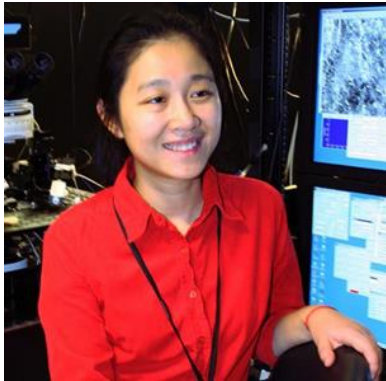


Tianyi Mao, Ph.D.



Dr. Mao is an Associate Professor and Scientist in the Vollum Institute at the Oregon Health and Science University. Dr. Mao received her B.S. degree in Biology from Tsinghua University in 1997, and Ph.D. degree in Neuroscience from Johns Hopkins School of Medicine in 2005. She carried out her postdoctoral training with Karel Svoboda, first at the Cold Spring Harbor Laboratory and then at the Howard Hughes Medical Institute, Janelia Research Campus.

Dr. Mao's laboratory is interested in elucidating circuit mechanisms underlying sensori- motor interactions and motor control, and understanding how these circuits are changed and modulated by defined behaviors and disease. To achieve these goals, Dr. Mao develops and implements cutting-edge technology in the mouse model, including modern anatomy, computation, genetics, imaging, and functional circuit mapping, to examine the principles governing such neuronal connectivity and their neuromodulation. The current focus is to investigate the connectivity and function of the thalamo-cortico-striatal pathway and opioid modulation of this pathway. In parallel, Dr. Mao has been developing genetically-encoded cAMP/PKA indicators to investigate the cellular responses to opioids in live tissue at single cell and subcellular resolutions.