

15 November 2019 (Friday), 3pm
The Auditorium (Level 1)

Hosted by: Dr Koh Tong-Wey

MAP kinase signaling in neuronal and organismal stress

Prof. Yishi JIN

University of California, San Diego,
United States



Using single axon injury assay in *C. elegans*, we have systematically screened the function of >1200 *C. elegans* genes and identified numerous axon regeneration pathways. Among them, we have elucidated signaling pathways for the DLK-1 MAP kinase. In parallel studies, we have characterized a different MAP kinase cascade that is broadly implicated in innate immunity and organism development. In this talk, I will describe the findings and strategies to understand the context specificity of MAP kinase mediated signal transduction mechanisms.

Yishi Jin completed her undergraduate education in Peking University, China. She received PhD from the University of California, Berkeley, under the mentorship of Professor Kathryn Anderson, and conducted her postdoctoral research in the lab of Professor H. Robert Horvitz at Massachusetts Institute of Technology. She received CUSBEA pre-doctoral fellowship, Jane Coffin Childs postdoctoral fellowship, Alfred P. Sloan research scholar award, Presidential Early Career Award for Scientists and Engineers, HHMI Investigator Award, and NIH Jacob Javits Neuroscience Investigator Award. She is an elected member of the American Academy of Arts and Sciences. Currently, she holds the Junior Seau Endowed Faculty Chair for Traumatic Injury, and is the Chair in the Section of Neurobiology, University of California, San Diego.

Recent Publications:

1. Inhibition of Axon Regeneration by Liquid-like TIAR-2 Granules. Andrusiak MG, Sharifnia P, Lyu X, Wang Z, Dickey AM, Wu Z, Chisholm AD, **Jin Y**. *Neuron*. 2019 Jul 24. pii: S0896-6273(19)30602-6. doi: 10.1016/j.neuron.2019.07.004. [Epub ahead of print]
2. Expanded genetic screening in *Caenorhabditis elegans* identifies new regulators and an inhibitory role for NAD⁺ in axon regeneration. Kim KW, Tang NH, Piggott CA, Andrusiak MG, Park S, Zhu M, Kurup N, Cherra SJ 3rd, Wu Z, Chisholm AD, **Jin Y**. *Elife*. 2018 Nov 21;7. pii: e39756. doi: 10.7554/eLife.39756.
3. Coordinated inhibition of C/EBP by Tribbles in multiple tissues is essential for *Caenorhabditis elegans* development. Kim KW, Thakur N, Piggott CA, Omi S, Polanowska J, **Jin Y**, Pujol N. *BMC Biol*. 2016 Dec 7;14(1):104.