

PhD studentship (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China
School	School of Sciences
Supervisors	Principal supervisor: Dr. Xinzhao Tong (XJTLU) Co-supervisor: Professor Jia Meng (XJTLU) Co-supervisor: Professor Heather Allison (UoL)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Genomic surveillance and transmission dynamics of nosocomial pathogens in China: A comprehensive analysis of genetic diversity, mobile genetic elements, and phylogeographic spread
Contact	Please email mailto:xinzhao.tong@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/XinzhaoTong/

General Requirements:

A Master's degree with Merit and a Bachelor's degree with first-class or upper second-class honors in **Bioinformatics, Computational Biology, Epidemiology, Biostatistics, or a related field** are required for PhD admissions. Exceptional candidates holding only a Bachelor's degree may be considered on an individual basis in certain disciplines.

Evidence of proficiency in both 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.

Specific Skills and Interests Required:

- Strong programming skills (e.g., **R and/or Python**).
- Experience or keen interest in **bioinformatics, genomic data analysis, and phylogenetics**.
- Aptitude for **mathematical or statistical modeling** (e.g., transmission networks, epidemiological models).

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 a period of 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 support participation in international conferences during the award period. 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. The living expenses could be partly covered by the salary paid for working as a Teaching Assistant in the university (RMB 60 per hour).

Project Description:

Pathogenic microbes often spread across cities primarily via human activities, triggering disease outbreaks—many caused by resilient, multi-drug-resistant nosocomial pathogens capable of stealthy community transmission. Although the intercity transmission of specific nosocomial pathogens is reported, the factors driving the pathogen lineage divergence across geographic regions in China remain poorly understood. Additionally, there is a critical need for a unified, open-access surveillance platform to track the spread of pathogens and enable the early identification of high-risk infection zones. In this study, we aim to investigate the intercity transmission routes and resistance profiles of three representative nosocomial pathogens—*Acinetobacter baumannii*, *Klebsiella pneumoniae*, and *Stenotrophomonas maltophilia*—and to identify the features that drive their lineage divergence. Our findings will help establish a pathogen monitoring platform to reduce the burdens of hospital-acquired and community infections.

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 <mailto:xinzhao.tong@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 educational qualifications in both Chinese and English (for international students, only the English version is required)
- PDF copy of Master's Degree dissertation (or an equivalent writing sample) and examiners reports available
- Previous publications, if any