

PhD studentship (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China
School	School of Science
Supervisors	Principal supervisor: Professor Alan Kaluev (XJTLU) XJTLU co-supervisor: Dr. Pengjing Xu XJTLU co-supervisor: Dr. Hejia Qiu Co-supervisor: Professor John Quinn.(UoL)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Artificial intelligence-driven CNS/TCM drug discovery using in vivo zebrafish models
Contact	Please email alan.kaluev@xjtlu.edu.cn (XJTLU principal supervisor's email address) with a subject line of the PhD project title. The principal supervisor's profile is linked here: https://scholar.xjtlu.edu.cn/en/persons/AlanKaluev

Requirements:

A Master's degree with Merit and a Bachelor's degree with first-class or upper second-class honors are required for PhD admissions. Prior research in neuroscience or related topic is critical. Evidence of good spoken and written English is essential. The candidate should have an IELTS (or equivalent) score of 6.5 or above, if the first language is not English. This position is open to all qualified candidates irrespective of nationality. We are searching for a smart, motivated, fast-paced, energetic PhD student to join a multidisciplinary neuroscience lab at XJTLU.

Degree:

The student will be awarded a PhD degree from the University of Liverpool (UK) upon successful completion of the program.

Funding:

The PhD studentship is available for three years subject to satisfactory progress by the student. The award covers tuition fees for three years (currently equivalent to RMB 99,000 per annum). It also provides up to RMB 16,500 to allow participation at international conferences during the period of the award. The scholarship holders are expected to conduct the majority of their research at XJTLU in Suzhou, China. However, they may apply for a short-term research visit to the University of Liverpool if the project requires it.

Project Description:

High prevalence of brain disorders necessitates novel therapies. Complementing laboratory rodents, the zebrafish (*Danio rerio*), is commonly used as an animal model organism in biomedical research. This project combines 1) biomedicine and 2) AI by using zebrafish and AI tools recently developed by our research team, for in-vivo anxiolytic/antidepressant drug screening using Traditional Chinese Medicines (TCM). The project involves a collaborative research team between the School of Science and School of AI and Advanced Computing, with synergistic expertise in neuroscience, pharmacology, genomics, biostatistics and AI. The project has an important scientific impact, because the identified CNS TCM effects are highly likely to provide new targets for better treatments of human brain disorders. Furthermore, in addition to fundamentally advancing translational neuroscience, this project can foster the development of novel high-throughput zebrafish screens for testing novel compounds with neuroactive properties. The study will be performed by a multidisciplinary research team with synergistic expertise in neuroscience, pharmacology, genomics, biostatistics and computer science. The main overall goal of the present project is developing novel translational models of brain disorders and drug screens based on zebrafish and AI, and using zebrafish to study CNS effects of TCMs. The supervisory team is led by XJTLU Prof. Alan Kaluev, a top 2% global scientist and a Highly Cited Chinese investigator (Focus: Neuroscience, Pharmacology), and includes Drs. Pengjing Xu and Dr. Hejia Qiu (Focus: AI/Computer science, XJTLU) and Prof. John Quinn (Focus: Neuroscience), Chair of Neuroscience at the University of Liverpool.

For more information about doctoral scholarship and PhD programme at Xi'an Jiaotong-Liverpool University (XJTLU), please visit

<https://www.xjtlu.edu.cn/en/admissions/global/entry-requirements/>

<https://www.xjtlu.edu.cn/en/admissions/global/fees-and-scholarship>

How to Apply:

Interested applicants are advised to email alan.kaluev@xjtlu.edu.cn (XJTLU principal supervisor's email address) the following documents for initial review and assessment (please put the project title in the subject line).

- CV
- Two formal reference letters
- Personal statement outlining your interest in the position
- Certificates of English language qualifications (IELTS or equivalent)
- Full academic transcripts in both Chinese and English (for international students, only the English version is required)

- Verified certificates of education qualifications in both Chinese and English (for international students, only the English version is required)
- PDF copy of Master Degree dissertation (or an equivalent writing sample) and examiners reports available