



WLA Laboratories
世界顶尖科学家国际联合实验室

last updated: June 6, 2023

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 conference will bring together experts in different areas of life science around the world, focusing on topics of current interest and debate.

Overview

The 2023 WLA Research Conference on Cells and Genes will take place on July 27 – 28, 2023, in Shanghai, and is hosted by the WLA Labs and Shanghai Jiao Tong University. The chairs of this meeting are Prof. Roger Kornberg of Stanford University and Prof. James Rothman of Yale University. Prof. Kornberg wins the 2006 Nobel Prize in Chemistry for his work on "the molecular basis of eukaryotic transcription", whereas Prof. Rothman shares the 2013 Nobel Prize in Physiology or Medicine with Prof. Randy Schekman and Prof. Thomas Südhof for his work on "how messages are transmitted inside and outside our cells." Their fundamental research has inspired many important advancements in genetics and cell biology.

The 2023 conference will feature frontier researchers in molecular and cell biology, structural biology, epigenetics, subcellular imaging, and related areas of biotechnology. It will have 6 plenary sessions, each for 90 minutes with 3 invited speakers. The conference highly encourages the latest unpublished results. Recording, photos, and videos are not permitted during the conference.

At this conference, the WLA Labs will officially announce its **Global Recruitment for Principal Investigator (PI)**. The Labs is seeking talented and vigorous PIs who conduct independent research in frontier areas. More details will be released at a later date.

Organizing Committee

Guang Yang (杨光), Ph.D.

WLA Labs

Xiaohong Helena Yang (杨晓虹), Ph.D.

WLA Labs / WLA Shanghai Center

Weidong Li (李卫东), Ph.D.

Shanghai Jiao Tong University

Xingxu Huang (黄行许), Ph.D.

WLA Labs



Ms. Ning Ma (马宁), MBA

WLA Labs

Ms. Yuhui Pei (裴育慧), 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 (何川)

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 (施一公)

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

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: *How do protein domains of low sequence complexity work?*
- 10:30 - 11:00 AM **Speaker #2 Dirk Görlich**
Scientific member and Director, Max Planck Institute for Multidisciplinary
Science
Topic: *The FG phase – a smart material for controlling transport between the
cell nucleus and the cytoplasm*
- 11:00 - 11:30 AM **Speaker #3 Cong Liu**
Principal investigator, Interdisciplinary Research Center on Biology and
Chemistry (IRCBC), CAS
Topic: *Protein Amyloid Aggregation in Neurodegenerative Disease*

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: *RNA splicing at atomic resolution*
- 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

Dr Lee's Professor of Chemistry,

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