

MONDAY | November 6, 2023

- 8:00–8:45 a.m.** **Breakfast/Registration**
- 8:45–9:00 a.m.** **Welcome & Introduction**
Co-Chairs: Sruti Shiva, PhD, Brett Kaufman, PhD (University of Pittsburgh)
- 9:00–9:45 a.m.** **Keynote Speaker:** Babak Razani, MD, PhD (University of Pittsburgh)
Lysosome Nutrient Sensing in Macrophages: A Critical Nexus in the Pathophysiology of Atherosclerosis
- 9:45–10:00 a.m.** **BREAK**
- 10:00–11:45 a.m.** **Symposium 1: Mitochondria/Metabolism in Aging**
Chairs: Toren Finkel, MD, PhD (University of Pittsburgh)
Edward V. Prochownik, MD, PhD (University of Pittsburgh)
- 10:00–10:25 a.m.** Joseph A. Baur, PhD (University of Pennsylvania)
Manipulating mitochondrial NAD⁺ in hepatocytes
- 10:25–10:50 a.m.** Aditi Gurkar, PhD (University of Pittsburgh)
Acetyl-CoA: A regulator of DNA damage-induced senescence and aging
- 10:50–11:15 a.m.** Julia Liu, PhD (University of Minnesota)
Mitochondrial calcium in the heart's two ventricles
- 11:15–11:45 a.m.** **Selected Abstracts:** Tyler Stevens, PhD (Temple University),
Evaluating the contribution of MICU3 towards the pathology of Alzheimer's Disease; and Devika Manickam, PhD (Duquesne University),
Microvesicles deliver their innate mitochondria and protect the BBB post-stroke
- 11:45 a.m.–noon** **Overview of UMDF Initiatives**
Philip Yeske, PhD, Science and Alliance Officer
- 12:00–1:30 p.m.** **LUNCH, NETWORKING TIME**
- 1:30–3:25 p.m.** **Symposium 2: Mitochondrial Disease & Metabolic Disorders**
Chairs: Deborah Murdock, PhD (Children's Hospital of Philadelphia),
Gerard Vockley, MD, PhD (University of Pittsburgh)
- 1:30–1:55 p.m.** Martin Picard, PhD (Columbia University)
The energetic cost of living with an OxPhos defect
- 1:55–2:20 p.m.** Marni Falk, MD (Children's Hospital of Philadelphia)
Precision Mitochondrial Medicine—novel therapeutic candidates and development trajectories
- 2:20–2:45 p.m.** Eric Goetzman, PhD (University of Pittsburgh)
Dodecanedioic Acid as an Alternative Medium-chain Metabolic Fuel
- 2:45–3:10 p.m.** Alessia Angelin, PhD (Children's Hospital of Philadelphia)
AAV-mediated transduction of the nuclear-coded mitochondrial ANT1 gene can ameliorate mouse Ant1^{-/-} pathology: A step toward the treatment of mitochondrial cardiomyopathy

3:10–3:25 p.m.

Selected Abstract: Shakuntala Basu, PhD (University of Pittsburgh),
A novel mouse model for VLCAD deficiency and first report of
VLCAD gene therapy

3:25–3:40 p.m.

BREAK

3:40–5:20 p.m.

Symposium 3: Immunometabolism

Chairs: Partha Dutta, DVM, PhD (University of Pittsburgh),
Xiangyu Zhang, PhD (University of Pittsburgh)

3:40–4:05 p.m.

Stanley Huang, PhD (Ohio State University)
Stress Sensing and Metabolic Circuits in Tumor Macrophages

4:05–4:30 p.m.

Greg M. Delgoffe, PhD (University of Pittsburgh)
Mitochondrial insufficiency underlies T cell dysfunction in cancer

4:30–4:55 p.m.

David A. Hill, MD, PhD (Children’s Hospital of Philadelphia)
Dietary fatty acids alter innate lung inflammation

4:55–5:20 p.m.

Will Bailis, PhD (University of Pennsylvania)
Single-cell NAD(H) variation underlies lymphocyte heterogeneity
and governs clonal expansion dynamics

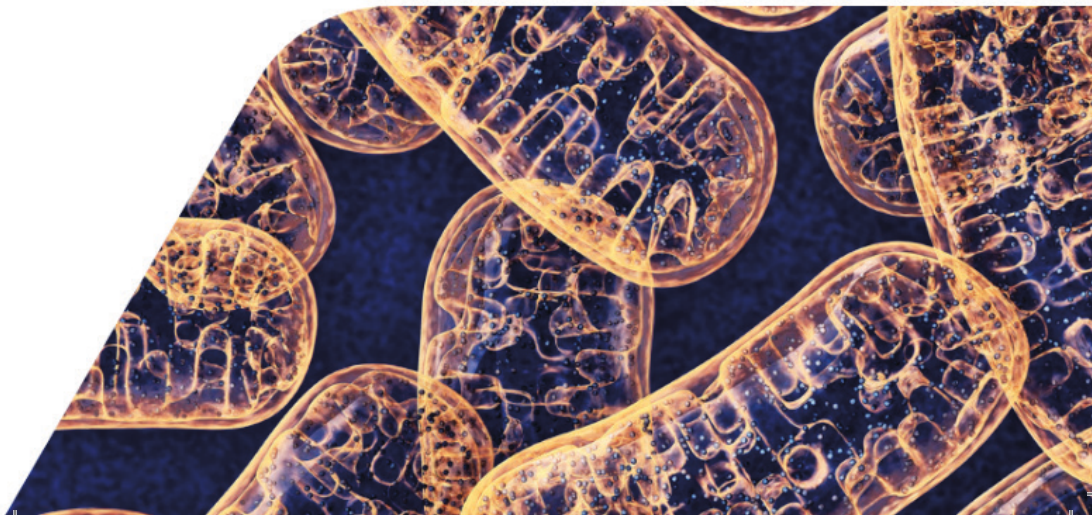
5:20–5:30 p.m.

Poster Pitches from Young Investigators, Sponsor: Regeneron

Presenters: Oluwaseun Akinyele, PhD (University of Pittsburgh),
Justin Sui (University of Pittsburgh), Zaineb Javed (Penn State University),
Lily Farmerie (University of Pittsburgh), Chidozie Okoye, PhD
(University of Rochester)

5:30–7:00 p.m.

Poster Session Sponsored by Regeneron



TUESDAY | November 7, 2023

- 7:30–8:00 a.m.** **Breakfast**
- 8:00–9:55 a.m.** **Symposium 4: Mito Quality Control & Organization**
Chairs: Charleen T. Chu, MD, PhD (University of Pittsburgh),
Michael J. Jurczak, PhD (University of Pittsburgh)
- 8:00–8:25 a.m.** Shiori Sekine, (University of Pittsburgh)
Mitochondrial Import-Coupled Stress Response—A fine system to
signal from mitochondria to the cytosol
- 8:25–8:50 a.m.** Brian Glancy, PhD (National Institute of Health)
- 8:50–9:15 a.m.** Nuo Sun, PhD (Ohio State University)
Targeting mitophagy to fight aging
- 9:15–9:40 a.m.** Xin Qi, PhD (Case Western Reserve University)
Regulation of mitochondrial proteostasis in alpha-synucleinopathy
- 9:40–9:55 a.m.** Selected Abstract: Shey-Shing Sheu, PhD (Thomas Jefferson University),
Spin transition induced by low magnetic fields stimulates cardiac
mitochondrial respiration with a bell-shaped response
- 9:55–10:10 a.m.** **BREAK**
- 10:10 a.m.–noon** **Symposium 5: Cardiac Metabolism**
Chairs: Iain Scott, PhD (University of Pittsburgh),
Janet Manning, PhD (University of Pittsburgh)
- 10:10–10:35 a.m.** Joanne Garbincius, PhD (Temple University)
Discovery of TMEM65 as a Positive Regulator of Mitochondrial
Calcium Efflux
- 10:35–11:00 a.m.** E. Douglas Lewandowski, PhD (Ohio State University)
Bypassing Reduced Long Chain Fatty Acid Oxidation in Failing Hearts
with Short Chain Substrates
- 11:00–11:25 a.m.** Bradford G. Hill, PhD (University of Louisville)
- 11:25 a.m.–12:05 p.m.** Selected Abstracts: Joseph Guarnieri, PhD (Children’s Hospital of
Philadelphia), Core mitochondrial genes are down-regulated during
SARS-CoV-2 infection of rodent and human hosts; and Nelli Mnatsakanyan,
PhD (Penn State University), Cryo-electron microscopy studies reveal
the inactivation mechanism of ATP synthase leak channel and its
contribution to mitochondrial permeability transition
- 12:05–1:15 p.m.** **LUNCH, NETWORKING TIME**
- 1:15–2:40 p.m.** **Symposium 6: Redox Biology & Metabolism**
Chairs: Sruti Shiva, PhD (Pitt), Brett Kaufman, PhD (University of Pittsburgh)
- 1:15–1:40 p.m.** Nuno Raimundo, PhD (Penn State University)
Mitochondria-lysosome crosstalk: touch me, don’t touch me, just be sweet
- 1:40–2:15 p.m.** Andrew P. Wojtovich, PhD (University of Rochester)
Controlling mitochondrial ROS production with light
- 2:15–2:45 p.m.** Nadine Hemple, PhD (University of Pittsburgh)
Consequences of Drp1 splice variant expression in cancer
- 2:45–3:00 p.m.** **Closing Remarks**