

The WLA Research Conference on Cells and Genes

Host
WLA Labs

July 27 - 28, 2023
Duration: 1.5 days

Venue

WLA Shanghai Center (Shanghai Science Hall)
Shanghai, China

Format

1.5-day, single-stream, on-site
symposium

Participants Limit

200 (advanced online registration + on-site registration required)

www.wrc.org.cn

Registration fee: \$200 + Banquet fee: \$50 (optional)

Background

The WLA Laboratories (WLA Labs) is an independent, nonprofit research institute committed to basic research and fostering the next generation of scientific talents. Scheduled to be inaugurated this July, the WLA Labs has planned a series of academic events, including the **WLA Research Conferences (WRC)**. As an annual symposium of the WLA Labs, the **WRC** will create an open and interactive platform for scientists worldwide to freely discuss the most recent scientific discoveries and research findings. Each year, the

Ms. Ning Ma, MBA
WLA Labs

Ms. Yuhui Pei, M.A.
WLA Labs / WLA Shanghai Center

Scientific Panel

Prof. Roger Kornberg, Chair
2006 Nobel Laureate in Chemistry;
Stanford University, U.S.A.

Prof. James Rothman, Co-Chair
2013 Nobel Laureate in Physiology or Medicine;
Yale University, U.S.A.

Prof. Steven McKnight
UT Southwestern Medical Center, U.S.A.

Prof. Wolfgang Baumeister
Max Planck Institute of Biochemistry, Germany

Prof. Chuan He
2023 Wolf Prize Laureate in Chemistry;
HHMI / University of Chicago, U.S.A.

Prof. Dame Carol Robinson
Kavli Institute for Nanoscience Discovery,
University of Oxford, UK

Prof. Yigong Shi
Westlake University, China

Agenda

Day 0

| | | |
|-------|----------|---------------------------|
| 14:00 | 20:00 PM | Registration and Check-in |
| 16:00 | 18:00 PM | WLA Labs Tour (optional) |
| 18:30 | 20:00 PM | Reception Buffet |

Day 1

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| 08:00 - 09:00 AM | Registration and Check-in (all day) |
| 09:00 - 09:15 AM | Opening Remarks |
| 09:15 - 10:00 AM | Keynote Speech: James Rothman Sterling Professor of Cell Biology, Yale University Topic: <i>Turbocharging Neurotransmitter Release</i> |

| Session 1: Primitive Proteins | | Chair: Steven McKnight |
|-------------------------------|--|------------------------|
| 10:00 - 10:30 AM | Speaker #1 Steven McKnight Distinguished Chair in Basic Biomedical Research, Department of Biochemistry, UT Southwestern Medical Center Topic: <i>How do protein domains of low sequence complexity work?</i> | |
| 10:30 - 11:00 AM | Speaker #2 Dirk Görlich Scientific member and Director, Max Planck Institute for Multidisciplinary Science Topic: <i>The FG phase – a smart material for controlling transport between the cell nucleus and the cytoplasm</i> | |
| 11:00 - 11:30 AM | Speaker #3 Cong Liu Principal investigator, Interdisciplinary Research Center on Biology and Chemistry (IRCBC), CAS Topic: <i>Protein Amyloid Aggregation in Neurodegenerative Disease</i> | |
| 11:30 - 13:00 PM | Lunch Break | |
| Session 2: TBD | | Chair Yigong Shi |
| 13:00 - 13:30 PM | Speaker #1 Yigong Shi President, Westlake University Topic: <i>RNA splicing at atomic resolution</i> | |
| 13:30 - 14:00 PM | Speaker #2 Yanhui Xu Professor, Fudan University Shanghai Cancer Center, Institutes of Biomedical Sciences, Fudan University Topic: TBD | |
| 14:00 - 14:30 PM | Speaker #3 Alexey Amunts Associate Professor, Department of Biochemistry and Biophysics, Stockholm University Topic: TBD | |
| 14:30 - 15:30 PM | Poster Session / Coffee Break | |

Session 3: Receptor Signalling Across Cell Membranes Chair Dame Carol Robinson

15:30 - 16:00 PM

Speaker #1 Dame Carol Robinson

Director, Kavli Institute for Nanoscience Discovery, University of Oxford

Topic: *From recombinant complexes in detergent micelles to receptor signaling across native membranes – The promises and pitfalls of native mass spectrometry*

16:00 - 16:30 PM

Speaker #2 Georgios Skiniotis

Professor of Molecular & Cellular Physiology, Professor of Structural Biology and Photon Science, Stanford University

Topic: TBD

16:30 - 17:00 PM

Speaker #3 Aashish Manglik

Associate Professor of Pharmaceutical Chemistry, School of Pharmacy, UCSF

Topic: TBD

18:00 20:00 PM

Banquet

Day 2

Session 4: New Frontier in RNA Biology Chair: Chuan He

09:00 - 09:30 AM

Speaker #1 Chuan He

John T. Wilson Distinguished Service Professor, The University of Chicago

Topic: *RNA methylation in gene expression regulation*

09:30 - 10:00 AM

Speaker #2 Xiao Wang

Thomas D. and Virginia Cabot Assistant Professor of Chemistry, MIT

Core member, The Broad Institute

Topic: *Translating spatial cell atlas to tissue function*

10:00 - 10:30 AM

Speaker #3 Ling-Ling Chen

New Cornerstone Science Laboratory, CAS Center for Excellence in

Molecular Cell Science, Chinese Academy of Sciences (CAS)

Topic: *Lnc-ing RNA processing and function*



10:30 - 11:00 AM

Coffee Break**Session 5:****Trends in Structural Biology****Chair: Wolfgang Baumeister**

11:00 - 11:30 AM

Speaker #1 Wolfgang Baumeister

Director, Max Planck Institute of Biochemistry

Topic: *Structural Biology in situ: The Promise and Challenges of Cryo-Electron Tomography*11:30 - 12:00 PM
(Noon)**Speaker #2 Nenad Ban**

Professor of Structural Molecular Biology, ETH Zurich

Topic: *Revealing the Remarkable Machinery for Production of Proteins in Human Cells*

12:00 - 12:30 PM

Speaker #3 Roger Kornberg

Mrs. George A. Winzer Professor of Medicine, Stanford University

Topic: *Chromatin, Chromosomes, and Transcription*

12:30-12:45 PM

Closing Remarks: Roger Kornberg