



SOCIETY FOR PEDIATRIC AND PERINATAL EPIDEMIOLOGIC RESEARCH
reproduction | pregnancy | fetal development | child | adolescent health

Society for Pediatric and Perinatal Epidemiologic Research
Virtual Annual Meeting – December 15th, 2020

Program at a Glance

Note: All times are listed in Mountain Standard Time

8:00 – 9:30 am	Concurrent contributed sessions (1A and 1B) Obstetric health Pregnancy outcomes
10:00 – 11:30 am	Symposia (2A and 2B) Machine learning applications, limitations, and opportunities in reproductive health research Developmental origins of health: a focus on epigenetic mechanisms
12:00 – 1:00 pm	Plenary (3) Keynote address Student prize paper presentation SPER 2020 Awards
1:30 – 3:00 pm	Concurrent contributed sessions (3A, 3B, 3C) Fetal growth and child development Fertility, fecundity, and reproductive health Pre- and perinatal exposure to medications and substance abuse
3:30 – 5:00 pm	Symposia (4A and 4B) Pregnancy and birth outcomes among sexual minority women: are there disparities by sexual orientation? Gynecologic epidemiology: research methodologies to address major challenges in measurement, confounding, and selection
5:15 – 5:30 pm	Business Meeting

Detailed Program: SPER Virtual Annual Meeting – December 15th, 2020

8:00 – 9:30 am (MST)		Concurrent contributed sessions (1A and 1B)
1A	OBSTETRIC HEALTH	<p>Co-chairs: Wei Perng and Julie Petersen</p> <p>Preterm birth and subsequent risk of coronary heart disease in black women Samantha Parker</p> <p>Dimensions of Pregnancy Intention and Maternal Mental Health: A secondary analysis of a longitudinal cohort of mother-baby dyads in Alberta, Canada Kaylee Ramage</p> <p>Migraine in a cohort of commercially insured women in the United States: natural history and association with preeclampsia, placental abruption, and preterm birth Mollie Wood</p>
1B	PREGNANCY OUTCOMES	<p>Co-chairs: Courtney Lynch and Jaime Slaughter-Acey</p> <p>Psychiatric conditions diagnosed prior to pregnancy and risk of miscarriage: a Norwegian registry study Maria Christine Magnus</p> <p>Inter-pregnancy interval and pregnancy outcomes: How important is the timing of confounding variable ascertainment? Laura Schummers</p> <p>Inter-pregnancy intervals and adverse birth outcomes in high-income countries: an international study Gizachew Tessema</p> <p>Forest fire exposure and first trimester pregnancy loss Jenna Nobles</p> <p>Effects of lifestyle interventions on risk of pregnancy loss Alexandra Purdue-Smithe</p>
10:00 – 11:30 am (MST)		Symposia (2A and 2B)
2A	Machine learning applications, limitations, and opportunities in reproductive health research	<p>Co-chairs: Elizabeth DeVilbiss and Sonia Grandi</p> <p>Ensemble learning application: Prediction of gestational age among Rwandan women receiving first trimester ultrasound Alejandra Benitez</p> <p>Machine learning assisted identification of preterm births in Zambia Alex Keil</p> <p>A cautionary tale on the use of machine learning to predict adverse pregnancy outcomes Ann Weber</p> <p>Synthesis and discussion: opportunities & cautions for machine learning in reproductive health research Elizabeth DeVilbiss and Sonia Grandi</p>
2B	Developmental origins of health: a focus on epigenetic mechanisms	<p>Co-chairs: Sonia Robinson and Edwina Yeung</p> <p>Epigenetics as a way to gain insight into mechanisms and pathways Marie-France Hivert</p> <p>Challenges in epigenetic research: the importance of cell-type and tissue specificity Kelly Bakulski</p> <p>The pregnancy and childhood epigenetics consortium: learning more by working together Stephanie London</p>

12:00 – 1:00 pm (MST)	Plenary: Keynote address, Student prize paper presentation, SPER 2020 Awards
12:05 – 12:35 pm	Keynote Address: Matthew W. Gillman, MD , Director of the Environmental Influences on Child Health Outcomes Program
12:35 – 12:55 pm	Student Prize Paper Presentation A Prospective Study of Male Preconception Marijuana Use and Spontaneous Abortion Alyssa Harlow
12:55 – 1:00 pm	SPER 2020 Awards Mentoring Award, Rising Star Award, Heinz Berendes Travel Award, President’s Award

1:30 – 3:00 pm (MST) Concurrent contributed sessions (3A, 3B, 3C)

3A FETAL GROWTH AND CHILD DEVELOPMENT
Co-chairs: Deshayne Fell and Carrie Shapiro-Mendoza

Every Week Counts: a Population-based Study of Gestational Age at Birth and Brain Morphology in Children at 10 Years
Hanan El Marroun (*Heinz Berendes Award Winner*)
Effect of Alcohol Consumption on Child Development among Breastfeeding Mothers
Matthew Tudball
Fetal growth trajectories among SGA newborns and child neurodevelopment
Kelly Ferguson
Prenatal Folate Revisited: Maternal Folate Status During Pregnancy and Brain Developmental Trajectories in Offspring
Runyu Zou
Exploring Paternal Preconception Windows of Vulnerability on Offspring Birthweight in Relation to Bisphenol and Phthalate Exposure
Yu Zhang

3B FERTILITY, FECUNDITY, AND REPRODUCTIVE HEALTH
Co-chairs: Audrey Gaskins and Anna Pollack

Linking stressful life experiences to the incidence of infertility
Jessica Gleason
Inflammation and conception, what is the role of vitamin D status?
Anne Marie Jukic
Residential proximity to major roads and fecundability among North American pregnancy planners
Amelia Wesselink
Use of depot medroxyprogesterone acetate reduces fibroid growth and incidence: a prospective study
Quaker Harmon
Markers of Vitamin D Metabolism and Reproductive Outcomes Among Women with Proven Fecundity
Sunni Mumford

3C PRE- AND PERINATAL EXPOSURE TO MEDICATIONS AND SUBSTANCE ABUSE
Co-chairs: Alicia Allen and Mollie Wood

Prenatal exposure to antidepressants and risk of ADHD in childhood: findings from a nationwide study
Buket Öztürk
Opioid use during pregnancy and ischemic placental disease.
Daina Esposito
Cannabis use in pregnancy and the development of congenital anomalies in British Columbia, Canada: A population-based study
Sabrina Luke
Selective serotonin reuptake inhibitor type and pregnancy loss
Lindsey Sjaarda

3:30 – 5:00 pm (MST) *Symposia 5A and 5B*

5A *Pregnancy and birth outcomes among sexual minority women: are there disparities by sexual orientation?*
Chair: Jonathan Snowden

Differences in birth and pregnancy outcomes between same and different-sex couples: evidence from birth certificate data

Jae Downing

Exploring the Relationship Between LGBT-Specific Policies and Birth Outcomes Among Sexual Minority Women

Bethany Everett

Birth outcomes among sexual minority women in California

Iman Berrahou

Pregnancy and birth outcomes among women in same-sex couples within a Swedish setting

Anna Sandstrom

Joint Q&A / discussion

5B *Gynecologic epidemiology: research methodologies to address major challenges in measurement, confounding, and selection*

Co-chairs: Whitney Robinson and Leslie Farland

Introduction

Whitney R. Robinson

Endometriosis: challenges in measuring disease status

Leslie V. Farland

Uterine Fibroids: investigating how stress and racism may influence excess burden among African American women

Anissa I. Vines

Polycystic ovary syndrome: assessment of a syndromic condition and statistical methods for epidemiologic research

Holly R. Harris

Differential phenotypes and misclassification of the outcome in women with vulvodynia: An epidemiological challenge in the study of its etiology

Bernard L. Harlow

Overview of Gynecologic Research and Funding at NIH

Lisa Halvorson

Discussion

5:15 – 5:30 pm (MST) *BUSINESS MEETING*

SPER President Lauren Wise