

PhD studentship (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China Suzhou Institute of Systems Medicine, CAMS, China
Department	Department of Biological Sciences Suzhou Institute of Systems Medicine
Supervisors	Primary supervisor: Professor Zhiliang Lu (Xi'an Jiaotong-Liverpool University) Main supervisor: Professor Yili Yang (Suzhou Institute of Systems Medicine, CAMS); Co-supervisor: Dr Jia Meng (Xi'an Jiaotong-Liverpool University); Co-supervisor: Prof Chris Sanderson (Institute of Translational Medicine, UoL)
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	The discovery and identification of neoantigen from colorectal cancer for personalized immunotherapy
Contact	For inquiries, please contact Professor Yili Yang (yyl@ism.cams.cn , Suzhou Institute of Systems Medicine, CAMS) or Professor Zhiliang Lu (Zhiliang.lu@xjtlu.edu.cn, Xi'an Jiaotong-Liverpool University) and copy doctoralstudies@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 Biomedical Sciences, Bioinformatics, Computer Science, Chemistry or a closely-related discipline. Evidence of good spoken and written English is essential. The candidate should have an IELTS score of 6.5 or above, or an equivalent qualification, 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:

This 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) by XJTLU and provides a monthly stipend of 3500 RMB as a contribution to living expenses by supervisors in Suzhou. 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 success of cancer immunotherapy revealed that neoantigens, tumor-specific antigens derived from mutated proteins in tumor cells, are the most important targets of anti-tumor immunity. In fact, the presence of T cells recognizing neoantigens is largely responsible for the effectiveness of adoptive transferred T cells and antibodies against checkpoint proteins (PD1, PDL-1, and CTLA-4). Additionally, it has been indicated that antibodies recognizing neoantigens hold the promise to overcome the difficulties in using CAR-T for the treatment of solid tumors. Thus, neoantigens are the keys for the development of novel effective anti-tumor immunotherapy. The PhD project is designed to develop methods for determining MHC typing, and identifying potential neoantigens based on genomic mutations and RNA expression. A number of methods available for docking peptides and identifying neoantigen will be utilized, compared, and improved. The project aims to integrate these factors once a time, and use the published results from mice as training data. Eventually, a novel system with the ability to learn will be build up.

For inquiries, please contact Professor Yili Yang (yyl@ism.cams.cn, Suzhou Institute of Systems Medicine, CAMS) or Professor Zhiliang Lu (Zhiliang.lu@xjtlu.edu.cn, Xi'an Jiaotong-Liverpool University)

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

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

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

How to Apply:

Interested applicants are advised to email.....@xjtlu.edu.cn (principle supervisor's email address) the following documents and copy doctoralstudies@xjtlu.edu.cn (please put the project title in the subject line).

- CV
- Two reference letters
- Personal statement outlining your interest in the position
- Proof of English language proficiency (an IELTS score of above 6.5 or equivalent is required)
- 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)

Informal enquiries may be addressed to Yili Yang (yyl@ism.cams.cn, Suzhou

Institute of Systems Medicine, CAMS)

<http://www.ismsz.cn/Index/EPage/767dc298-b3d8-4987-9bce-6065e225f24c> or

Professor Zhiliang Lu (Zhiliang.lu@xjtlu.edu.cn, Xi'an Jiaotong-Liverpool University)

<http://www.xjtlu.edu.cn/en/departments/academic-departments/biological-sciences/staff/zhiliang-lv>