

# Midwest Metabolism Meeting (M3)

Thursday, September 19, 2024 • 8:00 a.m. - 5:05 p.m.  
Northwestern Memorial Hospital, Feinberg 3rd Floor Conference Center

RECEPTION | 5:30 p.m.-7:30 p.m.  
Residence Inn Chicago Mag Mile  
101 E. Erie St, Chicago

8:00 a.m. **Check-in and Breakfast**

9:00 a.m. **Opening Remarks**

SESSION 1: Issam Ben-Sahra, PhD, Session Chair

9:05 a.m. **L-2-hydroxyglutarate (L-2-HG) is a Signaling Metabolite That Controls Mammalian Development**

Ram Chakrabarty

*Graduate Student, Northwestern University, Chandel Lab*

9:25 a.m. **Maternal Diet Influences Embryo Development and Offspring Phenotype in Drosophila Melanogaster**

Krittika Sudhakar, PhD

*Postdoctoral Fellow, Van Andel Institute, Lempradl Lab*

9:45 a.m. **Non-Small Cell Lung Cancer Cells Leverage Extracellular Vesicles to Induce Alterations in Neutrophil Function and Metabolism**

Ajay Shankaran

*Graduate Student, University of Michigan, Nagrath Lab*

10:05 a.m. **HK2 is Conditionally Essential for Growth in Human Cancer Cells**

Kim Huggler

*Graduate Student, University of Wisconsin-Madison, Cantor Lab*

10:25 a.m. **Break**

SESSION 2: Clara Peek, PhD, Session Chair

10:35 a.m. **Succinate Controls De Novo Purine Synthesis and Cancer Cell Growth**

Mushtaq Nengroo, PhD

*Postdoctoral Fellow, Northwestern University, Ben-Sahra Lab*

10:55 a.m. **Purine Salvage Promotes Treatment Resistance in H3K27M-Mutant Diffuse Midline Glioma**

Erik Peterson

*Graduate Student, University of Michigan, Wahl Lab*

11:15 a.m. **Loss of NADPH-Producing Enzymes Accelerates Pancreatic Precancerous Lesions**

Megan Radyk, PhD

*Postdoctoral Fellow, University of Michigan, Lyssiotis/Shah Labs*

11:35 a.m. **Small Amino Acids That Accumulate in Tumors Enable Cancer Cells to Overcome Lethal Chemotherapies**

Guillaume Cognet PhD

*Postdoctoral Fellow, University of Chicago, Muir Lab*

11:55 a.m. **Lunch & Poster Session**

SESSION 3: Issam Ben-Sahra, PhD, Session Chair

1:35 p.m. **Impact of High Fat Diet-Induced Lipotoxic Stress on Cancer Therapy Response**

Yujin Jeong, PhD

*Postdoctoral Fellow, Van Andel Institute, Lien Lab*

1:55 p.m. **RNS-Mediated Dynamic Rewiring of Pro-Inflammatory Macrophages Supports Immune Function**

Nick Arp

*Graduate Student, University of Wisconsin-Madison, Fan Lab*

2:15 p.m. **Defining the Role of Uridine Metabolism in Pancreatic Tumorigenesis**

Julia Ugras

*Graduate Student, University of Michigan, Lyssiotis Lab*

2:35 p.m. **Mitochondrial Fatty Acid Synthesis is a Novel Mediator of Myogenic Differentiation and Muscle Regeneration**

Jacob Longenecker, PhD

*Postdoctoral Fellow, Van Andel Institute, Nowinski Lab*

2:55 p.m. **Serine Starvation Inhibits SRSF Protein Expression and Modulates RNA Splicing**

Philippa Burns

*Graduate Student, University of Illinois at Chicago, Coloff Lab*

3:15 p.m. **Break**

SESSION 4: Navdeep Chandel, PhD, Session Chair

3:25 p.m. **Immunomodulatory Role of the Clock During Skeletal Muscle Regeneration via Hypoxic NAD<sup>+</sup> Production**

Eric Pfrender

*Research Technician, Northwestern University, Peek Lab*

3:45 p.m. **Fueling the Way—The Role of Localized GTP Synthesis in Cancer Metastasis**

Aki Ogawa-Iio, DVM, PhD

*Postdoctoral Fellow, University of Cincinnati, Sasaki Lab*

4:05 p.m. **KEYNOTE**

**The Transformative Discovery of Drugs with Integrated Multiple Hormone Activities to Address Obesity**

Richard Di Marchi, PhD

*Distinguished Professor of Chemistry, Indiana University*

5:05 p.m. **Closing Remarks & Adjourn**

5:30 p.m. **Reception at Residence Inn Mag Mile**