

## PhD studentship (Full-time)

Institution	Xi'an Jiaotong-Liverpool University, China
School	Wisdom Lake Academy of Pharmacy
Supervisors	<p><i>Please list all the names in the supervisory team. It should be consistent with the information on your approved PGRS proposal.</i></p> <p>Principal supervisor: Dr. Jianrui Song (XJTLU)  Co-supervisor: Professor Xi. Zhang (XJTLU)  Co-supervisor: Dr. Gabrielle Grundy (UoL)</p>
Application Deadline	Open until the position is filled
Funding Availability	Funded PhD project (world-wide students)
Project Title	Obesity promotes tumorigenesis with age via enhancing adipose senescence and immune evasion
Contact	<p>Please email <a href="mailto:jianrui.song@xjtlu.edu.cn">jianrui.song@xjtlu.edu.cn</a> (XJTLU principal supervisor's email address) with a subject line of the PhD project title.</p> <p>The principal supervisor's profile is linked here:  <a href="https://scholar.xjtlu.edu.cn/en/persons/JianruiSong">https://scholar.xjtlu.edu.cn/en/persons/JianruiSong</a></p>

### **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. Exceptional candidates holding only a Bachelor's degree may be considered on an individual basis in certain disciplines.

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.

### **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:**

Age and obesity are leading risk factors for cancer. Given the growing aged population with obesity, investigation into how visceral fat during aging with obesity promotes cancer is urgently needed. In our preliminary study, aged obese mice showed significantly increased cancer incidence, with increased insulin and activated p38 MAPK, which drives/mediates senescence. PD1<sup>+</sup> T cells were also found increased in those mice. We hypothesize, visceral fat promotes tumorigenesis during aging with obesity via adipose senescence and immune evasion. We will determine the adipose senescence and introduce senolytics to demonstrate the involvement of adipose senescence in tumorigenesis, followed by identifying the specific SASP factor that is importantly involved. We will also assess the protective potential of combining senolytics with PD1 blockade against cancer. This study could highlight a new approach for treating elder obese cancer patients by identifying the underlying mechanism.

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 [jianrui.song@xjtlu.edu.cn](mailto:jianrui.song@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