Washington University in St.Louis

School of Medicine

# 36<sup>th</sup> Annual Rothman Research Symposium

# Tuesday, May 3, 20221:00 - 5:00 PMBasic & Translational Research Presentations - Wohl Auditorium

# 1:00-1:10 PM

# Welcome/Introductions

Eric Strand, MD, Professor, General OBGYN Division Director

1:10-1:40 PM Basic Science Overview Antonina Frolova, MD, PhD, Assistant Professor

### 1:40-1:53 PM

Longitudinal and case-control studies of human uterine peristalses through menstrual cycles using noninvasive high-resolution electromyometrial imaging (EMMI) techniques Sicheng Wang, Graduate Research Assistant Advisor: Yong Wang, PhD

1:53-2:06 PM

Sperm mitochondrial activity increases during capacitation upon CatSper channel activation Juan Ferreira, PhD, *PostDoc* Advisor: Celia Santi, MD, PhD

#### 2:06-2:19 PM

**Diet-induced obesity impairs uterine contractility in mice Kevin Prifti**, *Sr. Lab Technician* Advisor: Antonina Frolova, MD, PhD

#### 2:19-2:32 PM

# Initial Validation of Uterine Microstructure Imaging using Quantitative Histology

**Wenjie Wu,** *Graduate Research Assistant* Advisor: Yong Wang, PhD

#### 2:32-2:45 PM

# First selective inhibitor of SLO3 impairs human sperm function

**Max Lyon**, *Graduate Research Assistant* Advisor: Celia Santi, MD, PhD

#### 2:45-2:58 PM

# Noninvasive Longitudinal Imaging of Human Placental Villi Maturation during Human Pregnancy

**Zhexian Sun**, *Graduate Research Assistant* Advisor: Yong Wang, PhD

## 2:58-3:11 PM

# NALCN and accessory subunit expression in human and mouse myometrium

**Lindsey Kent, PhD**, *Sr Scientist* Advisor: Sarah England, PhD

# 3:11-3:25 PM Break

### 3:25-3:38 PM Investigating tumor-mesothelial cell interactions during ovarian cancer metastasis

**Angela Schab**, *DBBS Pre Doc Trainee* Advisor: Katherine Fuh, MD, PhD

## 3:38-3:51 PM

# Entinostat restores responsiveness to Olaparib in ID8 TP53 null and ID8 TP53 null/BRCA2 null mouse ovarian cancer cell lines

**Tyler Woodard, MD**, *Clinical Fellow, GO* Advisor: Dineo Khabele, MD

### 3:51-4:04 PM

# RAD51 is a biomarker predictive of homologous recombination deficiency and clinical response to DNA damaging agents in patient-derived ovarian cancer organoids

**Lily Van Biljon**, *Research Technician I* Advisor: Maggie Mullen, MD

#### 4:04-4:17 PM

# Regulation of periostin by DDR2 in cancer-associated fibroblasts controls tumor invasion and metastasis in overian cancer

**Favour Akinjiyan**, *DBBS Graduate Research Assistant* Advisor: Katherine Fuh, MD, PhD

#### 4:17-4:30 PM

An in vitro model reproducing the interactions between murine peritoneal macrophages and ovarian cancer cells

**Simona Miceska**, *Visiting Researcher* Advisor: Dineo Khabele, MD

### 4:30-4:43 PM

# Mutational changes in ovarian tumors before and after neoadjuvant chemotherapy

**Mark Valentine, MD, PhD**, *Resident, PGY3* Advisor: Katherine Fuh, MD, PhD

#### 5:00-7:00 PM

**Rothman Reception & Alumni Society Kickoff** *Peds Lobby, McDonnell Building*  Washington University in St.Louis

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# 36<sup>th</sup> Annual Rothman Research Symposium

# Wednesday, May 4, 2022 8:00 AM – 12:30 PM Clinical Research Presentations - Seminar Room B, EPNEC

# 8:00 - 8:10 AM Welcome/Introductions

Eric Strand, MD, Professor, General OBGYN Division Director

# 8:10-8:23 AM

# Knowledge and Attitudes Towards Oocyte Cryopreservation amongst Obstetrician and Gynecologists

**Erika Mauban, MD**, *Resident, PGY2* Advisor: Patricia Jimenez, MD

# 8:23-8:36 AM

# **OB/GYN physician adherence to cervical cancer** screening guidelines Caroline Min, MD, MPH, *Resident, PGY2* Advisor: Lindsay Kuroki, MD, MSCI

# 8:36-8:49 AM

**Risk Factors and Outcomes in Black vs. White Patients in a Midwest Cohort Undergoing In Vitro Fertilization Jean Claire (Mandi) Dillon, MD, MPH**, *Resident, PGY4* Advisor: Tessa Madden, MD, MPH

### 8:49-9:02 AM

**Diet-induced obesity impairs uterine contractility in mice Manuela Mejia, MD**, *Resident, PGY4* Advisor: Nandini Raghuraman, MD, MS

### 9:02-9:15 AM

**Making the diagnosis of NRFS: Potential of implicit bias Bridget Huysman, MD, MPH**, *Resident, PGY4* Advisor: Lindsay Kuroki, MD, MSCI

### 9:15-9:28 AM

**Disparities in Surgical Management of Uterine Fibroids Lulu Yu, MD, MPHS**, *Resident, PGY4* Advisor: Whitney Ross, MD

### 9:28-9:41 AM Comparison of Patient Satisfaction with Contraceptive Counseling Delivered by Telehealth versus In-Person Emily Freeman, DO, MA, MS, *Clinical Fellow, CFP* Advisor: Tessa Madden, MD, MPH

9:41-9:56 AM Break

### 9:56-10:09 AM

Recurrent urinary tract infection incidence rates decrease in women with cystitis cystica after treatment with D-mannose: A cohort study Kimberley Chiu, MD, *Clinical Fellow, FPMRS* Advisor: Jerry Lowder, MD, MSc 10:09-10:22 AM

# A Survey of High-Risk Obstetric Patients' Attitudes towards the COVID-19 Vaccine

**Annessa Kernberg, MD**, *Clinical Fellow, MFM* Advisors: Abigail Bell; Nandini Raghuraman, MD, MS; Jeannie Kelly, MD, MS

10:22-10:35 AM

# Is fetal acidemia at the time od scheduled cesarean associated with neonatal morbidity? Katherine Bligard, MD, MA, Clinical Fellow, MFM Advisor: Nandini Raghuraman, MD, MS

# 10:35-10:48 AM

**The impact of cervical effacement at time of amniotomy in patients undergoing induction of labor Rebecca Rimsza, MD**, *Clinical Fellow, MFM* Advisor: Nandini Raghuraman, MD, MS

### 10:48-11:01 AM

**Deciphering chronic hypertension from preeclampsia: Utility of NT-proBNP in obstetric triage Megan Oakes, MD**, *Clinical Fellow, MFM* 

# Advisor: Tessa Madden, MD, MPH

11:01-11:14 AM Impact of Operating Room Setting on In Vitro Fertilization Outcomes in Patients with Class 3 Obesity Emily Spurlin, MD and Caitlin Martin, MD, MS,

*Clinical Fellows, REI* Advisor: Kenan Omurtag, MD

11:14-11:30 AM Break

11:30-12:30 AM - Guest Speaker

# "UME to GME Transition: A Wicked Problem in Medical Education."



**Dr. Maya Hammoud MD, MBA** J. Robert Willson Research Professor of OBGYN Professor of Learning Health Sciences Chief, Women's Health Division Associate Chair for Education University of Michigan Medical School