Inhibitory Immune Receptors in Cancer Development and Therapy

**Welcome and Keynote Address**

**Gordon Freeman**, Dana Farber Cancer Institute, USA

Inhibitory Receptors and Microbiome Regulation of the Anti-Cancer Immune Response

**WEDNESDAY, JANUARY 17**

The Role of Inhibitory Receptors in the Development of Autoimmunity, Allergy and Inflammation

**Eric Meffre**, Stanford University, USA

CTLA-4 Blockade Shifts the B Cell Repertoire Towards Autoimmunity

**Francesca Levi-Schaffer**, Hebrew University of Jerusalem, Israel

Regulation of Mast Cells and Eosinophils by Inhibitory Receptors in Allergy

**Maria Fernandes**, Université Laval, Canada

CLEC12A Regulation of Neutrophil Activation in Chronic Inflammatory Diseases

**Workshop 1: Signaling and Function of Immune Inhibitory Receptors**

**Saskia V. Vijver**, UMC Utrecht, Netherlands

A Novel Bioinformatics Pipeline for the Identification of Immune Inhibitory Receptors as Potential Therapeutic Targets

**Lindsay G. Serene**, Imperial College London, UK

Streptococcus Pyogenes Interacts with the Human Inhibitory Receptor LILRB2

**Maximilian Robinson**, University College London, UK

CTLA-4 Transendocytosis of CD80, but Not Simple CD80-CTLA-4 Binding, Regulates PD-L1:PD-1 Interactions

**Bastien Moës**, Université de Montréal, Canada

GSK-3 Signaling Affects T-cell Homeostasis that Enables CD8 Super-armed Killers in Anti-PD-1 Immunotherapy

**Matthew Vesely**, Yale University, USA

PD-1/H/VISTA Agonism as a Potential Therapy for Autoimmune Skin Diseases

**Waipan Chan**, National Institutes of Health, USA

TCR Ligand Potency Differentially Regulates PD-1-Mediated Inhibitions

**Daniela Cipolletta**, Seismic Therapeutic, USA

Identification and Characterization of Inhibitory Receptor Agonists for the Treatment of Autoimmune and Inflammatory Diseases

**Inhibitory Immune Receptors in Cancer Development and Therapy**

**Nicolas Poirier**, OSE Immunotherapeutics, France

Selective Anti-SIRPα Targeting in Immuno-Oncology

**Ricardo Fernandes**, University of Oxford, UK

Checkpoint Blockade by Phosphatase Recruitment

**Daniel D. Kaplan**, NGM Biopharmaceuticals, Inc., USA

Regulation of Myeloid Cell Biology Through the ILT/LILRB Inhibitory Receptors

**Chao Wang**, The Scripps Research Institute, USA

Short Talk: Degradation of Siglec-7/9 Receptors for Targeting Macrophages and T Cells in Cancer Immunotherapy

**Lee B. Rivera**, NGM Pharmaceuticals, USA

Short Talk: Identification of OSCAR as a LAIR1-regulated Receptor Mediating Collagen-Induced Myeloid Inflammation

**Poster Session 2**

**THURSDAY, JANUARY 18**

Regulation of Homeostasis by Inhibitory Receptors

**Li Peng**, Palleon Pharma, USA

Unlocking the Therapeutic Potential of Glycobiology

**Linde Meyaard**, University Medical Center Utrecht, Netherlands

Inhibitory Pattern Recognition Receptors in Homeostasis

**Lidia Bosurgi**, University Medical Center Hamburg-Eppendorf, Germany

Apoptotic Cell Identity Induces Distinct Functional Programs in Efferocytic Macrophages

**Carla V. Rothlin**, Yale University, USA

MERTK and TYRO3 in Retinal Homeostasis

**Linghua Zheng**, Ohio State University, USA

Short Talk: The Inhibitory Role of Cell Surface PILRα–CD8α Interactions in Maintaining CD8+ T Cell Quiescence and Homeostasis

**Thiago deJesus Borges**, Massachusetts General Hospital, USA

Short Talk: Siglec-E is a Novel Co-inhibitory Receptor in the Modulation of Innate Activation after Transplantation

**Career Roundtable**

**Sourav Ghosh**, Yale University School of Medicine, USA

**Nicole Joller**, University of Zurich, Switzerland

**Pia Pauliina Yachi**, Eli Lilly and Company, USA

**Novel Computational and Biological Insights Into Inhibitory Receptor Regulation and Function**

**Gavin J. Wright**, University of York, UK

Discovering Mechanisms of Immune Regulation by Systematic Large-Scale Receptor Screening

**Becca Asquith**, Imperial College London, UK

KIRs, T Cell Dynamics, Control of Chronic Virus Infection and Autoimmunity

**Sourav Ghosh**, Yale University School of Medicine, USA

TREM2 and AXL in Neurodegeneration

**Joshua D. Samuels**, University of Virginia, USA

Short Talk: SHP-1 Negatively Regulates Microglial Innate Immune Responses in Aβ Amyloidosis

**FRIDAY, JANUARY 19**

Dissecting the Role of Inhibitory Immune Receptors in Infection Biology
Alex McCarthy, Imperial College London, UK

The Hijacking of CEACAM1 by Human Bacterial Pathogens

Nicole Joller, University of Zurich, Switzerland

TIGIT Limits Immune Pathology During Viral Infections

Hisashi Arase, Osaka University, Japan

Immune Evasion of Plasmodium falciparum via Inhibitory Receptors

Meghan Morrissey, University of California, Santa Barbara, USA

Molecular Mechanism of CD47-SIRPA Inhibitory Signaling

Hannah Dorando, Washington University in St. Louis, USA

Short Talk: LAIR1 Prevents Excessive Inflammatory Signaling in S. Aureus Skin and Soft Tissue Infection

Workshop 2: New Concepts in Inhibitory Receptor Biology

Shi-Yo Jill Chen, College of Medicine, National Taiwan University, Taiwan

Investigation of the Role of CD300a in Epstein–Barr Virus-infected B Cells and its Potential as a Target Antigen for T Cell-directing Bispecific Antibodies

Ian A. Parish, Peter MacCallum Cancer Centre, Australia

Single Protein Mapping of Immune Checkpoints Reveals CD80 as an Antagonist of PD-L1/MHC-I Clusters

James Torchia, Dana-Farber Cancer Institute, USA

Location-Specific T-cell Inhibitory Molecules (LoSTIMs)

Dieuwke L. Marvin, University Medical Center Utrecht, Netherlands

Surface Removal and Degradation of PD-L1 Using SureTACs Technology

Yasuyuki Saito, Kobe University Graduate School of Medicine, Japan

CD47 Promotes Peripheral T Cell Survival by Preventing Dendritic Cell–mediated T Cell Necroptosis

Martina Damo, University of Chicago, USA

PD-1 Safeguards Against Cutaneous Immuneopathology by Local Neoantigen-specific CD8 T Cells

Seymour de Picciotto, Moderna, USA

Agonizing Multiple Inhibitory Receptors: A Potential Therapeutic Strategy for Autoimmune Diseases

Mariano Malamud Guillan, University of Exeter, UK

Regulation of Neutrophil Extracellular Trap Formation by a Novel Inhibitory C-type Lectin Receptor

Targeting Inhibitory Receptors for Novel Therapies

Ajay Nirula, Eli Lilly, USA

Clinical Validation of Checkpoint Agonist Antibodies in Immunologic Disease

Lynne Anne Murray, MiroBio, UK

Selection of Checkpoint Agonist Antibodies through Understanding of Inhibitory Receptor Signaling

Jonathon D. Sedgwick, Abbvie, USA

Current Status and the Future Promise for Therapeutic Inhibitory Receptor Targeting

Meeting Wrap-Up: Outcomes and Future Directions (Organizers)