

NICHD Workshop on Idiopathic/Non-Aneuploid Early Pregnancy Loss (EPL): The State of The Science

July 22 and 23, 2021 (1:00-5:00 p.m. EST)

Location

The live videocast of this meeting will be conducted by virtual format. It will be accessible at <https://nih.zoomgov.com/j/1607708558>

Workshop Goals

The goal of this workshop is to bring together basic and clinical investigators working in the area of EPL not related to aneuploidy to identify gaps in knowledge, barriers to advancing the science, promising approaches, and needed tools. This workshop will generate opportunities to understand implantation mechanistically and reveal a range of key factors, not limited to genetics, involved in implantation and placentation, which are important for early pregnancy establishment and maintenance, including abnormalities that contribute to EPL, birth defects, intrauterine fetal demise, and pregnancy complications.

Program

Day 1: July 22, 2021

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| 1:00-1:05 p.m. | Welcome --- Louis DePaolo, Ph.D. |
| 1:05-1:25 p.m. | Opening Remarks --- Diana W. Bianchi, M.D. |
| 1:25-1:30 p.m. | Purpose of the Meeting --- Esther Eisenberg, M.D., M.P.H. |
| 1:30-2:15 p.m. | Keynote Speech --- Katherine Hartmann, M.D., Ph.D.
Is it Time to Add Miscarriage Prevention to Preconception Care? |
| 2:15-2:30 p.m. | Voice of the Participant --- Megan Hanson
Unexplained is Unacceptable: The Patient Experience of Recurrent Pregnancy Loss |



Eunice Kennedy Shriver National Institute
of Child Health and Human Development

EPL DEFINITIONS AND DATA

Moderator: Roz King, Ph.D.

- 2:30-3:00 p.m. Robert Silver, M.D.
Diagnosis, Nomenclature, and Causes
Enrique Schisterman, Ph.D.
Epidemiology on EPL and Lessons from the Effects of Aspirin in Gestation and Reproduction (EAGeR) Trial
- 3:00-3:20 p.m. Panel Discussion
- 3:20-3:30 p.m. Break

IMPACT OF MATERNAL HEALTH, INFECTION, AND IMMUNOLOGICAL FACTORS

Moderator: Nahida Chakhtoura, M.D., Ms.G.H.

- 3:30-4:15 p.m. Vikki Abrahams, Ph.D.
Infection and Immune Factors Affecting EPL
Adrian Erlebacher, M.D., Ph.D.
Epigenetic Regulation of Wound-Healing Responses at the Maternal-Fetal Interface
Aleksandar Stanic, M.D., Ph.D.
Leveraging Integration of Single Cell Data to Unravel Decidual Immunology
- 4:15-4:35 p.m. Panel Discussion

Day 2: JULY 23, 2021

- 1:00-1:15 p.m. Remarks --- Dr. Janine Clayton, M.D.

UNCOVERING NUTRITIONAL, ENVIRONMENTAL, AND SOCIAL DETERMINANTS

Moderator: Sunni Mumford, Ph.D.

- 1:15-2:00 p.m. Kathleen Caron, Ph.D.
Burning Questions: Are E-cigarettes Safe During Pregnancy
Jorge Chavarro, M.D., Sc.D.
Nutrition and EPL: What We Think We Know, and What We Clearly Do Not Know

Alicia Christy, M.D.

The Influence of Racial and Social Determinants on EPL

2:00-2:20 p.m. Panel Discussion

MATERNAL AND PATERNAL FACTORS IN EPL

Moderator: Clara Cheng, Ph.D.

2:20-3:05 p.m. Franco DeMayo, Ph.D.

The Identification of Pathways Governed by Steroid Hormones,
Which Are Critical to Ensure Appropriate Embryo Implantation and
Prevent Pregnancy Loss

Diana Monsivais, Ph.D.

An Endometrial Bone Morphogenetic Protein Signaling Axis
Controls Receptivity and Embryo Implantation

Tomer Avidor-Reiss, Ph.D.

Non-Genomic Male Factors in EPL: An Urgent Call to Action

3:05-3:25 p.m. Panel Discussion

3:25-3:35 p.m. Break

MODEL SYSTEMS AND RESEARCH TOOLS

Moderator: Elena Gorodetsky, M.D., Ph.D.

3:35-4:05 p.m. Thomas Spencer, Ph.D.

Biological Role of Uterine Glands: Insights into Pregnancy Loss

Asgerally Fazleabas, Ph.D.

EPL: Role of the Decidua

4:05-4:20 p.m. Panel Discussion

4:20-4:40 p.m. Final Discussion and Closing Remarks

Sponsor/Co-Sponsor(s): *Eunice Kennedy Shriver* National Institute of Child Health and Human Development and the Office of Research on Women's Health