

# 2024 JOINT UCLA SCORE SYMPOSIUM: Sex Differences in Brain-Gut Disorders and Metabolism

**Friday, April, 5, 2024**

*(In-Person and Virtual)*

## California NanoSystems Institute (CNSI)

8:30 AM – 9:00 AM	<b>Continental Breakfast</b>
<b>Introduction and Welcoming Remarks</b>	
9:00 AM – 9:10 AM	<p><b>Lin Chang, MD</b> MPI, SCORE on Sex Related Differences in Brain Gut Microbiome Interactions in Irritable Bowel Syndrome; Director, Disorders of Gut Brain Interaction Program, G. Oppenheimer Center for Neurobiology of Stress and Resilience; Vice-Chief, Vatche and Tamar Manoukian Division of Digestive Diseases, David Geffen School of Medicine at UCLA</p>
<b>Session I – Update of the SCOREs and State of the Centers</b>	
9:10 AM – 10:00 AM	<b>Session Chair: Andrea Hevener PhD</b>
	<p><b>Vivian Ota Wang, PhD, FACMG, CGC (15 minutes)</b> Deputy Director, NIH Office of Research on Women's Health</p>
	<p><b>A Tribute to Frank Hamilton, MD, MPH (15 minutes)</b> Former Program Director, NIDDK Division of Digestive Diseases and Nutrition</p>
	<p><b>Karen Reue, PhD (10 minutes)</b> MPI, SCORE on UCLA SCORE on Sex Differences in the Metabolic Syndrome; Professor, Department of Human Genetics, David Geffen School of Medicine at UCLA</p>
	<p><b>Emeran Mayer, MD (10 minutes)</b> MPI, SCORE on Sex Related Differences in Brain Gut Microbiome Interactions in Irritable Bowel Syndrome; Director, G. Oppenheimer Center for Neurobiology of Stress and Resilience; Vatche and Tamar Manoukian Division of Digestive Diseases, David Geffen School of Medicine at UCLA</p>
<b>Session II – Invited Speakers Part I (25 minutes each + 10-minute Panel Discussion at end)</b>	
10:00 AM – 11:00 AM	<b>Session Chair: Tien Dong, MD, PhD</b>
	<p><b>Stephanie Correa, PhD</b> Associate Professor, Integrative Biology and Physiology, UCLA <i>“The Effects of Reproductive and Metabolic States on the Neural Circuits that Control Energy Balance”</i></p>
	<p><b>Franck Mauvais-Jarvis, MD, PhD</b> Price-Goldsmith Professor of Nutrition; Professor of Medicine, Department of Endocrinology Metabolism &amp; Diabetes, Tulane University School of Medicine <i>“Genetic Architecture of Sex Differences in Human Pancreatic Islets”</i></p>
11:00 AM – 11:20 AM	<b>Coffee Break</b>

<b>Session III – Invited Speakers Part II (25 minutes each + 10-minute Panel Discussion at end)</b>	
11:20 AM – 12:20 PM	<b>Session Chair: Swapna Joshi, PhD</b>
	<p><b>Eldin Jašarević, PhD</b>  Assistant Professor, Department of Obstetrics, Gynecology and Reproductive Sciences, Magee-Women’s Research Institute, University of Pittsburgh  <b>“The Power of the Maternal Mind: Prenatal and Postnatal Contributions of Maternal Microbiome on Offspring Development”</b></p>
	<p><b>Rhonda Voskuhl, MD</b>  Professor, Department of Neurology, UCLA; Jack H. Skirball Chair; Director, UCLA Multiple Sclerosis (MS) Program; Faculty Neurologist, UCLA Comprehensive Menopause Care Program  <b>“The Role of an X Chromosome Gene (Kdm6a) and an Estrogen Receptor (ERb) in Neurodegenerative Disease”</b></p>
<b>Lunch, Poster Session and Judging</b>	
12:20 PM – 2:00 PM	Lunch, Poster Session and Judging
<b>Session IV – Lightning Round Presentations (10 minutes each + 15-minute Panel Discussion at end)</b>	
2:00 PM – 2:55 PM	<b>Session Chair: Victor Mendoza, PhD</b>
	<p><b>Xiaobei Zhang, PhD</b>  Post-Doctoral Scholar, Gupta Laboratory, G. Oppenheimer Center for Neurobiology of Stress and Resilience, Vatche and Tamar Manoukian Division of Digestive Diseases, David Geffen School of Medicine at UCLA  <b>“The Influence of Psychosocial Stress on Brain and Gut Microbiome Alterations in Women Related to Obesity”</b></p>
	<p><b>Kelsey Jarrett, PhD</b>  Post-Doctoral Scholar, The Tarling-Vallim Lab, Division of Cardiology, David Geffen School of Medicine at UCLA  <b>“Sex Differences in Bile Acid Metabolism Impact Cholesterol Homeostasis and Cardiovascular Disease”</b></p>
	<p><b>David Meriwether, PhD</b>  Adjunct Assistant Professor, Department of Medicine, David Geffen School of Medicine at UCLA  <b>“Determination of Sex Hormones in Plasma and Stool by LC-MS/MS”</b></p>
	<p><b>Carrie Wiese, PhD</b>  Post-Doctoral Scholar, Laboratory of Karen Reue, Department of Human Genetics, David Geffen School of Medicine at UCLA  <b>“X Chromosome Gene Dosage Influences Sex Differences in Obesity”</b></p>
<b>Session V – Cedars-Sinai SCORE (20 minutes each + 10-minute Panel Discussion at end)</b>	
2:55 PM – 3:45 PM	<b>Session Chair: Arpana Gupta PhD</b>
	<p><b>Sonia Sharma, PhD</b>  Associate Professor, Center for Autoimmunity and Inflammation, Center for Cancer Immunotherapy, Center for Sex-based Differences in the Immune System, La Jolla Institute for Immunology  <b>“Sex-Based Differences in Purine Metabolism Regulates Antiviral Immunity to SARS-CoV-2”</b></p>

	<p><b>Anja Karlstaedt, MD, PhD</b>  Assistant Professor, Cardiology and Biomedical Sciences, Cedars-Sinai;  Research Scientist, Smidt Heart Institute, Cedars-Sinai; Assistant Professor-in-Residence, David Geffen School of Medicine at UCLA</p> <p><b><i>“Oncometabolic Stress Induces Sex-Differences in Skeletal Muscle Wasting”</i></b></p>
<b>Poster Awards and Acknowledgements</b>	
3:45 PM – 4:00 PM	<b>Lin Chang, MD</b>

### ***About the UCLA Specialized Centers of Research Excellence (SCORE) on Sex Differences***

#### **UCLA SCORE on Sex Related Differences in Brain Gut Microbiome Interactions in Irritable Bowel Syndrome.**

The aims are to gain a better understanding of the role of the gut microbiome and female sex hormones in the modulation of brain gut microbiome interactions in two of the most common disorders of the gastrointestinal tract, irritable bowel syndrome (IBS) and chronic functional constipation. These studies will provide valuable insights on the pathophysiology and treatment of these conditions. [uclacns.org/score](http://uclacns.org/score)

**The UCLA SCORE on Sex Differences in the Metabolic Syndrome.** The objective is to elucidate sex differences in risk factors and treatments for Metabolic Syndrome (MetSyn) components such as obesity, insulin resistance/diabetes, dyslipidemia, and fatty liver. Differences between men and women in susceptibility to cardio-metabolic disease are well known, but the underlying genetic and physiological mechanisms remain poorly defined. Our goal is to identify factors that determine sex-specific MetSyn risk, which may lead to better diagnosis and treatment for both sexes. [sexdifferencesinmetabolism.ucla.edu](http://sexdifferencesinmetabolism.ucla.edu)