript Signature for Distinguishing Bacterial and Viral Infections**
Aditya Rao, Stanford University
- 2:40 pm** **Distinct B cell Subsets Give Rise to Protective Antibody Responses Against SARS-CoV-2 Infection**
Haley Dugan, University of Chicago
- 2:55 pm** **Hyaluronan Primes Human Neutrophils**
Iwona Niemietz, University of British Columbia
- 3:10 pm** **Identification and Characterization of Coronavirus Cross-reactive Antibodies using LIBRA-seq**
Andrea Shiakolas, Vanderbilt University Medical Center
- 3:25 pm** **Break**
- 3:30 pm** **The CXCR3 Chemokine System Determines the Function of Stem-like CD8+ T cells and Allows for Treatment Stratification in Solid Tumors**
Tino Vollmer, MD, Charité-Universitätsmedizin Berlin
- 3:45 pm** **Identification of SARS-CoV-2 Infected Cells within the Human Nasopharynx**
Bruce Horwitz, MD, Boston Children's Hospital
- 4:00 pm** **Transcriptional Profiling and Single-cell Chimerism Analysis Identify Human Tissue-resident Host T cells in the Skin after Allogeneic Stem Cell Transplantation**
Christina Zielinski, MD, Technical University of Munich
- 4:15 pm** **The COVID-19 Immune Landscape is Dynamically and Reversibly Correlated With Disease Severity**
Jane Buckner, MD, Benaroya Research Institute

2:30 pm – 4:30 pm

Poster Presentations with Authors Present

Poster presentations are available for viewing for the duration of FOCIS 2020. During this time, select poster authors will be available live via video chat to discuss their research.

Saturday, October 31

All times listed are in US Pacific Daylight Time (PT), 7 hours behind UTC.

7:00 am – 7:45 am

Keynote Address: Normal and Neoplastic Stem Cells

Irving Weissman, MD, Stanford University

Chair: Maria-Grazia Roncarolo, MD, Stanford University

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7:45 am – 8:00 am

Break

8:00 am – 9:30 am

Immune Response to Vaccines and Infections

Chair: Bob Balderas, BD Biosciences

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- 8:00 am** **SARS CoV2 Specific T cell Responses in Exposed and Non-exposed Subjects**
Alessandro Sette, PhD, La Jolla Institute for Immunology
- 8:30 am** **Immunotherapies from Dupilumab in Asthma and Allergy to Bispecifics in Cancer**
George Yancopoulos, MD, PhD, Regeneron Pharmaceuticals, Inc.
- 9:00 am** **Structure-guided Development of COVID-19 Vaccines and Antibodies**
Barney Graham, MD, PhD, National Institute of Allergy and Infectious Diseases
- 9:30 am** **To Be Announced**
Daniel Skovronsky, MD, PhD, Eli Lilly

9:45 am – 10:00 am

Break

10:00 am – 11:30 am

Cell and Gene Therapies

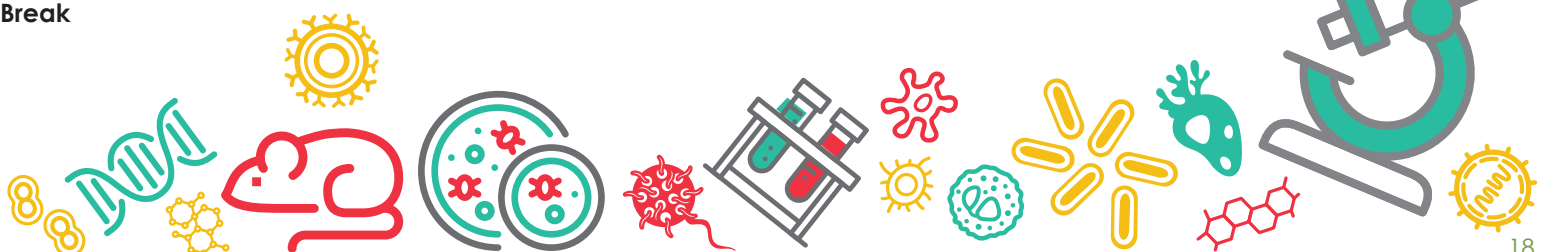
Chair: Megan Sykes, MD, Columbia University

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- 10:00 am** **Engineering CAR-Tregs**
Megan Levings, PhD, University of British Columbia
- 10:30 am** **Genome Editing to Create Safe and Effective Cell Based Medicines**
Matt Porteus, MD, PhD, Stanford University
- 11:00 am** **Overcoming T cell Exhaustion in Cancer Immunotherapy**
Margo Roberts, PhD, Lyell Immunopharma

11:30 am – 12:30 pm

Lunch Break



12:30 pm – 2:15 pm

Human B Cells and Antibodies

Chair: William Robinson, MD, PhD, Stanford University

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12:30 pm **Modulating the Immune System with Multi-Specific Antibodies**

Roland Buelow, PhD, TeneoBio

12:55 pm **Abstract Presentation: HIV-1 Therapy with Monoclonal Antibody Elicits HIV-1 Specific T cell Responses in the Host**

Lotta von Boehmer, MD, PhD, Stanford University

1:10 pm **Molecular Regulation of B Cell Differentiation in Human SLE**

Ignacio Sanz, MD, Emory University

1:35 pm **Abstract Presentation: Lymphoma Driver Mutations in the Pathogenic Evolution of an Iconic Human Autoantibody**

Manu Singh, PhD, Garvan Institute of Medical Research

1:50 pm **B cell Memory of Influenza and SARS-CoV-2**

Patrick Wilson, PhD, University of Chicago

12:30 pm – 2:15 pm

Immunomodulation

Chair: Hans-Dieter Volk, MD, PhD, Charité - Universitätsmedizin Berlin

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VENTURES

12:30 pm **Conversion of Effector/memory T cells into Regulatory T cells for Treatment of Immunological Diseases**

Shimon Sakaguchi, MD, PhD, Osaka University

12:55 pm **Abstract Presentation: CRISPR-based Gene Editing Enables FOXP3 Gene Repair in HSPCs and IPEX Patient T cells**

Rosa Bacchetta, MD, Stanford University

1:10 pm **Archetypes of Immune Responses**

Max Krummel, PhD, University of California, San Francisco

1:35 pm **Abstract Presentation: MHC-mediated Antigen Presentation by Thymic Stromal Cells is Required to Enforce Central T cell Tolerance**

Irina Proekt, PhD, University of California, San Francisco

1:50 pm **TNF Blockade Promotes IL-10 Expression in Human Inflammatory T Cells**

Leonie Taams, PhD, King's College London

12:30 pm – 2:00 pm

NK Cells and Innate Lymphocytes

Chair: Kavita Dhodapkar, MD, Emory University

Sponsored by  **Apexigen**

12:30 pm **Empowering Natural Killer Cell Reactivity in Solid Tumors**

Adelheid Cerwenka, PhD, University of Heidelberg

12:55 pm **NK Cell Memory**

Silke Paust, PhD, Scripps Institute

1:20 pm **Abstract Presentation: Delineating the Role of Human Innate Lymphoid Cells in Kidney Homeostasis**

Julia Szusz, University of Toronto

1:35 pm **Development and Plasticity of Human Innate Lymphoid Cell Subsets**

Hergen Spits, PhD, University of Amsterdam

1:00 pm – 5:00 pm

Big Data in Immunology Workshop

(separate registration required)

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Fathman, C. Garrison: IL2Rx (1, 4)

Feldmann, Marc: 180 Lifesciences (2, 4)

Frueh, Klaus: Vir Biotechnology (1, 4)

Gabrilovich, Dmitry: Astra Zeneca (2)

Gommerman, Jennifer: Roche (1)

Hafler, David: Bristol-Myers Squibb (1); Genentech (1),
Proclara Bioscience (1), Sanofi-Genzyme (1)

Honjo, Tasuku: Bristol-Myers Squibb (5, 6); Meiji Seika
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Levings, Megan: Sangamo Therapeutics (1, 5, 6)

Mellman, Ira: Genentech (2, 5, 6)

Ouyang, Wenjun: Amgen (2, 4)

Plenge, Robert: Bristol-Myers Squibb (2)

Spits, Hergen: AIMM Therapeutics (1, 4); Astra Zeneca (6);
GSK (1); Janssen (6); UniQure (1)

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FOCIS 2020 Exhibit Information

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The virtual exhibit hall and booths are open to registrants throughout the entirety of FOCIS 2020. Each exhibitor will have a booth on their own webpage within the virtual Exhibit Hall. Registrants may browse through the hall to find companies.

How to Interact with Exhibitors

After entering a booth, there are several options for holding a conversation with an exhibitor. Each booth will have multiple chat features, including public chat (text) and a one-on-one private chat (text). The public chat feature allows everyone in the booth to chat at the same time; and the one-on-one private chat can be a separate private discussion with anyone in the booth at the same time. Exhibitors also have the option to have staff available for video chat or presentation. Please review the "Presenters" listing on the left-hand side to chat with a booth staff member.

Exhibitors

10x Genomics
Adaptive Biotechnologies
Arcus Bio
BD Biosciences
Bio X Cell
BioLegend
Cellular Technology Limited
Immudex
Immune Epitope Database & Analysis Resource (IEDB)
iRepertoire
Janssen
Lupus Research Alliance
NanoString
Pfizer
Science Immunology/AAAS
STEMCELL Technologies
Thermo Fisher
Thermo Fisher - One Lambda



Wednesday, October 28

7:00 am – 4:00 pm

Systems Immunology Course
(separate registration required)

8:00 am – 4:30 pm

Cancer Immunity & Immunotherapy Course
(separate registration required)

8:30 am – 5:30 pm

Basic Immunology in Medicine: Update 2020 Course
(separate registration required)

7:00 am – 10:20 am

Environmental Effects on Immune Response Diversity

7:00 am – 11:00 am

Going Viral: Modulation of Alloresponses by Viral Infections

7:00 am – 10:45 am

Symposium on Tolerance in Transplantation, Autoimmunity and Cancer

11:00 am – 2:30 pm

Big Data Immunology in Uveitis

11:00 am – 2:30 pm

Endocannabinoids & Phytocannabinoids in Immunity

11:00 am – 2:10 pm

Immunology at Mucosal Surfaces

11:05 am – 2:10 pm

Engineering Immunity: Shedding Light on Potential Pathogenic Mechanisms in Autoimmunity, Cancer and Transplantation

Thursday, October 29

7:00 am – 7:45 am

Special Opening Session with Dr. Anthony Fauci

8:00 am – 9:30 am

20th Anniversary (part 1)

9:45 am – 11:15 am

20th Anniversary (part 2)

11:15 am – 12:15 pm

Industry Tutorial: BioLegend

11:15 am – 12:15 pm

Industry Tutorial: 10xGenomics

11:15 am – 12:15 pm

Industry Tutorial: BD Biosciences

11:15 am – 12:15 pm

Flow Cytometry Course

12:30 pm – 2:15 pm

Thematic Session: Inflammation and Host Defense

12:30 pm – 2:15 pm

Thematic Session: Leukocyte Migration

12:30 pm – 2:15 pm

Thematic Session: Autoimmunity

2:25 pm – 4:30 pm

Oral Abstract Session: Allergy and Inflammation

2:25 pm – 4:15 pm

Oral Abstract Session: Autoimmunity

2:25 pm – 4:30 pm

Oral Abstract Session: Infectious Disease and Host Immunity

2:30 pm – 4:30 pm

Poster Presentations with Authors Present

4:30 pm – 5:15 pm

Keynote Address: Future Perspective of Cancer Immunotherapy

Friday, October 30

7:00 am – 7:45 am

Keynote Address: Human T cell Subsets in Health and Disease

8:00 am – 9:30 am

Interferons and Emerging Diseases

9:45 am – 11:15 am

Cancer Beyond Checkpoint Inhibitors

11:15 am – 12:15 pm

Industry Tutorial: Adaptive Biotechnologies

11:15 am – 12:15 pm

Flow Cytometry Course

11:15 am – 12:15 pm

Women@FOCIS: Diversity, Sex and Gender in the COVID-19 Era

12:30 pm – 2:15 pm

Thematic Session: Metabolism and Microbiome

12:30 pm – 2:15 pm

Thematic Session: Stem Cell and Organ Transplantation

12:30 pm – 2:15 pm

Thematic Session: Systems Immunology

2:25 pm – 4:30 pm

Oral Abstract Session: Cell and Gene Therapy and Transplantation

2:25 pm – 4:30 pm

Oral Abstract Session: Immunomodulation

2:25 pm – 4:15 pm

Oral Abstract Session: Immuno-oncology

2:25 pm – 4:30 pm

Late Breaking Oral Abstract Session

2:30 pm – 4:30 pm

Poster Presentations with Authors Present

Saturday, October 31

7:00 am – 7:45 am

Keynote Address: Normal and Neoplastic Stem Cells

8:00 am – 9:30 am

Immune Response to Vaccines and Infections

10:00 am – 11:30 am

Cell and Gene Therapies

12:30 pm – 2:15 pm

Thematic Session: Human B Cells and Antibodies

12:30 pm – 2:15 pm

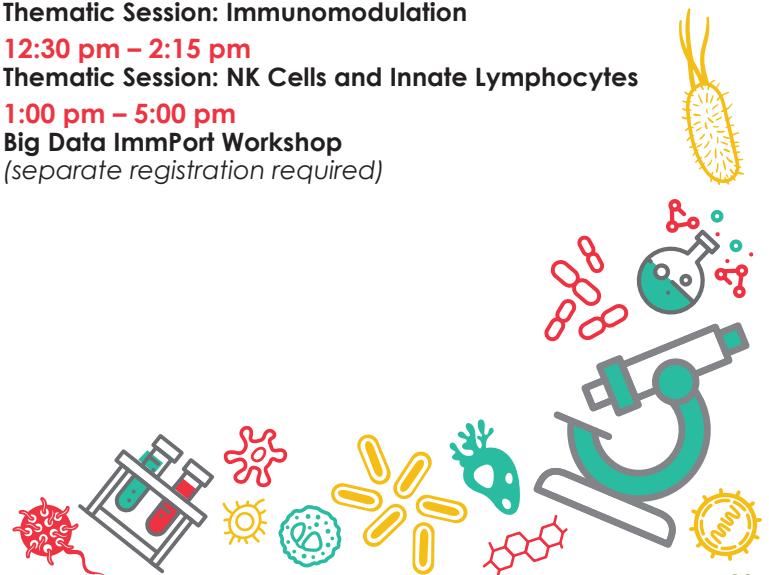
Thematic Session: Immunomodulation

12:30 pm – 2:15 pm

Thematic Session: NK Cells and Innate Lymphocytes

1:00 pm – 5:00 pm

Big Data ImmPort Workshop
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