# Lei Luo

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#### **EDUCATION**

King's College London London

Neuroscience Master Institute of Psychiatry, Psychology & Neuroscience Sep 2021 - Sep 2022

Southern University of Science and Technology.

Shenzhen

Bioscience Bachelor College of Life Sciences Sep 2018 - Sep 2018

GPA: 3.49 /4.00

Dissertation for degree: Mechanism Inquiry of The Strategy of Pericyte Based on Medical Stimulation.

Now in the "3+1" Joint Undergraduate and Master Training Program at King's College London and Southern University of Science and Technology.(only 3 students get the chance in 2021 at SUSTech)

# **PROFESSIONAL EXPERIENCE**

## Professor Hou Shengtao laboratory.

Shenzhen

Internships Sep 2019 - Jun 2022

As the secondary contributing author, publish an article titled "40 Hz light flicker alters human brain EEG microstates and complexity implicated in brain diseases" on Frontiers in Neuroscience.

(from June 2021 to Oct 2021, Internship)

Extract, isolate and culture pericytes from mice and try to build a system for recognizing pericytes from all cells by neural network deep machine learning.

(from Aug 2020 to Apr 2021, internship)

The National College Student Innovation and Entrepreneurship Training Program in China, with the topic *rhythmic flicking* can save hippocampal y and protect ischemic neurons by affecting pericytes.

(from Apr 2020 to Sept 2021, Internship)

The lipidomic research of stroke, learn cell culture techniques and experiment with calcium imaging, immunofluorescence methods. Learn the cardiac perfusion techniques and construction method of creating mouse tMACO models.

(from Sept 2019 to Jan 2020, Internship)

Behavioural experiments for example water maze, Y maze, novel object recognization.

(from Sept 2019 to Nov 2019, Internship)

# Southern University of Science and Technology - Queensland University Joint Neuroscience and Nervous Engineering Research Center

Shenzhen

Oct 2019 - Oct 2021

Student assistant

Cooperate to organise the national scientific seminars. Periodically biweekly contact with researchers, typeset and post the announcement for each seminar.

### Chinese Institute for Brain Research, Beijing

Beijing

Camper Jan 2021 - Feb 2021

The winter camp of the Chinese Institute for Brain Research, Beijing and became an excellent camper. Attended a two-week course and gave a presentation with the group.

#### Professor Xiao Guozhi laboratory.

Shenzhen

Student assistant Jun 2019 - Sep 2019

Learned laboratory basic knowledge, a series of model animals experiments. Made contributions to the main project by doing designed experiments weekly. Determined my interest in neuroscience.

# **HONARS and AWARDS**

#### **Publications**

40 Hz light flicker alters human brain EEG microstates and complexity implicated in brain diseases (as the secondary author, Frontiers in Neuronscience) (IF: 4.501)

#### **Awards**

The Study Abroad Program Scholarships for Undergraduates of the Southern University of Science and Technology (2021)

Third Prize Scholarship in Zhicheng College of the Southern University of Science and Technology (2019)

The Third Prize of the National High School Mathematics Competition (2018)

#### SKILLS, CERTIFICATIONS & OTHERS

- Programming Language: Python and R (used in my previous research), Java (courses), html & ejs (blog), C (self-learning)
- Certifications: IELTS 6.5 (Listing: 6.5, Reading: 6.5, Talking: 6, Writing: 6)
- Languages: Mandarin (Bilingual or native proficiency), Wu (Bilingual or native proficiency), English(Complete professional competence), Cantonese (Limited working proficiency), German (Elementary proficiency)
- Lab Skills: EEG; electrophysiology experiments (patch-clamp); calcium imaging; construction of mouse tMCAO model; neurons extraction; immunofluorescence; frozen and vibratome section; cardiac perfusion techniques; etc.
- Club: Membership in the supercomputing and big data analytics center for computational science and engineering in Southern University of Science and Technology.