

PhD studentship (Full-time)



Institution	Xi'an Jiaotong-Liverpool University, China
Department	Department of Biological Sciences
Supervisors	<i>Please list all the names in the supervisory team. It should be consistent with the information on your approved RDF proposal.</i> Principle supervisor: Dr Sekar Raju (Department of Biological Sciences, Xi'an Jiaotong-Liverpool University) Co-supervisor: Professor Alan J McCarthy (Institute of Integrative Biology, University of Liverpool)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Novel microbial source tracking markers for identification of fecal contaminations in inflow rivers of Taihu Lake 评估新的微生物源追踪标记以应用于识别太湖入流河中的粪便污染
Contact	Please email Sekar.Raju@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 Biological Sciences with specialization in Microbiology or Virology or Molecular Biology. Experience in DNA/RNA analysis, bioinformatics and statistics 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:

The urban water system in China faces various challenges. Fecal pollution is one of the major concerns to watersheds. Taihu Lake serves as important drinking water source for many nearby cities in addition to many other roles including aquaculture, transportation and tourism. The inflow rivers are reported to significantly contribute to the pollution of this lake. Microbial source tracking (MST) markers have emerged as promising tools to determine the sources of fecal pollution. Our recent studies assessed the pollution levels in one of the inflow rivers (Water, 2018; doi:10.3390/w10020183) and validated and quantified the *Bacteroidales* markers to track fecal pollution in Taihu watershed (Frontiers in Microbiology, 2019; doi: 10.3389/fmicb.2019.00699). The current project aims to apply novel phage-based MST markers to detect fecal pollution in major inflow rivers of Taihu watershed for improved management of Taihu and other lakes in China. This project will be supervised by Dr. Sekar Raju (Xi'an Jiaotong-Liverpool University) and Professor Alan McCarthy (University of Liverpool).

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 contact **Dr Sekar Raju (Email address: Sekar.Raju@xjtlu.edu.cn)** with the following documents for initial review and assessment (please put the project title in the subject line).

- CV
- Name and contact details of two referees
- 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. Sekar Raju (Sekar.Raju@xjtlu.edu.cn), whose personal profile is linked below:

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