

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Maternal-Fetal Cross Talk: Harmony vs. Conflict (T2)

October 4-8, 2017 • Westin Washington, D.C. City Center • Washington, D.C., USA

Scientific Organizers: Jeff Murray, Louis J. Muglia and Yoel Sadovsky

Supported by the Directors' Fund

Abstract & Scholarship Deadline: / Abstract Deadline: / Discounted Registration Deadline:

WEDNESDAY, OCTOBER 4

Arrival and Registration

THURSDAY, OCTOBER 5

Welcome and Keynote Address

David Haig[†], Harvard University, USA
Pregnancy: Harmony and Conflict

The Placenta – Cells to Tissues

Julie C. Baker[†], Stanford University, USA
Transposable Elements, Non-Coding RNAs and Placental Function
James (Jay) C. Cross[†], University of Calgary, Canada
Placental Development: Trophoblast Strategies

Susan J. Fisher[†], University of California, San Francisco, USA
The Contribution of Early Placentation Events to Adverse Pregnancy Outcomes

Short Talk(s) Chosen from Abstracts

The Rapidly Evolving Placenta

Derek Wildman[†], University of Illinois, USA
Placental Evolution: Informing Reproduction through Comparative Biology

Bernard J. Crespi[†], Simon Fraser University, Canada
Placental Invasiveness and the Shaping the Primate Maternal-Fetal Interface

Jean-François Lemaitre[†], Université de Lyon, France
Diversification of the Eutherian Placenta Is Associated with Changes in the Pace of Life

Short Talk Chosen from Abstracts

Poster Session 1

FRIDAY, OCTOBER 6

The Establishment of Pregnancy – Tolerance and Rejection

Sing Sing Way[†], Cincinnati Children's Hospital, USA
Balancing Fetal Tolerance and Infection Susceptibility: New Insights from Mouse Models

Adrian Erlebacher[†], University of California, San Francisco, USA
Chemokine Signaling and the Wall at the Maternal Fetal Interface

Ofer Mandelboim[†], Hebrew University, Israel
Innate Immunity and the Maintenance of Pregnancy

Ashley Moffett[†], University of Cambridge, UK
Maternal – Fetal Genotypes and Pregnancy Success: The Role of NK Cells

Short Talk(s) Chosen from Abstracts

Crosstalk between the Maternal and Fetal Microbial Communities

Jeffrey I. Gordon[†], Washington University School of Medicine, USA
The Maternal Microbiome: New Insights into Pregnancy Health and Postnatal Growth

David A. Relman[†], Stanford University, USA
The Vaginal Microbiome Signature of At-Risk Pregnancy

Jacques Ravel[†], University of Maryland School of Medicine, USA
Do Ancestral Differences in Microbiome Structure Contribute to Adverse Pregnancy Outcomes?

Short Talk Chosen from Abstracts

Poster Session 2

SATURDAY, OCTOBER 7

Epigenetics and Imprinting in Feto-Placental Harmony and Conflict

Anne C. Ferguson-Smith[†], University of Cambridge, UK
Methylation, miRs and Placental Development

Jon F. Wilkins[†], Santa Fe Institute, USA
Canalization, Phenotype Variation and Imprinting in Complex Disease

Marisa S. Bartolomei[†], University of Pennsylvania Perelman School of Medicine, USA
Assisted Reproduction, Imprinting and Placental Development

Richard Saffery[†], University of MelbourneMurdoch Childrens Research Institute, Australia
Epigenetic Regulation of Human Placental Function and Pregnancy Outcome: Considerations for Causal Inference

Short Talk(s) Chosen from Abstracts

Genomic Communication during Pregnancy

Steve Quake[†], Stanford University, USA
Cell-Free Circulating RNA as a Window to Feto-Placental Biology

Yoel Sadovsky, Magee-Womens Research Institute, USA
The Biology of Placental Exosomes and their miRNA Cargo

Nathan D. Price[†], Institute for Systems Biology, USA
Integrating Omics: New Insights from Cross-Platform Analyses

Short Talk Chosen from Abstracts

Poster Session 3

SUNDAY, OCTOBER 8

From Uterine Quiescence to Parturition

Roger Smith[†], University of Newcastle, Australia
Hormones and Pregnancy: Is What We Think They Do Really What They Do?

Sam Mesiano[†], Case Western Reserve University, USA
Progesterone Signaling in Primate Biology: The Role of Progesterone Receptor Modifications

Carole R. Mendelson[†], University of Texas Southwestern Medical Center, USA
Fetal Signals that Control the Duration of Gestation

Roberto Romero[†], National Institutes of Health / Wayne State University, USA
Infection, Inflammation and the Transition to Labor

Short Talk(s) Chosen from Abstracts

Epidemiology of Pregnancy Health and Outcomes

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Louis J. Muglia, Cincinnati Children's Hospital Medical Center, USA

*Populations as Laboratories for Biological and Social Discovery in
Pregnancy Outcomes*

Bo Jacobsson[†], University of Gothenburg, Sweden

Nutritional Influences on Pregnancy Outcomes

Rachel Freathy[†], University of Exeter, UK

*Environmental and Genetic Determinants of Fetal Growth and Infant
Health*

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

MONDAY, OCTOBER 9

Departure