SUNDAY, JUNE 7
Arrival and Registration

MONDAY, JUNE 8
Welcome and Keynote Address (Joint)
Joseph (Mike) McCune, Bill & Melinda Gates Foundation, USA
Human Immune Ontogeny: Implications for Maintenance of the Maternal-Fetal Interface and Responses to Environmental Antigens in utero and at Birth

Maternal-Fetal Immunological Detente (Joint)
Tippi MacKenzie, University of California, San Francisco, USA
Gil G. Mor, Wayne State University School of Medicine, USA
Remodeling and Inflammation at the Maternal-Fetal Interface
Adrian Erlebacher, University of California, San Francisco, USA
Epigenetics of Pregnancy and Parturition
Short Talks Chosen from Abstracts

Poster Session 1
Primary Microbial Colonization and Offspring Development (Joint)
Florent Ginhoux, Singapore Immunology Network, Singapore
Learning from Fetal Immunity
Maria G. Dominguez-Bello, Rutgers University, USA
Postnatal Development of the Microbiome
Kjersti Marie Aagaard, Baylor College of Medicine, USA
Our Earliest Friends
Short Talks Chosen from Abstracts

TUESDAY, JUNE 9
Maternal Microbiota in Healthy Pregnancy and Adverse Pregnancy Outcomes (Z3)
David A. Relman, Stanford University, USA
Microbiome Dynamics During and After Pregnancy
Frederic D. Bushman, University of Pennsylvania, USA
The Microbiome and Virome in Early Life
Michal A. Elovitz, University of Pennsylvania School of Medicine, USA
Mechanisms by Which a Non-Optimal Cervicovaginal Microbiota Promotes Preterm Birth
Roberto Romero, National Institutes of Health / Wayne State University, USA
Microbial Host Interactions during Fetal Life and Adverse Pregnancy Outcome
Short Talks Chosen from Abstracts

Innate, Trained and Heterologous Immunity (Z4)
Dorothee Viemann, Hannover Medical School, Germany
Perinatal Innate Immune Programming
Tobias R. Kollmann, Telethon Kids Institute, Australia
INNATE IMMUNE ONTOGENY
Bali Pulendran, Stanford University School of Medicine, USA
Talk Title to be Announced
Sabra L. Klein, Johns Hopkins University, USA
Heterologous Immunity and the Impact of Sex on Immune Development
Short Talks Chosen from Abstracts

Workshop 1: Animal Pregnancy Models: Benefits and Drawbacks (Z3)
Short Talks Chosen from Abstracts

Pregnancy Timing, Is there a Parturition Clock? (Z3)
Carole R. Mendelson, University of Texas Southwestern Medical Center, USA
Fetal-Maternal Signaling in the Initiation of Labor
Brice Gaudilliere, Stanford University School of Medicine, USA
Immune System Clockwork in Pregnancy
Sarah K. England, Washington University School of Medicine, USA
Chronodisruption and Risk of Preterm Birth
Short Talks Chosen from Abstracts

* Session Chair † Invited but not yet accepted  Program current as of March 12, 2020. Program subject to change. Meal formats are based on meeting venue. For the most up-to-date details, visit https://www.keystonesymposia.org.
Ontogeny of Adaptive Immunity: Repertoire and Response (Z4)

Scott D. Boyd, Stanford University, USA
The Human Adaptive Immune Repertoire in Early Life
Deena L. Gibbons, King's College London, UK
T Cell Development and Function in the Human Neonate
Christiane Eberhardt, Emory University School of Medicine, Switzerland
Early Life B Cell Vaccine Responses and Influence of Maternal Antibodies
Short Talks Chosen from Abstracts

Poster Session 2

WEDNESDAY, JUNE 10

The Placenta in Health and Disease (Z3)

Susan J. Fisher, University of California, San Francisco, USA
Genome-Scale Fluctuations in the Cytotrophoblast Epigenome over Gestation and in Placental Pathologies
Mana M. Parast, University of California, San Diego, USA
Modeling Human Trophoblast Differentiation in Normal and Diseased Placentation
Kent L. Thornuburg, OHSU, USA
Maternal Stresses Modify Placental Function and Fetal Growth
Short Talks Chosen from Abstracts

Immune Responses to Infection in Early Life (Z4)

Jody L. Baron, University of California, San Francisco, USA
HBV
Margaret Feeney, University of California, San Francisco, USA
The Immune Response to Malaria In Utero
Nigel Curtis, University of Melbourne, Australia
The Heterologous Effects of Neonatal BCG Vaccination
Purvesh Khatri, Stanford University, USA
Systems Approaches to Predict and Unravel the Immunobiology of Neonatal Sepsis
Short Talks Chosen from Abstracts

Workshop 2: Shared Pathophysiology Underlying Common Pregnancy Complications (Stillbirth, Spontaneous Abortion, Prematurity, Preeclampsia)? (Z3)

Short Talks Chosen from Abstracts

Workshop: Novel Platforms and Mechanisms of Inducing Protective Immunity to HIV in Early Life (Z4)

Anjali Singh, National Institutes of Health, USA
Kristina De Paris, University of North Carolina at Chapel Hill, USA

Sallie R. Permar, Duke University Medical Center, USA
Infant HIV to achieve broadly neutralizing antibody responses
Mary A. Marovich, NIAID, National Institutes of Health, USA

Immunity at the Maternal-Fetal Interface (Z3)

Kang Chen, Wayne State University and National Institutes of Health, USA
Harnessing the Function of B Cells to Prevent Preterm Labor
Aleksandar Stanic, University of Wisconsin-Madison, USA
Integration of Single Cell RNAseq and T Cell Receptor Repertoire Data at the Maternal-Fetal Interface
Elizabeth A. Bonney, University of Vermont, USA
Exhaustion, Senescence and Metabolism: Potential Implications for Maternal T cell Biology.
Nardhy Gomez-Lopez, Wayne State University, Perinatology Research Branch/NICHD, USA
Effector and Regulatory T Cells in the Pathophysiology of Preterm Labor and Birth
Short Talks Chosen from Abstracts

Protecting the Infant through Maternal and Neonatal Immunization (Z4)

Arnaud Marchant, Université libre de Bruxelles, Belgium
Maternal Immunization and the Developing Immune System
Ofer Levy, Boston Children's Hospital, USA
Precision Vaccines: Age-Specific Adjuvantenent Systems to Enhance Early Life Immunization
Rino Rappuoli, GlaxoSmithKline Vaccines, Italy
Engineering Vaccines to Protect the Neonate and Young Infant

Poster Session 3

THURSDAY, JUNE 11

Local and Systemic Maternal Changes in Normal Pregnancy and Pregnancy Complications (Z3)

Philippe Van de Perre, University Montpellier, France
Breastmilk Cell Trafficking and Neonatal Immune Maturation
Manuel Friese, University Medical Center Hamburg-Eppendorf, Germany
Modulation of Immune Responses during Pregnancy in Multiple Sclerosis
Sing Sing Way, Cincinnati Children's Hospital, USA
Microchimeric Cells

The Rising Tide of Allergy and Autoimmunity (Z4)

Donata Vercelli, University of Arizona, USA
Maternal Immune Profiles, Neonatal Epigenome and Microbial Exposures in the Trajectory to Childhood Asthma
Peter Vuillermin, Deakin University, Australia
Ontogeny of the Immune System and Microbiome in Relation to Allergies

Mikael Knip, University of Helsinki, Finland
Early Origin of Autoimmunity

Short Talks Chosen from Abstracts

Congenital Infections as a Probe for Maternal Fetal Cross Talk (Joint)
Carolyn B. Coyne, University of Pittsburgh, USA
Trophoblast Antimicrobial Immunity

Sallie R. Permar, Duke University Medical Center, USA
Selective Maternal Antibody Transfer and Protection Against Neonatal Pathogens

Philip J. Goulder, University of Oxford, UK
Congenital HIV

Short Talk Chosen from Abstracts

Closing Keynote Address (Joint)
Andrew J.S. Macpherson, University of Bern, Switzerland
The Pervasive Effects of the Maternal Microbial Diaspora in Shaping Early Life Organ Function

Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (Z3)
Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (Z4)

FRIDAY, JUNE 12
Departure