

The
**3rd Annual
OSCAR Symposium**

Wednesday, November 16, 2022

8:30 am – 2:15 pm

Hybrid

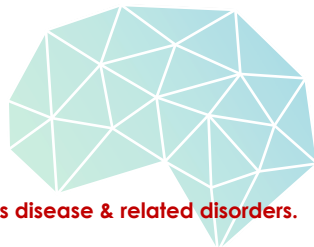


University of
Pittsburgh

Alzheimer's Disease Research Center
Research Education Component

Sponsored by NIH grant P30AG066468
PI: Oscar L. Lopez, MD

The 3rd Annual OSCAR Symposium



Wednesday, November 16, 2022

Featuring leaders and trainees in research on Alzheimer's disease & related disorders.

Hybrid on campus & Zoom

AGENDA

- 8:30 am Breakfast at the University Club
- 9:15 am **Welcome, ADRC/REC Overview, & Introductions**
- 10:00- **Keynote:** Mitochondria in Alzheimer's Disease: Perspectives & Lessons
10:50 am Learned
Russell Swerdlow, MD
University of Kansas School of Medicine
Q&A with Dr. Swerdlow
- 9:50 am Short break
- 11:00- **Research Mentoring Panel Discussion**
11:50 am
Amanda Myers, PhD
University of Miami Miller School of Medicine
Russell Swerdlow, MD
University of Kansas School of Medicine
Dana Tudorascu, PhD
University of Pittsburgh School of Medicine
Moderator: Jennifer Lingler, PhD, CRNP
University of Pittsburgh School of Nursing
Q&A with the panelists
- 12:00 pm Lunch at the University Club
- 12:30- **OSCAR Scholar Presentations**
2:00 pm
Yurun Cai, PhD, Data Management & Statistics Core Scholar
H. Matthew Lehrer, MD, PhD, Clinical Core Scholar
Pradeep Reddy Raamana, PhD, Neuroimaging Core Scholar
- 2:00 pm- **Wrap up, Closing Statements & Adjourn**
2:15 pm



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The OSCAR Symposium is coordinated by the **Research Education Component (REC)** at the University of Pittsburgh Alzheimer's Disease Research Center (ADRC).

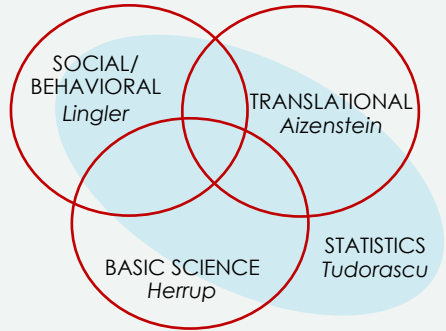
REC Leadership

- ▶ Howard Aizenstein, MD, PhD
- ▶ Jennifer Lingler, PhD, CRNP

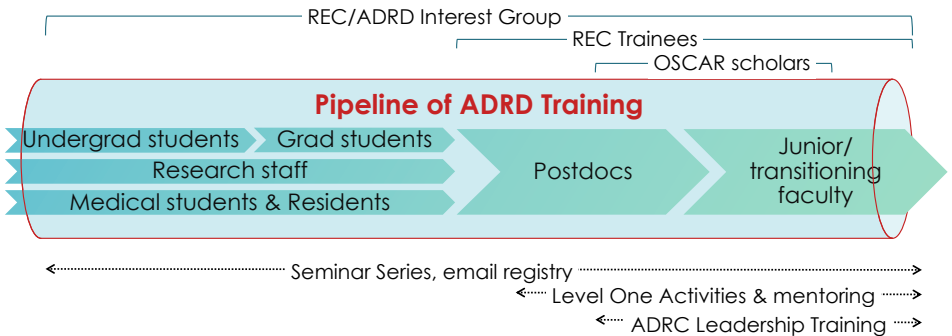
Co-Investigators

- ▶ Karl Herrup, PhD
- ▶ Dana Tudorascu, PhD

REC Coordinator Melissa Knox



- ▶ Pitt's ADRC seeks to identify and attract new trainees to the research field on Alzheimer's disease and related disorders (ADRD) and to grow and support their career development.
- ▶ The REC assumes primary responsibility for executing this vision for advancing the ADRD research workforce and places emphasis on cultivating the growth of this field's future leaders across the pipeline of ADRD training.



Optimizing
Scientific
Careers in
Alzheimer's Disease
Research

Scholars Program

A subset of trainees who demonstrate extraordinary potential are recruited to spend one year as an OSCAR scholar and participate in:

- ▶ ADRD-specific leadership development activities and
- ▶ a leadership apprenticeship with an ADRC Core Leader or Associate Leader.

This symposium was developed for the 2022 OSCAR scholars. Learn more about the current cohort of scholars on pages 6 & 7.

Morning session

Welcome

9:15-9:50 am

Overview: **University of Pittsburgh ADRC & Research Education Component**

Introductions around the room with icebreaker activity

Networking

Keynote: **Mitochondria in Alzheimer's Disease: Perspectives and Lessons Learned**

10:00-10:50 am

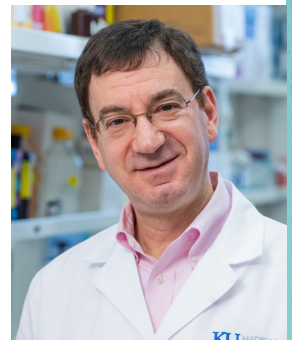
Russell Swerdlow, MD

Dr. Russell Swerdlow is a professor in the Departments of Neurology, Molecular and Integrative Physiology, and Biochemistry and Molecular Biology at the University of Kansas School of Medicine. He directs the University of Kansas Alzheimer's Disease Research Center, its Neurodegenerative Disorders Program, and the Heartland Center for Mitochondrial Medicine.

He received undergraduate and MD degrees from New York University and trained as a neurologist and Alzheimer's specialist at the University of Virginia. He holds the Gene and Marge Sweeney Chair at the University of Kansas and is a recipient of an S. Weir Mitchell Award from the American Academy of Neurology, a Cotzias Award from the American Parkinson's Disease Association, a Chancellor's Club Research Award from the University of Kansas, a Dolph Simons Research Achievement Award in the Biomedical Sciences from the University of Kansas, and the Oskar Fischer Prize. From 2017-2021 he sat on the NIA Board of Scientific Counselors.

Dr. Swerdlow's research focuses on brain energy metabolism, its role in Alzheimer's disease, and its therapeutic manipulation.

Presentation is followed by a Q&A with Dr. Swerdlow



Research Mentoring Panel Discussion

11:00-11:50pm



Amanda Myers, PhD

Associate Professor of Neuroscience, and Human Genetics & Genomics, University of Miami Miller School of Medicine



Russell Swerdlow, MD

Professor of Neurology, Molecular & Integrative Physiology, and Biochemistry & Molecular Biology, University of Kansas School of Medicine; Director, University of Kansas ADRC



Dana Tudorascu, PhD

Associate Professor of Psychiatry & Biostatistics, University of Pittsburgh School of Medicine



Session moderated by

Jennifer Lingler, PhD, CRNP, FAAN

Professor of Nursing & Psychiatry, University of Pittsburgh School of Nursing; Outreach, Recruitment, & Engagement Core Leader, & REC Co-Leader, ADRC

Afternoon session

OSCAR Scholar Presentations

12:30-2:00pm

Each presentation is followed by a brief Q&A



Sensorimotor function as predictors of cognitive impairment and dementia

Yurun Cai, PhD

Assistant Professor of Nursing



Cognitive Function in Retired Night Shift Workers: Investigating the Role of Sleep and Mitochondrial Bioenergetics

H. Matthew Lehrer, PhD, MS

Assistant Professor of Psychiatry



Better decision support systems via quality, reproducible, and open science

Pradeep Reddy Raamana, PhD

Assistant Professor of Radiology and Biomedical Informatics

About the 2022 OSCAR Scholars



Yurun Cai, PhD

Dr. Yurun Cai is an Assistant Professor in the department of Health and Community Systems in Pitt's School of Nursing.

Her research has focused on mobility, physical activity, and sensorimotor function and their associations with cognitive aging. In recent years, she has extended her research focus to further explore the association between sensorimotor function and cognitive impairment and Alzheimer's dementia and related disorders.

ADRC Core:
Data Management & Statistics Core

ADRC Mentor:
Dr. Steven Belle

Twitter:
[@CaiYurun](#)

In her future research, Dr. Cai will continue to apply advanced statistics such as latent growth curve modeling to delineate cognitive decline across multiple domains. Multiple types of analysis will also be used to unravel accelerometer data and gait parameters. This contributes to her goal of leading a statistical team to focus on these data analyses for future projects.

As an OSCAR Scholar in the Data Management & Statistics Core, Dr. Cai seeks to strengthen her research skills particularly in data management and analysis. She hopes that the leadership development activities in the program will prepare her to be a statistical team leader.



H. Matthew Lehrer, PhD, MS

Dr. H. Matthew Lehrer is an Assistant Professor in the department of Psychiatry and a sleep and circadian scientist.

His research examines the consequences of long-term sleep and circadian disruption on biological (e.g., mitochondrial dysfunction) and cognitive aging.

He was recently awarded a K01 Career Development grant to characterize Alzheimer's disease risk in retired night shift workers. This study compares retired night shift workers to retired day workers on Alzheimer's-relevant indices of brain volume, cognitive function, and brain bioenergetics. Findings will provide evidence on the potential "scarring" of shift work exposure on Alzheimer's risk and will facilitate early identification of at-risk individuals.

Through the OSCAR Scholars program, Dr. Lehrer hopes to augment his K award training and become more established as an Alzheimer's disease researcher, positioning himself to be a leader at the intersection of sleep and circadian science, biological aging, and Alzheimer's disease research.

ADRC Core:
Clinical Core
Mentor:
Dr. Beth Snitz (Co-mentor Dr. Ann Cohen)

Twitter:
[@HMLlehrer](#)

About the 2022 OSCAR Scholars, continued



Pradeep Reddy Raamana, PhD

Dr. Pradeep Reddy Raamana is an Assistant Professor at the Departments of Radiology, Biomedical Informatics and Intelligent Systems.

Dr. Raamana's research focuses on developing multidisciplinary techniques for precision medicine by advancing the the best practices for machine learning, biostatics, quality control, and open science. His research in the Open MINDS Lab is driven by the motivation to maximize reproducibility and potential for clinical translation.

He has developed a number of methods and tools in machine learning and statistics for early detection of Alzheimer's disease, and to accurately differentiate AD from other neurological disorders. He is a passionate advocate for quality, reproducible and open science.

During his time as an OSCAR Scholar, he hopes to develop synergistic and close collaborations with ADRC researchers, to sharpen his ideas, and to improve the adoption of best practices in machine learning, neuroimaging quality control, data science and open science.

ADRC Core:
Neuroimaging
Core

Mentor:
Dr. Ann Cohen
(co-mentor Dr.
Dana Tudorascu)

Twitter:
[@Raamana](https://twitter.com/Raamana)

Thank you for attending the 3rd Annual OSCAR Symposium

If you would like to learn more about the University of Pittsburgh Alzheimer's Disease Research Center, the Research Education Component, or the OSCAR scholars program, please visit www.adrc.pitt.edu or email the REC Coordinator, Melissa at mlk42@pitt.edu.

This event was brought to you by:



University of
Pittsburgh

Alzheimer's Disease Research Center
Research Education Component