

# Neural Engineering Laboratory

## School of Biomedical Engineering

### • About the Lab •

The Neural Engineering Laboratory (NEL) was established by Prof. Shanbao Tong in 2005. The mission of NEL is to develop novel technologies for monitoring and understanding the brain in both experimental and clinical neuroscience. The current researches in NEL are focusing on developing novel neural signal processing, optical brain imaging and cognitive neural engineering. In particular, we are interested in the study of (1) neurovascular imaging techniques and instrumentation, (2) reorganization and plasticity of brain network following stroke, amputation or mental disorders.

### • About the Team •

Director: Prof. Dr. Shanbao Tong.

Dr. Tong is a professor and associate dean of the School of Biomedical Engineering of SJTU. He also an active Associate Editor of many journals including IEEE Transactions on Neural Systems and rehabilitation engineering, Medical & Biological Engineering & Computing, IEEE transactions on Biomedical Engineering, and IEEE Pulse. He is the founding chair of IEEE EMBS international summer school of neural engineering. The conference chair of the 8<sup>th</sup> IEEE EMBS international neural engineering conference.

For other faculty of NEL, please visit <http://nel.sjtu.edu.cn>

### • Research Fields •

#### Cognitive Neural Engineering

- Ageing related brain network change
- EEG analysis of meditation
- EEG signal recording and analysis for ischemic stroke study

#### Brain Modulation

- Transcranial Ultrasound Stimulation: animal and clinical study

### • Responsibility •

Depends on the time and background

### • 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

### • Additional Financial Support •

N/A

### • Contact •

Person in Charge: Dr. Shanbao Tong, 34205138, [stong@sjtu.edu.cn](mailto:stong@sjtu.edu.cn), Monday-Friday, 8:00-17:00pm

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