

# Symposium on Structural Biology and Immunity

in celebration of the fast-advancing field  
and 27 years of the Hao Wu lab

Co-organized by Qian Yin, Tianmin Fu, PCMM and BCMP

April 26<sup>th</sup>, 2024, 9:00 am – 6:00 pm

Folkman Auditorium, Boston Children's Hospital Enders Building,  
320 Longwood Ave, Boston, MA 02115

8:30 – 8:50 am	Registration
8:30 – 9:00 am	Opening picture video
9:00 – 9:05 am	Opening Speech – <b>Qian Yin</b>
9:05 – 9:10 am	Opening Remarks – <b>Fred Alt</b> (PCMM Director; Charles A. Janeway Professor of Pediatrics, HMS; HHMI)
9:10 – 9:15 am	Welcome video
<b>Section 1: Structural Biology on Membrane Proteins (Chair: Roberto Negro)</b>	
9:15 – 9:30 am	<b>Yihua Huang</b> (Principal Investigator, IBP-CAS); “Outer membrane biogenesis in Gram-bacteria and beyond”
9:30 – 9:45 am	<b>Wei Mi</b> (Asst Prof, Yale Univ.); “Regulatory mechanisms of lipopolysaccharide synthesis in <i>Escherichia coli</i> ”
9:45 – 10:00 am	<b>Qian Yin</b> (Asso Prof, FSU); “Assembly chaperones in membrane trafficking of immune mediators”
10:00 – 10:15 am	<b>Alexander Tong</b> (Postdoc, UC Berkeley); “A trailing ribosomes speeds up RNA polymerase via force and allostery”
10:15 – 10:30 am	<b>Steve Damo</b> (Prof, Fisk Univ.); “Resisting zinc toxicity-how GBS ascends the reproductive tract”
10:30 – 10:45 am	Coffee Break
<b>Section 2: Inflammasome and Pyroptosis (Chair: Gunes Bozkurt)</b>	
10:45 – 11:00 am	<b>Liman Zhang</b> (Asst Prof; OHSU); “Navigating sensitivity and stability: Exploring the structural basis of the NAIP/NLRC4 pathway”
11:00 – 11:15 pm	<b>Jixi Li</b> (Prof, Fudan Univ); “Cell death in neurodegenerative diseases”
11:15 – 11:30 am	<b>Ryan Ferrao</b> (Sr Res Scientist II, Gilead); “The role of modern structural biology in drug discovery”
11:30 – 11:45 am	<b>Xing Liu</b> (Principal Investigator, SIII-CAS); “Inflammasome-independent pyroptosis”
11:45 – 12:00 pm	<b>Shiyu Xia</b> (Postdoc, Caltech); “Programmable control of cell death and immunity”

12:00 – 12:15 pm	<b>Jianbin Ruan</b> (Asst Prof, UConn); “Gasdermin pores: The Guardians in Host Defense”
12:15 – 12:30 pm	<b>Setu Vora</b> (Sr Scientist, Evolved By Nature); “GSDMD agonism to induce antitumor immunity”
12:30 – 1:20 pm	Lunch, outside Folkman Auditorium
<b>Section 3: Evolutionary Immunity (Chair: Ermelinda Damko)</b>	
1:20 – 1:35 pm	<b>Longfei Wang</b> (Prof, Wuhan Univ); “Immune signaling of bacterial anti-phage defense systems”
1:35 – 1:50 pm	<b>Hyun Ho Park</b> (Prof, Chung-Ang Univ); “A journey to find novel strategies for CRISPR-Cas regulation”
1:50 – 2:05 pm	<b>Wenjun Xie</b> (Asst Prof, U of Florida); “Advancing enzymology with generative AI-based sequence analysis”
2:05 – 2:20 pm	<b>Bobby Hollingworth</b> (Postdoc, HMS); “Spatiotemporal regulation of the NLRP3 inflammasome”
2:20 – 2:35 pm	<b>Tian-Min Fu</b> (Asst Prof, OSU); “My adventure at OSU”
2:35 – 2:50 pm	<b>Tongpil Min</b> (Founder, PonderEd); “The process of brain development & differences in thinking processes”
<b>Section 4: Scientific Publications (Moderator: Tianmin Fu)</b>	
2:50 – 3:05 pm	<b>Steve Mao</b> (Chief Editor, <i>Cancer Cell</i> ); “Navigating the future of scientific publishing with Cell Press”
3:05 – 3:20 pm	<b>Jia Cheng</b> (Editor, <i>Cell</i> ); “Communicating your science, and publishing with Cell Press”
3:20 – 3:30 pm	Coffee break
<b>Section 5: Careers beyond Academia (Moderator: Qian Yin)</b>	
3:30 – 3:50 pm	<b>Panel discussion (Panelist: Alvin Lu/Li Wang/Qi Qiao/Gunes Bozkurt/Setu Vora/Ryan Ferrao/Tongpil Min/Hong Ye)</b>
<b>Keynote Speech (Chair: Venkat Magupalli)</b>	
3:50 – 4:40 pm	<b>Zhijian “James” Chen</b> (George L. MacGregor Distinguished Chair in Biomedical Science UTSW; HHMI); TBA
<b>Closing Remarks</b>	
4:40 – 4:45 pm	<b>Steve Blacklow</b> (Gustavus Adolphus Pfeiffer Professor of BCMP, HMS)
4:45 – 5:00 pm	<b>Hao Wu</b> (Asa and Patricia Springer Professor of Structural Biology, PCMM and HMS)
<b>Reception and Dinner</b>	
5:00 – 6:00 pm	Reception outside Folkman Auditorium
6:00 – 9:00 pm	Dinner, by invitation only