

PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Biological Sciences
Supervisors	Principal supervisor: Dr. Xiaowei Jiang (XJTLU, BIO) Co-supervisor: Dr. Jason Parsons (UoL, NWCR) Co-supervisor: Dr. Pascal Grange (XJTLU, PHY/MATH) Co-supervisor: Dr. Jia Meng (XJTLU, BIO)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Measuring cancer evolution in a changing tumour microenvironment 度量肿瘤在不断变化的肿瘤微环境中的演化
Contact	Please email Xiaowei.Jiang@xjtlu.edu.cn with a subject line of the PhD project title

Requirements:

The candidate should have a first class or upper second class honours degree, or a master's degree (or equivalent qualification), in Computational Biology/Bioinformatics/Mathematical Biology/Computer Science/Physics. Experience in cancer genomics/genetics and computational/mathematical modelling would be an advantage. Evidence of good spoken and written English is essential. The candidate should have an IELTS score of 6.5 or above, if the first language is not English. This position is open to all qualified candidates irrespective of nationality.

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 80,000 per annum) and provides a monthly stipend of 5,000 RMB as a contribution to living expenses. It also provides up to RMB 16,500 to allow participation at international conferences during the period of the award. It is a condition of the award that holders of XJTLU PhD scholarships carry out 300-500 hours of teaching assistance work per year. The scholarship holder is expected to carry out the major part of his or her research at XJTLU in Suzhou, China. However,

he or she is eligible for a research study visit to the University of Liverpool of up to three months, if this is required by the project.

Project Description:

Currently, a general theory of adaptive cancer evolution is lacking. The tumour microenvironment (TME) is largely ignored or considered static by most cancer evolution models. Therefore, most previous cancer evolution models are not realistic, which may lead to biased inference of the tempos and modes of cancer evolution and mislead cancer treatments and clinical trials. In our recent published work, we have developed a genetic and phenotypic model of cancer spatial evolution by assuming the TME has a changing phenotypic optimum. In this project we seek to understand how cancer evolution can be measured using cancer genomic data by extending an existing framework (Jiang and Tomlinson 2020). We will use cutting-age computational approaches and cancer genomic data from public domains and our collaborators to measure how cancer evolution in a changing TME may change our view of malignancy, metastasis and treatment response/failure in various cancers.

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

<http://www.xjtlu.edu.cn/en/study-with-us/admissions/entry-requirements>

<http://www.xjtlu.edu.cn/en/admissions/phd/feesscholarships.html>

How to Apply:

Interested applicants are advised to email Xiaowei.Jiang@xjtlu.edu.cn the following documents for initial review and assessment (please put the project title in the subject line).

- CV
- Two reference letters with company/university letterhead
- Personal statement outlining your interest in the position
- Proof of English language proficiency (an IELTS score of 6.5 or above)
- Verified school 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

Informal enquiries may be addressed to Dr. Xiaowei Jiang

(Xiaowei.Jiang@xjtlu.edu.cn), whose personal profile is linked below,

<https://www.xjtlu.edu.cn/en/departments/academic-departments/biological-sciences/staff/xiaowei-jiang>

