ITI Human Immune Monitoring Technology and Bioinformatics Conference
Sponsored by the
Center for Human Systems Immunology (PD: Mark M. Davis)
Organizing Committee: Purvesh Khatri, Catherine Blish & Bali Pulendran

Thursday, May 2nd - Friday May 3rd 2019, Li Ka Shing Center, Berg Hall, Stanford

Thursday, May 2, 2019
07:30–08:30 BREAKFAST

08:30–08:45 Welcome & Opening Remarks
Lynda Stuart, Bill and Melinda Gates Foundation
Mark Davis, Stanford

Session Chair

08:45–09:15 Bruce Walker, Ragon Institute of MGH, MIT and Harvard

09:20–09:50 Nathan Price, Institute for Systems Biology, Seattle
Longitudinal multi-omic profiling for thousands of people.

09:55–10:25 Justin Sonnenberg, Stanford
Establishing the Diet-Microbiome-Immune Axis in Humans.

10:30–10:45 COFFEE BREAK

10:45–11:15 Kari Nadeau, Stanford
Studying Immunological Mechanisms to Try to End Food Allergy.

11:20–11:50 Nima Aghacepou, Stanford
Multiomics Analysis of Term and Preterm Human Pregnancy.

HiFi molecular transmission via crisscross cooperativity.

12:30–01:30 LUNCH

Session Chair

01:30–02:00 Taia Wang, Stanford
IgG Fc domain repertoires drive diverse responses to influenza viruses.

02:05–02:35 Evan Newell, Fred Hutchinson Cancer Research Center
Decomposing disease associated T cell responses using mass cytometry.

02:40–03:10 Somuya Raychaudhari, Harvard Broad Institute
Defining the architecture of rheumatoid arthritis at the single cell level.
03:15–03:30      COFFEE BREAK

03:30–04:00      Crystal Mackall, Stanford
Engineering T Cells for Cancer Therapy.

04:05–04:35      X. Shirley Liu, Dana-Farber Cancer Institute
Hidden immunology signals in tumor RNA-seq.

04:40–05:10      H. Tom Soh, Stanford
Multiplexed Protein Measurements with High Sensitivity and Resolution

05:10–05:45      Ami Bhatt, Stanford
Genomic approaches to decipher microbial contributions to health and disease.

Friday, May 2

08:00–08:30      BREAKFAST

Session Chair:

08:30–09:00      Rhiju Das, Stanford
Inexpensive diagnostics for ratiometric gene signatures through designer riboswitches.

09:05–09:35      Elizabeth Egan, Stanford
Title TBA

09:40–10:10      Galit Alter, Ragon Institute of MGH, MIT and Harvard
Systems Serology to Define Correlates of Immunity.

10:15–10:30      COFFEE BREAK

Session Chair:

10:30–11:00      Garry Nolan
Pathology from the Molecular Scale on Up.

11:05–11:35      Sarah Fortune
Single cell RNAseq analysis of TB granulomas: defining therapeutic challenges.

11:40–12:10      Andrea Radtke, NIH
Advanced optical imaging approaches to understand human immunity in a tissue context.

12:15–01:15      LUNCH

Session Chair:

01:15–01:45      Carolyn Bertozzi, Stanford
Chemical technologies for infectious disease diagnostics.

01:50–02:20      Manu Prakash, Stanford
Title TBA

02:25–2:55       Yueh-hsiu Chien, Stanford
Title TBA

03:00–03:15      COFFEE BREAK
Session Chair:

03:15–03:45 Steven Deeks, UCSF
Towards and HIV Cure: Untangling the Immunology of HIV Persistence during Antiretroviral Therapy.

03:50–04:20 Rosa Bacchetta, Stanford
New approaches to dissect immune dysregulation in children with genetic immune diseases.

04:25–04:55 Nir Yosef, UC Berkley
Analytics of single cell RNA-seq: lessons from heterogeneity of immune cells.

05:00-05:30 William Greenleaf, Stanford
Title TBA

05:30-05:45 Closing Remarks
Mark Davis, Stanford