



## PROGRAM

### Molecular Mechanisms Driving Physiology and Pathology During Aging

Baldwin Auditorium (First Floor)  
303 East Superior Street  
Chicago, Illinois 60611

Friday, October 7, 2022 8:150am – 6:00 pm

## MORNING SESSION

Program Chair: Navdeep Chandel, PhD

<b>8:15am</b>	<b>9:00am</b>	<b>Breakfast – Refreshments Provided</b>
<b>9:00am</b>	<b>9:10am</b>	<b>Welcome and Introduction</b> GR Scott Budinger, MD Pulmonary and Critical Care Medicine, Northwestern University
<b>9:10am</b>	<b>9:30am</b>	<b>Introducing the Potocsnak Longevity Institute at Feinberg School of Medicine</b> Douglas Vaughan, MD Department of Medicine, Northwestern University
<b>9:30am</b>	<b>10:00am</b>	<b>Why diseases are tissue-specific? Lessons from mitochondrial diseases and stress responses</b> Anu Suomalainen, MD, PhD University of Helsinki, Finland
10:00am	10:10am	Discussion
<b>10:10am</b>	<b>10:25am</b>	<b>Mitochondrial integrated stress response controls lung epithelial cell fate</b> SeungHye Han, MD Northwestern University
10:25am	10:30am	Discussion
<b>10:30am</b>	<b>11:00am</b>	<b>Break – Refreshments Provided</b>
<b>11:00am</b>	<b>11:30am</b>	<b>Systematic functionalization of redox-regulated protein cysteines in aging</b> Edward Chouchani, PhD Harvard University
11:30am	11:40am	Discussion
<b>11:40am</b>	<b>11:55am</b>	<b>The aging brain microenvironment drives development of disease-associated microglia</b> Rogan Grant Northwestern University
11:55am	12:00pm	Discussion

**12:00pm 1:15pm Lunch – (On Your Own)**

### AFTERNOON SESSION

**Program Chair: Benjamin Singer, MD**

**1:15pm 1:45pm Transitional states in regeneration and disease**

Purushothama Rao Tata, PhD

1:45pm 1:55pm Discussion

**2:10pm 2:25pm Profiling the TCR repertoire landscape during severe pneumonia**

Luisa Morales-Nebreda, MD  
Northwestern University

2:05pm 2:15pm Discussion

**2:15pm 2:45pm Aging and cellular and molecular biomarkers of successful responses to therapy in severe pneumonia**

Alexander Misharin, MD, PhD  
Northwestern University

2:45pm 2:55pm Discussion

**2:55pm 3:10pm Expression of cleavage resistant Merck prevents the age-related decline in muscle function after viral pneumonia**

Connie Runyan  
Northwestern University

3:10pm 3:15pm Discussion

**3:15pm 3:45pm Break – Refreshments Provided**

**3:45pm 4:00pm Molecular Basis of Metformin Action**

Colleen Reczek, PhD  
Northwestern University

4:00pm 4:05pm Discussion

**4:05pm 4:35pm Metabolism of aging and delayed aging by caloric restriction**

Rozalyn Anderson, PhD  
University of Wisconsin

4:35pm 4:45pm Discussion

**4:45pm Closing Remarks**

GR Scott Budinger, MD  
Pulmonary and Critical Care Medicine, Northwestern University

**5:00pm 6:00pm Reception – Refreshments Provided**

### CONFERENCE ORGANIZERS

This Pulmonary and Critical Care Medicine conference is organized by the investigators of the Program Project Grant (PPG) on Aging lead by GR Scott Budinger in collaboration with Drs. William Balch, Navdeep Chandel, Alexander Misharin, Richard Morimoto, Karen Ridge, Benjamin Singer, and Jacob Sznajder. Funding for this conference by the National Institute of Aging PPG award 1P01AG049665.