



Postdoctoral Positions in Neuroscience
Harvard Medical School



We are seeking postdoctoral fellows to study adhesion G protein-coupled receptor biology in neurodevelopment and diseases.

Adhesion G protein-coupled receptors facilitate cell-cell and cell-extracellular matrix communications. Our published (Piao et al, *Science* 2004; Bae et al, *Science* 2014; Giera et al, *Nature Communications* 2015; Petersen et al, *Neuron* 2015; Salzman et al, *Neuron* 2016) and unpublished work demonstrate that some members of the adhesion G protein-coupled receptor family regulate key processes of neurodevelopment. Synapses, the junctions of communication between neurons, form the bases of neuronal connectivity; whereas myelin, a fatty insulate around axons, ensures efficient neuronal conduction. During development, two concurrent events, synaptic formation and pruning (removing weak ones while strengthening others) and myelination (a literate wrapping of axons by oligodendrocyte), establish neuronal connections. Glia, non-neuronal cells, play key roles in brain wiring. However, it is not known how glial cells interact with neurons to regulate these two highly synchronized events. We are seeking motivated and talented postdoctoral fellows to investigate how adhesion G protein-coupled receptors enable glial cells to interact with each other, with neurons, and with the extracellular matrix to regulate synaptic formation/pruning and myelination during normal development and disease process.

Applicants must hold a Ph.D. or an equivalent degree in life science. Individuals with a strong background in biochemistry, molecular biology, and neuroscience are especially welcome. Successful candidates will apply their knowledge in biochemistry, histology, and mouse brain development to investigate how adhesion GPCRs and their binding partners regulate glial cell function in synaptic formation and related diseases.

An outstanding salary and benefits package is included; salary will be commensurate with experience.

Interested applicants should send a brief description of their research interests and a curriculum vitae that includes contact information for three references to: Dr. Xianhua Piao at xianhua.piao@childrens.harvard.edu.