

Neuroscience and Neuroengineering Research Center

School of Biomedical Engineering

• About the Lab •

Neuroscience and Neuroengineering Research Center, Professor Guo-Yuan Yang's research team was established in 2008. It is a team with high innovative capability, quality, and sound organizational structure. Under the leadership of Professor Yang and building upon Med-X platform, the research team has developed a number of multi-level research projects, involving molecular biology, cell biology, immunohistochemistry, small animal synchrotron radiation angiography, MRI, Micro PET / CT and Micro-CT medical imaging techniques.

• About the Team •

Course(s) offered: Neurobiology, Experimental Basis of Neural Biology

Prof. Guo-yuan Yang, MD/PhD in Neurology & Neurosurgery, Shanghai Medical University. Dr. Yang has published more than 200 scientific papers, with an impact factor (IF) of more than 800. His works were cited more than 9674 times. His publications include *Clinical Neurological Surgery* (Shanghai Science and Technology Press, 1991), *Experimental stroke surgery* (China Science and Technology Press, 2012). He is now KC Wong Endowed Chair Professor of Shanghai Jiao Tong University, the Associate Dean of Med-X Research Institute, Director of rehabilitation engineering. His research interests mainly focus on the molecular mechanisms of cerebrovascular diseases in both basic and clinical fields. Recently, Dr. Yang has developed focal angiogenesis and focal microvessel dysplasia model in rodent brain for the study of cerebrovascular physiology and pathology. Dr. Yang is also interested in the exploring novel stroke therapeutic approach through taking advantages of biomaterials, neuroimaging, neural rehabilitation, and medical devices.

Course(s) offered: Biology, Biochemistry

Prof. Yongting Wang, Ph.D. in Biochemistry, the University of Mississippi Medical Center. She conducted post-doctoral research on protein subunit interaction and protein aggregation diseases at MIT (2004-2008) before joining Med-X Research Institute of SJTU in 2008 as an Associate Professor (2008-2011). She is now a Professor in the School of Biomedical Engineering. Her research focuses on gene therapy and stem-cell-combined gene therapy for ischemic stroke, with an emphasis on translational research.

• Research Fields •

- The pathogenesis and intervention of cerebral ischemia; Real-time live imaging of the cerebral microvasculature of experimental animals.
Project: "In situ and in vivo real-time dynamic studies of rodent models of ischemic stroke" (#U1232205, NSFC, 2013.01-2016.12)
- Gene therapy and stem-cell-combined gene therapy for ischemic stroke.
Project: "the study on regulation of striatal GABA neurons using ontogenetic techniques" (#81371305, NSFC, 2014, 01-2017.12)

• Responsibility •

N/A

• Eligibility •

- In principle, we recruit junior and senior students
- Hold at least a 2.5 GPA on a 4.0 scale
- Students of non-English speaking countries must provide English language proficiency certificate,

IELTS no less than 6.0, and TOEFL no less than 90 points. If you are in the college for English teaching programs, please provide relevant certificates

- Have at least one prior research experience
- Sound knowledge of English grammar and Science
- Proficient at communicating information effectively
- Excellent knowledge of Biology, Neuroscience or Neurology
- Skilled at using appropriate methods for better understanding of new concepts

• Additional Financial Support •

N/A

• Contact •

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