

## "Transcriptional Regulatory Mechanisms in Animal Cells"

### Robert G. Roeder, PhD

Arnold and Mabel Beckman Professor of Biochemistry and Molecular Biology, Laboratory of Biochemistry and Molecular Biology, The Rockefeller University

Robert G. Roeder, PhD is a world-renowned scientist. He is widely known as a pioneer scientist for the field of eukaryotic transcription for his landmark discovery of three distinct nuclear RNA polymerases in 1969. His seminal discoveries in science also cover characterization of many proteins involved in the regulation of transcription. including basic transcription factors and the first mammalian gene-specific activator over five decades of research. Dr. Roeder is a Member of the U.S. National Academy of Sciences and a Fellow of the American Association of Arts and Sciences, and the recipient of the Gairdner Foundation International Award in 2000. the Albert Lasker Award for Basic Medical Research in 2003, and the Kyoto Prize in 2021. He currently serves as the Arnold and Mabel Beckman Professor and Head of the Laboratory of Biochemical and Molecular Biology at The Rockefeller University.



Hyatt Regency Hotel, Old Greenwich, Cl

The Department of Pharmacological Sciences at the Icahn School of Medicine at Mount Sinai focuses on discovery of the fundamental mechanisms underlying complex physiology and pathophysiology and translating biological knowledge into new therapeutics. We study biological processes at the molecular, cellular, tissue, and organismal levels to understand how these processes function and how we can modulate them for therapeutic purposes. Studies involve the analysis of interactions of exogenous and endogenous substances with biological systems and the development of new therapeutics based on our understanding of cellular and molecular interactions. The mission of the Department is to provide a nurturing environment for discovery and innovation in basic and translational biomedical research of human health and disease, for advanced training for the next generation of scientists and physician scientists, and to function as a hub for interdisciplinary collaborations with researchers of different disciplines to solve the most challenging problems in biomedical sciences.

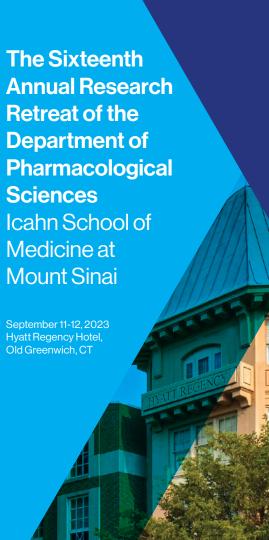
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Winner of "The 2022 Best Poster" Yufei Xiang / The Shi Lab

#### **Comittee Organizers**

Avner Schlessinger, PhD, Yi Shi, PhD, Emmanuel Antigua and Yoori Kim





### **PROGRAM**

# **PRESENTING RESEARCH LABS**

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## Monday, September 11th

10:00 am **Welcoming Remarks**Ming-Ming Zhou, PhD

10:10 am DPS-SPA Update

10:20 am New Faculty Presentations - Aneel Aggarwal, PhD

10:20 am William Cheung, PhD 10:40 am Masayuki Yasawa, PhD

11:00 am Lab Presentations 1 - Jinye Dai, PhD

"Rational Drug Design"

11:00 am Prasanth Akella, PhD [DeVita Lab]
11:20 am Carisse Lansiquot [Lazarus Lab]

11:45 am Lunch / Check-In

1:00 pm **Workshops** - Choose One 1. "Mentoring the Mentor"

2. "Lost at Sea"

2:15 pm Lab Presentations - Masayuki Yazawa, PhD

"Structure & Function"

2:15 pm Aya Osman, PhD [Devi Lab] 2:35 pm Bianca Fiorillo, PhD [Filizola Lab]

2:55 pm Gregory Zilberg [Wacker Lab]

3:15 pm Jingying Zhang [Yuan Lab]

3:30 pm **Poster Presentations** with Wine Tasting

5:30 pm **Keynote** 

Robert G. Roeder, PhD, Rockefeller University

6:30 pm **Dinner** 

# Tuesday, September 12th

8:00 am Breakfast

9:00 am Lab Presentations 3 - Peng Yuan, PhD

"Epigenetics & Bacterial Immunity"

9:00 am Md Kabir, PhD [Jin Lab]

9:20 am Michael Appiah, PhD [Zhou/Cheung Lab]

9:40 am Olga Rechkoblit, PhD [Aggarwal Lab]

10:00 am Yifei Sun, PhD [Walsh Lab]

10:30 am Poster Presentations

12:00 pm Lunch / Check-Out

1:15 pm Lab Presentations 4 - William Cheung, PhD

"Comput. Pharmacology & Protein Engineering"

1:15 pm Jeffrey Kim [Shi Lab]

1:35 pm Janice Yang [Sobie Lab]

1:55 pm Noah Herrington, PhD [Schlessinger Lab]

2:30 pm Workshop

3. "Stress Management"

3:30 pm Closing Remarks



Ming-Ming Zhou, PhD

Professor & Chair

Structural and chemical biology of gene transcription, and structural mechanism-based drug discovery.



Aneel Aggarwal, PhD

Professor & Vice Chair

Protein-nucleic acid interactions in DNA and RNA metabolism.



KaLung (William) Cheung, PhD

Assistant Professor

Mechanism of transcriptional regulation of cell development in immunity, and epigenetic drug discovery.



Lakshmi Devi, PhD

Professor & Vice Chair

Mechanism and pharmacology of opiate and cannabinoid receptor activation and morphine action.



Robert DeVita, PhD

Professor

Small molecule drug discovery, chemical biology, target validation, organic chemistry and synthesis.



Marta Filizola, PhD

Professor

Computer-aided structural biology and drug discovery.



Jian Jin, PhD

Professor

Medicinal chemistry and drug discovery; Noval degraders targeting oncogenic proteins.



Michael Lazarus, PhD

Associate Professor

Mechanism of intracellular glycosylation and autophagy with structural and chemical biology methods.



**Avner Schlessinger, PhD** 

Associate Professor

Structural bioinformatics and structure-based drug design for membrane transporters.



Yi Shi. PhD

Associate Professor

Mass spectrometry method development, protein engineering and nanobody drug discovery.



Eric Sobie, PhD

Professor

Mathematical modeling of cardiac physiology and mechanisms of arrhythmias and heart failure.



**Daniel Wacker, PhD** 

Assistant Professor

Structural biology and drug discovery of serotonin receptors and transporters.



#### Martin Walsh, PhD

Professor

Mechanisms of chromatin remodeling and epigenetic gene transcription in biology and diseases.



## Peng Yuan, PhD

Professor

Structure and molecular mechanisms of ion channels and transporters in human physiology and diseases.



Masayuki Yazawa, PhD

Associate Professor

Novel imaging and genetic technologies, mechanism of cardiovascular and infectious diseases, and drug discovery.

## **Workshop Details**

1. "Mentoring the Mentor"

Mount Sinai Office of Faculty Development

This workshop will engage in large-group facilitated discussion around several mentoring scenarios, from both perspectives of the trainee and the faculty mentor.

#### 2. "Lost at Sea"

Talent Development and Learning Division

A team building survival game to encourage interaction and teamwork. The chances of 'survival' depend on your ability to rank the salvaged items in relative order of importance.

### 3. "Stress Management"

Center for Stress, Resilience & Personal Growth

This interactive workshop focuses on evidence-based strategies to optimize the functioning of teams in a research setting in the midst of uncertainty, setbacks, and time-sensitive priorities.