



VIRTUAL BIOLOGY COLLOQUIUM

Friday, 3 Sept 2021 | 4 pm | Online Zoom Session

Hosted by A/P Cynthia He

Function of Hippo Signaling in the innate immune system

By Lanfen Chen

School of Life Sciences, Xiamen University

The Hippo pathway has been established as a key regulator of tissue homeostasis and organ size control in multiple organisms. Dysregulation of this pathway results in developmental defects and tumorigenesis. Recently, patients bearing a loss-of-function mutation of Mst1, the mammalian ortholog of *Drosophila* Hippo, are reported to have an autosomal recessive primary immunodeficiency syndrome. Our recent studies have shown that kinases Mst1/2 play an important role in regulating both adaptive and innate immunity. Mst1/2 functions to control ROS production by regulating mitochondrial trafficking and mitochondrion-phagosome juxtaposition. Furthermore, we also demonstrate that TLR4 signaling induces Piezo1-mediated calcium influx and consequently activates CaMKII-Mst1/2-Rac axis for pathogen ingestion and killing. I will summarize our recent findings of cellular mechanisms/functions of Hippo signaling in the innate immune system.



About the Speaker

Dr. Lanfen Chen is currently a professor at the School of Life Sciences, Xiamen University. She obtained her BS degree at Xiamen University, Xiamen, China at 1997 and Ph.D degree at the Albert Einstein College of Medicine, New York, US, at 2006. She was a Research Fellow at the Brigham and Women's Hospital, Harvard Medical School, Boston, US (2007-2012). Recently, she obtained Chinese National Science Fund for Distinguished Young Scholars (2019) and won the 17th China Young Women Scientists Awards (2020). Dr. Chen's research group aims to characterize the regulation and physiologic functions of the Hippo pathway in the immune system and has published several papers in some professional journals, including Nature Immunology, Cancer Cell and Nature Communications.

Join Zoom Meeting | [LINK](#)
Meeting ID: 819 8989 4030
Password: 780172



Virtual Seminar Etiquette:

- ✓ Please "mute" upon arrival into the meeting room.
- ✓ Questions can be asked after the presentation. You are encouraged to verbally ask questions or submit your questions via chat group.
- ✓ By being present at this meeting, **information presented is a privilege** and you agree that you would **NOT UNDERTAKE** any forms of recording/photo-taking.