Dr. Yongjie Yang  
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**TITLE:** Getting to Know the “Mysterious” Neighbors in the CNS

**ABSTRACT:**
Astroglia is the most abundant glial cell types in the mammalian central nervous system (CNS) with unique morphology and functions. These cells are anatomically localized between brain vasculatures and neurons, closely enshelthing the synapses and forming the critical neuro-astroglia-vascular unit in mammalian CNS. Despite the close interaction between astroglial processes with vasculatures and synapses, how astroglial cells acquire their highly ramified and complex processes are essentially unknown. Here, I will present our recent work about the potential mechanisms in regulating the growth of fine astroglial processes. In addition, we have developed and utilized new tools to investigate the molecular property of astroglia in vivo, providing new insights about their functions in the CNS.

**BIOGRAPHICAL:**
Dr. Yongjie Yang received his B.A. and M.S. in genetics from Ocean University of China (formerly as Ocean University of Qingdao) (1995), and his Ph.D. in Genetics & Neuroscience from Iowa State University (2005) in the laboratory of Professor Anumantha Kanthasamy. After graduation, he went on to do a postdoc fellowship in Professor Jeffrey Rothstein’s laboratory at Johns Hopkins University, working on the role of astroglial cells in neurodegenerative diseases, especially the roles of glutamate transporters. Dr. Yang started his own laboratory at the fall of 2010 in the Department of Neuroscience at Tufts University School of Medicine. His lab is investigating the signaling pathways between neuron and astroglia interaction, especially how neuronal signals regulate the growth of astroglial fine processes and how dysregulation of astroglial functions contribute to neurological disorders.

**DATE • TIME • LOCATION:**
Tuesday November 19, 2013, 4:00 PM, 105 Agricultural Engineering Building