ANNUAL RETREAT
IMMUNOLOGY AND INFLAMMATION PROGRAM

Wednesday, June 19, 2019
Alumni Hall B and Farkas Hallway
AGENDA

JUNE 19

9:30 am  Breakfast  
Farkas Hallway

10:00 pm  Session I  
Alumni Hall B

Session Chairs: Dan Littman, MD, PhD and Susan Schwab, PhD

10:00 am  Boris Reizis, PhD  
Welcome and Introductory Remarks

10:10 am  Nicholas Arpaia, PhD  
(Columbia University Irving Medical Center)  
Programmable Bacteria Induce Durable Tumor Regression and Systemic Anti-tumor Immunity

10:40 am  Axel Concepcion, PhD  
(Feske Lab)  
Functional Genomics Screens to Define the Ion Channelome in T Cells and Adaptive Immunity

10:55 am  Johannes Nowatzky, MD  
Dissecting Immunity of Rare Polygenic Auto-inflammatory Disease

11:25 am  Jhimmy Talbot, PhD  
(Littman Lab)  
Food Intake Triggers Activation of a VIPergetic Neuro-immune Circuit that Modulates Host-Microbiota Interactions and Lipid Absorption

11:40 am  Shruti Naik, PhD  
Choreographing Immunity at the Cutaneous Interface

12:10 pm  Lunch  
Smilow Cafe/MSB Large Conference Room

1:10 pm  Session II  
Alumni Hall B

Session Chairs: Juan Lafaille, PhD and Sergei Koralov, PhD

1:10 pm  Steven Josefowicz, PhD  
(Weill Cornell Medicine)  
Signaling to Chromatin in Inflammation: Epigenetic Regulation of Rapid Transcription

1:40 pm  Tae Jin Yun, PhD  
(Reizis Lab)  
Sensing of HCMV-Infected Cells by Plasmacytoid Dendritic Cells

1:55 pm  Bhama Ramkhelawon, PhD  
Pathological Vascular Remodeling by Arterial Macrophages

2:25 pm  Matt Keller  
(Cadwell/Torres Lab)  
A Role for Autophagy Regulated Exosomes during S. aureus Infection

2:40 pm  Poster Session and Coffee Break  
Farkas Hallway

4:10 pm  Session III: Tumor Immunology  
Alumni Hall B

Session Chairs: George Miller, MD and Michelle Krogsgaard, PhD

4:10 pm  Anastasia Tikhonova, PhD  
(Aifantis Lab)  
Illuminating Functional Heterogeneity of the Bone Marrow Microenvironment

4:25 pm  Anastasia Zavitsanou  
(Koralov/Papagiannakopoulos Lab)  
Investigating How Tumor-Intrinsic Driver Mutations Impact Lung Cancer Immune Surveillance

4:40 pm  Keynote Presentation  
Brian Brown, PhD  
(Icahn School of Medicine at Mount Sinai)  
Utilizing CRISPR Genomics to Investigate Control of Immunophenotypic States

5:40 pm  Poster Awards and Concluding Remarks  
Alumni Hall B

6:00 pm -  Reception  
Smilow Cafe/MSB Large Conference Room
**POSTER PRESENTATIONS**

**Blaser Lab**
Tim Borbet
- Exposing the Early-Life Microbiome to a Brief Antibiotic Course Alters the Adult Immune Phenotype in a Murine House Dust Mite Model

**Cadwell Lab**
Ying-Han Chen, PhD
- Altered Immunity of Laboratory Mice in the Natural Environment is Associated with Fungal Colonization

Simone Dallari, PhD
- Functional Characterization of the Enteric Virome

Patricia Martin
- Salmonella and Atg16L1

Shushan Sargsian
- The Immunomodulatory Capacity of Clostridia Species isolated from the Helminth-Influenced Microbiota

Stela Sota
- Innate Immune Sensing of Murine Norovirus in Vivo

Mericien Venzon
- Gut Microbiome Determinants of Helminth Infection

**Cadwell / Torres Lab**
Matt Keller
- A Role for Autophagy Regulated Exosomes during S. Aureus Infection

**Feske Lab**
Axel R. Concepcion, PhD
- Functional Genomics Screens to Define the Ion Channelome in T Cells and Adaptive Immunity

Sascha Kahlfuss, MD
- Suppression of ORAI1-Mediated Calcium Influx in T Cells Prevents Allergic Airway Inflammation without Abolishing Immunity to Influenza A Virus Infection

Thomas Scambler, PhD
- The Role of Ion Channels in Regulating Myeloid Derived Suppressor Cells

Liwei Wang, PhD
- An in Vivo RNA Interference Screen Identifies Novel Ion Channels Mediating CD8+ T Cell-Mediated Antitumor Immunity

Yinhu Wang, PhD
- T Cell Ion Channel and Transporter Screen in Murine Pathobiont Induced Colitis

**Khanna Lab**
Stephen Yeung
- Functional Role of CD169+ Macrophages in Septic Shock

**Kong Lab**
Elliot Philips
- PD-igands Diverged in Placental Mammals and Dimerize via Transmembrane Domains

**Koralov Lab**
Alberto Herrera
- Atovaquone Targets Aberrant STAT3 Signaling in CTCL

Marcus Hines
- The Role of miR-29 in B Cell Development and Function

Angelina Seffens
- Atovaquone Targets Aberrant STAT3 signaling in CTCL

Katharine Yang
- Effects of Metabolites on Inflammatory Diseases

**Krogsgaard Lab**
Aswin Natarajan
- Molecular Determinants Involved in TCR Proximal Signaling

**Littman Lab**
Hannah Fehlner-Peach
- Distinct Polysaccharide Preferences in Human Intestinal Prevotella Copri Isolates

Ranit Kedmi, PhD
- Antigen Presenting Cells as Coordinators of T Cell Responses to Gut Microbiota

Kai Mesa, PhD
- Investigation of Dermal Macrophage Renewal during Tissue Repair by Live Imaging

Varsha Raghavan, PhD
- Autoimmune Potential of Commensal Bacteria

Jhimmy Talbot, PhD
- Food Intake Triggers Activation of a VIPergic Neuro-Immune Circuit that Modulates Host-Microbiota Interactions and Lipid Absorption

**Miller Lab**
Berk Aykut, MD
- Piezo1 in Immunity

Brian Diskin, MD
- The Immune Landscape and Immunotherapeutic Efficacy in Primary vs Metastatic Pancreatic Cancer Diverge Based on B cell Programming
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<td>Wei Wang, MD</td>
<td>Development and Testing of the First in Class Immunotherapy Targeting Delta1 Containing Gamma Delta T Cells for the Treatment of Cancer</td>
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