

## Oral Program

### Sunday, February 11 2018

08:00-11:00 **Registration | The David Lopatie Conference Centre**

11:00-11:20 **Welcome and Introduction**

**Session 1: Cellular and Organismal Homeostasis | The Michael and Anna Wix Auditorium**

**Chairs:** Yehudit Bergman, *The Hebrew University of Jerusalem, Israel*; Scott Plevy, *Janssen Pharmaceuticals, Inc, USA*

11:20-12:00 **With a little help from our friends**

Ruslan Medzhitov, *Yale University, USA* [INV01]

12:00-12:30 **Phagocyte responses to dying cells**

Julie Magarian Blander, *Weill Cornell Medical College, USA* [INV02]

12:30-13:00 **The power of ONE: Immunology in the age of single cell genomics**

Ido Amit, *Weizmann Institute of Science, Israel* [INV03]

13:00-14:20 **Lunch | The David Lopatie Conference Centre**

14:20-14:35 **Human dendritic cells: From development to functions**

Florent Ginhoux, *Singapore Immunology Network (SIgN), A\*STAR, Singapore* [ST01]

14:35-15:05 **Host genetics and barrier function in gut inflammation**

Ramnik Xavier, *Broad Institute of MIT and Harvard* [INV42]

15:05-15:35 **Human Lupus: Adding new pieces to the puzzle**

Virginia Pascual, *Weill Cornell Medical College, USA* [INV05]

15:35-16:05 **Western diet triggers a NLRP3-dependent persistent functional reprogramming of myeloid cells**

Eicke Latz<sup>\*1-4</sup>, A. Christ<sup>1,2</sup>, <sup>1</sup>*University of Bonn, Germany*, <sup>2</sup>*UMass Medical School, USA*, <sup>3</sup>*Norwegian University of Science and Technology, Norway*, <sup>4</sup>*German Center for Neurodegenerative Diseases, Germany* [INV06]

16:05-16:35 **Refreshment Break | The David Lopatie Conference Centre**

**Session 1: Cellular and Organismal Homeostasis cont. | The Michael and Anna Wix Auditorium**

**Chairs:** Yehudit Bergman, *The Hebrew University of Jerusalem, Israel*; Scott Plevy, *Janssen Pharmaceuticals, Inc, USA*

16:35-16:50 **Ubiquitin-dependent regulation of Golgi homeostasis**

Yifat Merbl, *Weizmann Institute of Science, Israel* [INV07]

16:50-17:05 **Spatiotemporal dynamics of naïve CD8<sup>+</sup> T cells undergoing intrahepatic priming**

Matteo Iannacone, *San Raffaele Scientific Institute, Italy* [ST02]

17:05-17:35 **Gut reactions: Immune pathways in the intestine in health and disease**

Fiona Powrie, *University of Oxford, UK* [INV08]

17:35-17:50 **Immunoregulation of microbial-driven liver inflammation**

Roni Nowarski<sup>\*1</sup>, P. Pallis<sup>1</sup>, J. Rone<sup>1</sup>, A. York<sup>2</sup>, P. Bielecki<sup>2</sup>, A. Ring<sup>2</sup>, K. Williams<sup>3</sup>, S. Bensinger<sup>3</sup>, R. Flavell<sup>2</sup>, <sup>1</sup>*Harvard Medical School and Brigham & Women's Hospital, USA*, <sup>2</sup>*Yale University School of Medicine, USA*, <sup>3</sup>*University of California, USA* [ST06]

17:50-18:20 **Immune regulation at barrier surfaces**

David Artis, *Weill Cornell Medicine, USA* [INV09]

18:20-20:20 **Poster Session 1 | The David Lopatie Conference Centre**

18:20-21:30 **Drinks Reception and Dinner | The David Lopatie Conference Centre**

### Monday, February 12 2018

**Session 2: Host-microbe Interactions | The Michael and Anna Wix Auditorium**

**Chairs:** Shulamit Michaeli, *Bar Ilan University, Israel*; Dirk Gevers, *Janssen Human Microbiome Institute, USA*

09:00-09:30 **Intestinal microbiota and infection: The listeria paradigm**

Pascale Cossart, *Institut Pasteur, France* [INV10]

09:30-10:00 **An ancient arm of adaptive immunity controls microbiota impact on skin immunity and tissue repair**

Yasmine Belkaid, *NIH, USA* [INV11]

10:00-10:30 **The gut-liver axis in immunological disorders**

Maria Rescigno, *IEO European Institute of Oncology, Italy* [INV12]

10:30-11:00 **Refreshment Break | The David Lopatie Conference Centre**

**Session 2: Host-microbe Interactions cont. | The Michael and Anna Wix Auditorium**

**Chairs:** Shulamit Michaeli, *Bar Ilan University, Israel*; Dirk Gevers, *Janssen Human Microbiome Institute, USA*

11:00-11:30 **Host-microbiome interactions in health and disease**

Eran Elinav, *Weizmann Institute of Science, Israel* [INV13]

11:30-12:00	<b>RNA regulation of the immune system</b> Jorge Henao-Mejia, <i>University of Pennsylvania, USA</i> [INV14]
12:00-12:15	<b>Post-transcriptional regulation is critical for controlling innate immune response to infection</b> Noam Stern-Ginossar, <i>Weizmann Institute of Science, Israel</i> [INV15]
12:15-12:45	<b>The gut microbiome: A master regulator of metabolism</b> Lora Hooper, <i>University of Texas Southwestern Medical Center, USA</i> [INV16]
12:45-14:15	<b>Lunch   The David Lopatie Conference Centre</b>
	<b>Session 3: Microbiome in Health &amp; Disease   The Michael and Anna Wix Auditorium</b> <b>Chairs:</b> Naama Geva-Zatorsky, <i>Technion, Israel</i> ; Omry Koren, <i>Bar Ilan University, Israel</i>
14:15-14:45	<b>The role of the microbiota in asthma</b> Brett Finlay, <i>The University of British Columbia, Canada</i> [INV17]
14:45-15:15	<b>Modulation of the immune system by the gut microbiota</b> Kenya Honda* <sup>1,2</sup> , T. Tanoue <sup>1,2</sup> , <sup>1</sup> <i>Keio University School of Medicine, Japan</i> , <sup>2</sup> <i>RIKEN Center for Integrative Medical Sciences, Japan</i> [INV18]
15:15-15:45	<b>Microbiota-mediated defense against intestinal infection</b> Eric Pamer, <i>Memorial Sloan Kettering Cancer Center, USA</i> [INV19]
15:45-16:00	<b>Dietary influences on the microbiota: New insights thanks to gnotobiology and next-generation sequencing</b> Catherine Mooser* <sup>1</sup> , S.C. Ganal-Vonarburg <sup>1</sup> , M. Gomez de Agüero <sup>1</sup> , K.D. McCoy <sup>2</sup> , A.J. Macpherson <sup>1</sup> <sup>1</sup> <i>University of Bern, Switzerland</i> , <sup>2</sup> <i>University of Calgary, Canada</i> [ST03]
16:00-16:30	<b>Refreshment Break   The David Lopatie Conference Centre</b>
	<b>Session 3: Microbiome in Health &amp; Disease cont.   The Michael and Anna Wix Auditorium</b> <b>Chairs:</b> Naama Geva-Zatorsky, <i>Technion, Israel</i> ; Omry Koren, <i>Bar Ilan University, Israel</i>
16:30-17:00	<b>Small molecules from the human microbiota</b> Michael Fischbach, <i>University of California, San Francisco, USA</i> [INV20]
17:00-17:15	<b>Longitudinal, single-cell evaluation of the immune state to define the mechanism of B cell depletion therapy in Multiple Sclerosis</b> Jenna Pappalardo* <sup>1</sup> , B. Goods <sup>2</sup> , Y. Cao <sup>1</sup> , C. Zografou <sup>1</sup> , C. Love <sup>2</sup> , A. Shalek <sup>2</sup> , D. Hafler <sup>1</sup> , <sup>1</sup> <i>Yale University, USA</i> , <sup>2</sup> <i>Massachusetts Institute of Technology, USA</i> [ST04]
17:15-17:45	<b>The intestinal crypt: Decrypting a cryptic ecosystem</b> Philippe Sansonetti, <i>Institut Pasteur, France</i> [INV21]
17:45-18:15	<b>Loosely, in the gut with microbes</b> Richard Flavell, <i>Yale University, USA</i> [INV22]
18:15-20:15	<b>Poster Session 2   The David Lopatie Conference Centre</b>
18:15-22:00	<b>Drinks Reception and Meet the Speakers Dinner   The David Lopatie Conference Centre</b>
<b>Tuesday, February 13 2018</b>	
	<b>Session 4: Neuro-immune Axis   The Michael and Anna Wix Auditorium</b> <b>Chairs:</b> Idit Shachar, <i>Weizmann Institute of Science, Israel</i> ; Benny Geiger, <i>Weizmann Institute of Science, Israel</i>
09:00-09:30	<b>Induction and regulation of Th17 Cells</b> Vijay Kuchroo, <i>Harvard University, USA</i> [INV23]
09:30-10:00	<b>Microbiota and immune regulation in the gut mucosa</b> Dan Littman, <i>New York University, USA</i> [INV24]
10:00-10:30	<b>Microglia: From last-gen to next-gen</b> Richard Ransohoff, <i>Biogen Inc, USA</i> [INV25]
10:30-11:00	<b>Refreshment Break   The David Lopatie Conference Centre</b>
	<b>Session 4: Neuro-immune Axis cont.   The Michael and Anna Wix Auditorium</b> <b>Chairs:</b> Idit Shachar, <i>Weizmann Institute of Science, Israel</i> ; Benny Geiger, <i>Weizmann Institute of Science, Israel</i>
11:00-11:30	<b>Immune cells mind the brain: Fighting Alzheimer's disease by unleashing the innate and adaptive immune cells</b> Michal Schwartz, <i>Weizmann Institute of Science, Israel</i> [INV26]
11:30-12:00	<b>Sympathetic neuroimmunity for obesity</b> Ana Domingos, <i>Instituto Gulbenkian de Ciência (IGC), Portugal</i> [INV27]
12:00-12:15	<b>IL-17A controls expression of IL-17 lineage cytokines through a negative feedback loop involving IL- 24, and limits autoimmune disease</b> Rachel R. Caspi* <sup>1</sup> , W-P. Chong <sup>1,2</sup> , K. Raychaudhuri <sup>1</sup> , R. Horai <sup>1</sup> , P.B. Silver <sup>1</sup> , Y. Jittayasothorn <sup>1</sup> , C-C. Chan <sup>1</sup> , J. Chen <sup>1</sup> , <sup>1</sup> <i>NIH, NEI, USA</i> , <sup>2</sup> <i>ZOC, Sun-yat-Sen Univ., China</i> [ST05]
12:15-12:45	<b>Gene regulatory pathways for human innate versus adaptive lymphoid cells</b> Marco Colonna, <i>Washington University in St Louis, USA</i> [INV28]

12:45-14:15	<b>Lunch   The David Lopatie Conference Centre</b>
	<b>Session 5: Immunity &amp; Metabolism   The Michael and Anna Wix Auditorium</b> <b>Chairs:</b> Klaus Rajewsky, <i>The Max Delbrück Center for Molecular Medicine, Germany</i> ; Michael Sela, <i>Weizmann Institute of Science, Israel</i>
14:15-14:45	<b>Molecular and functional memory in human uterine NK cells following pregnancy</b> Ofer Mandelboim <sup>1*</sup> , M. Gamliel <sup>1</sup> , D. Goldman-Wohl <sup>2</sup> , B. Isaacson <sup>1</sup> , C. Gur <sup>1</sup> , N. Stein <sup>1</sup> , R. Yamin <sup>1</sup> , M. Berger <sup>1</sup> , M. Grunewald <sup>3</sup> , E. Keshet <sup>3</sup> , Y. Rais <sup>4</sup> , C. Bornstein <sup>4</sup> , E. David <sup>4</sup> , A. Jelinski <sup>4</sup> , I. Eisenberg <sup>2</sup> , C. Greenfield <sup>2</sup> , A. Ben-David <sup>2</sup> , T. Imbar <sup>2</sup> , R. Gilad <sup>2</sup> , R. Haimov-Kochman <sup>2</sup> , D. Mankuta <sup>5</sup> , M. E. Suzin <sup>5</sup> , I. Amit <sup>4</sup> , J. Hanna <sup>4</sup> , S. Yagel <sup>2</sup> <sup>1</sup> <i>Hebrew University Faculty of Medicine, Israel</i> , <sup>2</sup> <i>Hadassah Hebrew University Medical Center, Israel</i> , <sup>3</sup> <i>Hebrew University Hadassah Medical School, Israel</i> , <sup>4</sup> <i>Weizmann Institute of Science, Israel</i> , <sup>5</sup> <i>Hadassah University Hospital, Israel</i> [INV29]
14:45-15:15	<b>Oxysterol restraint of cholesterol synthesis prevents AIM2 inflammasome activation</b> Jason G. Cyster*, E.V. Dang, J.G. McDonald, D.W. Russell, <i>University of California, San Francisco, USA</i> [INV30]
15:15-15:45	<b>Personalizing treatments using microbiome and clinical data</b> Eran Segal, <i>Weizmann Institute of Science, Israel</i> [INV31]
15:45-16:00	<b>Quantitative analysis of protein-protein interactions and post-translational modifications in rare immune populations</b> Jakub Abramson, <i>Weizmann Institute of Science, Israel</i> [INV04]
16:00-16:30	<b>Refreshment Break   The David Lopatie Conference Centre</b>
	<b>Session 5: Immunity &amp; Metabolism cont.   The Michael and Anna Wix Auditorium</b> <b>Chairs:</b> Klaus Rajewsky, <i>The Max Delbrück Center for Molecular Medicine, Germany</i> ; Michael Sela, <i>Weizmann Institute of Science, Israel</i>
16:30-17:00	<b>Understanding the T cell proteomic landscape: A new discovery tool</b> Doreen Cantrell, <i>University of Dundee, UK</i> [INV32]
17:00-17:15	<b>Germinal centers: Arrivals, departures and the T cell border control</b> Ziv Shulman, <i>Weizmann Institute of Science, Israel</i> [INV33]
17:15-17:45	<b>Mitochondrial priming by CD28</b> Erika L. Pearce*, R.K. Goltink, <i>Max Planck Institute of Immunobiology and Epigenetics, Germany</i> [INV34]
17:45-18:15	<b>Tissue-treg nurturing-cells</b> Diane Mathis, <i>Harvard University, USA</i> [INV35]
18:15-22:30	<b>Dinner and Party in Tel Aviv (transport will be provided)</b>
<b>Wednesday, February 14 2018</b>	
	<b>Session 6: Immunity to Cancer   The Michael and Anna Wix Auditorium</b> <b>Chairs:</b> Dan Peer, <i>Tel Aviv University, Israel</i> ; Yinon Ben-Neriah, <i>The Hebrew University of Jerusalem, Israel</i>
09:00-09:30	<b>The yin yang of innate immunity and cancer: IL-1R8 as a checkpoint for NK cell-mediated resistance to carcinogenesis and metastasis</b> Alberto Mantovani, <i>Humanitas Clinical and Research Center, Italy</i> [INV36]
09:30-10:00	<b>From the clinic to the lab: Investigating response and resistance mechanisms to immune checkpoint therapy</b> Padmanee Sharma, <i>MD Anderson Cancer Center, USA</i> [INV37]
10:00-10:15	<b>The tumor microbiome and its effects on chemoresistance</b> Ravid Straussman, <i>Weizmann Institute of Science, Israel</i> [INV38]
10:15-10:30	<b>Innate lymphoid cells and cancer</b> Eric Vivier, <i>Aix Marseille University, CNRS, INSERM, France; Hôpital de la Timone, France</i> [ST07]
10:30-11:00	<b>Refreshment Break   The David Lopatie Conference Centre</b>
	<b>Session 6: Immunity to Cancer cont.   The Michael and Anna Wix Auditorium</b> <b>Chairs:</b> Dan Peer, <i>Tel Aviv University, Israel</i> ; Yinon Ben-Neriah, <i>The Hebrew University of Jerusalem, Israel</i>
11:00-11:30	<b>Immune-mediated effects of chemopreventive and anticancer agents</b> Guido Kroemer, <i>INSERM, Institut Gustave Roussy, France</i> [INV39]
11:30-12:00	<b>Cancer neoantigens as targets for natural and therapeutic anti-tumor responses</b> Robert Schreiber, <i>Washington University in St Louis, USA</i> [INV40]
12:00-12:40	<b>Immune checkpoint blockade in cancer therapy: Insights, opportunities, and prospects for cures</b> James P. Allison, <i>MD Anderson Cancer Center, USA</i> [INV41]
12:40-13:00	<b>Closing Remarks and End of Meeting</b>