LECTURER/SENIOR LECTURER IN CELL SIGNALLING
Job Ref: 010247

Faculty: Faculty of Health and Life Sciences, Institute of Integrative Biology, Department of Biochemistry

Location: University Campus

Grade: 8/9

Salary: Depending on qualifications and experience

Range: £40,792 - £65,362 pa

Hours of work: Full Time

For informal enquiries, please contact Professor Sonia Rocha, email: Sonia.rocha@liverpool.ac.uk

For shortlisting and interview enquiries, please contact Tina Lewis, email: tina.lewis@liverpool.ac.uk
We are looking to appoint a Lecturer or Senior Lecturer with established expertise in cell signalling and associated research interests to join the Institute of Integrative Biology (IIB) at the University of Liverpool. The Institute offers a vibrant research community with world-leading research infrastructure and facilities. We are now looking to strengthen the team of scientists working in the fields of post-translational modifications-mediated signalling and hypoxia.

You should demonstrate a strong research portfolio and evidence of high quality publications in your field of expertise. Expertise in the application of mass-spectrometry proteomics, imaging or genomics to answer biological questions of relevance in health and disease in the context of cell signalling would be advantageous. Technological know-how, whilst important, should be underpinned by your drive to address fundamental biological questions in any area relevant to the Institute. You will be expected to develop both your own research program and collaborate with existing staff across the Institute and more broadly across the University.

The Institute of Integrative Biology (IIB) is one of the five research-intensive Institutes within the Faculty of Health and Life Sciences and lies at the heart of a thriving biomedical and environmental science campus in Liverpool. The Institute’s academic staff contribute to biological, biomedical and veterinary science undergraduate curriculums through close links with the Faculty’s undergraduate teaching institutes (Institute of Life and Human Sciences; Institute of Clinical Sciences; Institute of Veterinary Science). The Institute’s engagement across a range of disciplines supports the delivery of research-driven teaching to its undergraduate community.

The Institute’s doctoral programme attracts an annual intake of around 40 PhD students. They are funded by UK research councils including BBSRC and NERC and other national governments as well as companies and medical charities. The University is a partner in NERC and BBSRC Doctoral Training Partnerships, which are managed from the Institute. The IIB collaborates with Biological Sciences and Environmental Sciences staff at the XJTLU campus to co-supervise PhD students, and also recruit postgraduate students to international programmes linking the Institute with RIKEN (Japan), A*STAR (Singapore), Soleil (France), several Spanish institutions, and several Thai universities, contributing to the Institute’s growing international presence.

The Institute currently consists of 69 academic staff, including 28 Professors, 9 independent research fellows, ~100 staff on permanent and fixed-term research contracts, ~100 postgraduate students and 28 technical staff. It is administered by 18 professional services staff providing management, financial, research and clerical support to the institute. With a research income of ~£9.2m annually, the Institute’s scientists deliver ground-breaking research which spans the complete range of biological scales from genes and genetic regulation through proteins, whole organisms, populations and ecosystems. IIB benefits from state-of-the-art facilities in genomics, proteomics, metabolomics and computational biology and expertise in applying these techniques to meet societal challenges in healthcare, bioscience, agriculture and environmental science.

The Institute is organised into three Departments (led by Heads of Department) with four cross-cutting research themes (led by Research Theme Leads). Particular emphasis is placed on breaking down disciplinary
barriers and on encouraging the development of thematic networks of active research groups, both within IIB, but also extending externally into environmental science, chemistry, mathematics and veterinary and clinical medicine.

Vision

Over the next five years the Institute aims to:

- Ensure that its research will have a positive impact on society.
- Continue to grow its discovery science and translational research by working more closely with industry, the public sector and other higher education partners.
- Continue to support and grow its postgraduate community, developing the next generation of research scientists.

Research and Partnerships

The Institute currently has over 159 active PI research grants and contracts totalling more than £39.7 million from a range of sources, including the UK Research Councils, UK research charities including the Wellcome Trust, British Heart Foundation and Cancer Research UK, the European Commission, the UK Department for Environment, Food and Rural Affairs and other Government Departments, along with links to industrial partners such as Unilever PLC. The Institute’s Research and Finance Team provide the focal point for all research administration within the Institute including pre- and post-award, recruitment and progression of research students, and external liaison. Where appropriate, liaison with specialist IP, legal and business-support teams is provided centrally by The Research Support Office, Research Policy, and Business Gateway.

The Institute has an active programme promoting impact and knowledge exchange activities, being recognised recently by BBSRC in a national competition for advancing a culture change in relation to societal and commercial impacts.

Facilities

The IIB’s research activities are housed mainly within the Biosciences Building, which comprises core laboratories for cell imaging, genomics, proteomics, insect, plant and microbial culture, an aquarium and NMR spectroscopy. Some of these laboratories also provide Shared Research Facilities for the Faculty, supported by the University’s Technology Directorate. Together, this provides a large-scale, interactive research environment for life and health sciences.

The Institute’s core research facilities include:

- The Centre for Genomic Research acting as collaborative core UK sequencing facility for the wider scientific community, with expertise in high-throughput cell isolation to single cell level, sequencing platforms (2nd and 3rd generation) and informatics infrastructure for genome analyses.
- GeneMill Synthetic Biology Lab: BBSRC-funded facility for gene editing and synthesis.
- Centre for Proteome Research housing state-of-the-art instrumentation for qualitative and quantitative proteomics, MS imaging and MS-based structural protein analysis.
- Centre for Cell Imaging housing both confocal and wide-field luminescence microscopes.
• Computational Biology Facility promoting the interaction and coordination of the community of computational and experimental biologists in Liverpool.
• Barkla X-ray Laboratory of Biophysics with in-house X-ray crystallography and SAXS capability.
• NMR Centre for Structural Biology and Metabolomics for structural and metabolite analysis in liquid and solid state

Other facilities include:

• Henry Wellcome Laboratory of Mammalian Behaviour and Evolution, based at the Leahurst campus, with specialised indoor and outdoor facilities for wild and laboratory rodents.
• Extensive culture facilities including controlled temperature rooms, glasshouses, plant growth rooms, and a 450m² aquarium equipped for all biomes.
• A 48 pond (2000L) replicated mesocosm facility with individual temperature control and monitoring
• Access to a state-of-the-art Biomedical Services Unit for work on laboratory rodents.
• Access to farm animals at the Leahurst Campus and to the University Botanic Gardens at Ness, both of which are on the nearby Wirral peninsula.

Excellent facilities/expertise exist elsewhere on the campus, these include MRI scanners, electron, atomic-force and photoelectron microscopy, nanobiotechnology and materials discovery. Maintaining the leading-edge status of these key facilities is the role of the Technology Directorate, which coordinates internal and external investment on behalf of the Faculty, with cost-recovery mechanisms to encourage sustainability.

Diversity and Equality

The Institute has Athena SWAN Gold status in recognition of its activities and policies promoting gender equality. This is the first Gold award for the University and one of ten nationally, placing IIB in the 1.6% of university departments holding such an award (see ECU website). IIB is committed to supporting its staff in reaching their full potential, providing a fair and supportive working environment and organisational structure. Further details are available on IIB’s Athena SWAN web page.
## Person Specification

### ESSENTIAL CRITERIA  |  DESIRABLE CRITERIA

(Identified from – Application form, CV, Supporting Statement, Interview, References)

### EXPERIENCE

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<td>Experience as a successful researcher</td>
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<td>Evidence of UG and/or PG teaching experience</td>
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<td>Evidence of high impact publications</td>
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<td>Experience of cross-disciplinary research</td>
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<td>Evidence of research independence</td>
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<td>Experience of training in laboratories in more than one institution</td>
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<td>4.</td>
<td>Experience of working in collaborative projects</td>
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<td>Experience of innovative contribution to design and delivery of teaching</td>
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<td>5.</td>
<td>Evidence of ability to obtain grant funding</td>
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<td>6.</td>
<td>Evidence of securing substantive grant awards (for appointment at Senior Lecturer/G9 level)</td>
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<td>7.</td>
<td>Leadership and active collaboration within and outside your institution (for appointment at Senior Lecturer/G9 level)</td>
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<td>8.</td>
<td>Experience in a Lecturer or equivalent academic position (for appointment at Senior Lecturer/G9 level)</td>
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<td>9.</td>
<td>Sustained excellence in teaching activity</td>
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### EDUCATION, QUALIFICATIONS AND TRAINING

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<td>PhD in relevant discipline</td>
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### SKILLS, GENERAL AND SPECIAL KNOWLEDGE

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<td>Excellent technical research skills in a relevant discipline</td>
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<td>Evidence of scientific leadership at a national level</td>
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<td>2.</td>
<td>Excellent written and presentation skills</td>
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<td>Evidence of engagement at a national or international level</td>
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<td>3.</td>
<td>Evidence of scientific leadership at a local level</td>
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### PERSONAL ATTRIBUTES AND CIRCUMSTANCES

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<td>Evidence of ability to collaborate with other research groups whilst pursuing independent research interests</td>
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<td>Interest in supporting the development of junior researchers</td>
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<td>Integrity and commitment to diversity</td>
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<td>Evidence of ability to lead a research group</td>
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The University of Liverpool is one of the UK’s leading research institutions with an annual turnover of £480 million, including £102 million for research. Ranked in the top 1% of higher education institutions worldwide, Liverpool is a member of the prestigious Russell Group of the UK’s leading research universities. The University has 33,000 students, 7,500 of whom travel from all over the world to study here, and 211,000 alumni in 171 countries. Its global focus has led the institution to establish a university in Suzhou near Shanghai, in partnership with Xi’an Jiaotong University, as well as a campus in London. The University is the largest provider of 100% online postgraduate degree courses in Europe with over 10,000 students studying for Liverpool degrees around the world.

As one of the top 25 UK universities targeted by global graduate employers, and 18th in the top universities in the UK for graduate employability our students enjoy high employability rates, with 88% of all of the University’s graduates in employment or further study six months after graduation. For undergraduate leavers this rises to 90% and to 95% for UK-based undergraduate leavers. The University is committed to continually improving the quality of its student experience, and, supported by a £600 million phased investment in our campus our approach has had a significant impact on the University’s student recruitment position in recent years.

Liverpool graduates have become pioneers in every field, with Nobel prize winners including: Sir Ronald Ross (1902; discovery of mode of spread of malaria), Professor Charles Glover Barkla (1917; discovery of the electromagnetic properties of x-rays), Professor Sir Charles Sherrington (1932; functional analysis of motor unit in a muscle), Professor Sir James Chadwick (1936; discovery of the neutron), Professor Sir Robert Robinson (1947; investigation into alkaloids and other plant products), Professor Har Gobind Khorana (1968; genetic code of protein synthesis), Professor Rodney Robert Porter (1972; structure of antibodies); Professor Sir Joseph Rotblat (1995; work to diminish the role of nuclear arms in international politics) and Ronald H. Coase – awarded the Nobel Prize in Economics 1991 for his research into the significance of transaction costs and property rights for the institutional structure and functioning of the economy.

Over 6,000 talented staff help create the inspiring learning environment our students thrive in, it’s no wonder given over 81% of our research is seen as ‘world leading’ and ‘internationally excellent’. What’s more, we provide a supportive and high-quality environment for our people across the University and a range of initiatives ensure that there are equal opportunities for all, including our partnership with Athena SWAN which celebrates good employment practice for women working in science, technology, engineering and medicine.
The City of Liverpool

As the seventh largest city in the UK, Liverpool is diverse, energetic and exciting. Built on an illustrious heritage that stretches back 800 years, Liverpool has a global reputation for sport, music, architecture and culture.

Today the city is enjoying a resurgence, driven by its designation as European Capital of Culture in 2008. Record levels of inward investment have transformed the city.

The regeneration of Liverpool City Centre has been spearheaded by the £1 billion Liverpool One project - one of Europe's biggest shopping/mixed-use schemes, which has positioned the city as one of the UK's top five retail destinations.

The successful European Capital of Culture experience in 2008 has been followed by the designation of Liverpool's stunning waterfront as a UNESCO World Heritage Site and massive investment in new cultural and leisure attractions, including Albert Dock. Liverpool is a major cultural hub in the UK. In fact, there are more museums, theatres, and galleries in Merseyside than in any other region outside London.

Liverpool Philharmonic Hall, home to the Royal Liverpool Philharmonic Orchestra, one of Europe’s leading orchestras, is the classical counterpoint to the city’s many contemporary music venues and the visually stunning Echo Arena.

Home to two of Europe’s most famous football teams – Liverpool FC and Everton FC – the city’s achievements in sport are internationally recognised. Aintree Racecourse, home of the Grand National, and two internationally acclaimed golf courses at Royal Birkdale & Royal Liverpool in Hoylake are on the doorstep.

Compared to many other UK cities Liverpool has less congestion, is closer to countryside, has more parks, has more cultural and recreational opportunities, better schools and more accessible transport. Liverpool is uniquely situated 1 hour from Manchester, 3 hours from London by train and the city’s Liverpool John Lennon Airport (one of the Europe's fastest growing airports) connects to more than 650 world wide destinations.
General Information

Asylum & Immigration
The University will comply with the Immigration, Asylum and Nationality Act 2006, which requires all employees to provide documentary evidence of their legal right to work in this country prior to commencing employment. Please be aware that you will be required to bring your passport (and visa if applicable) to interview so that it can be copied and verified by a member of the Selection Panel. For posts requiring a recognised degree level or equivalent qualification, and where there is no suitable UK or European Economic Area candidate, the University will take the necessary steps to secure UK Border Agency permission for a foreign national to take up employment. Should a candidate require a Certificate of Sponsorship in order to take up a post they will need to meet the UK Border Agency Tier 2 Points Based Criteria. A self assessment tool can be found on the UK Border Agency website at: www.ukba.homeoffice.gov.uk/poinscalculator

A candidate may also be required to undertake an English Language test prior to commencing work at the University. Details of Home Office approved tests can be found at: https://www.gov.uk/government/publications/guidance-on-applying-for-uk-visa-approved-english-language-tests

Further information on the eligibility criteria for Certificates of Sponsorship can be found at: www.ukba.homeoffice.gov.uk/employers/points

National Insurance Number
All employed individuals must possess a UK National Insurance Number. Further information and how to apply for a unique National Insurance Number can be found at: https://www.gov.uk/apply-national-insurance-number

Diversity and Equality
The University of Liverpool is committed to diversity and equality of opportunity. All employees and applicants for jobs will be considered on their abilities and will not be discriminated against on the grounds of age, caring responsibilities, colour, disability, employment status, gender, gender identity, marital status, nationality, race or ethnic origin, religion or belief, sexual orientation, socio-economic status or any other irrelevant distinction. Training is available to support career progression within the University.

Two Ticks Disability: Guaranteed Interview Scheme (GIS)
The University of Liverpool is committed to the employment of disabled people, and as part of our commitment, we guarantee to interview all disabled applicants who meet the essential criteria for a post and consider them on their abilities. If your disability prevents you completing the application form by the specified closing date, or when the vacancy closes early, due to a high volume of applications, please call the Recruitment Team to discuss alternative arrangements. http://www.liv.ac.uk/working/jobvacancies/guaranteedinterviewscheme/

Micah Liverpool Programme
The University of Liverpool supports the Liverpool Anglican Cathedral Micah Liverpool Programme. Applicants who have successfully completed the programme and meet the essential criteria for the post will be offered a guaranteed interview. Please note that individuals will be confirmed through the Micah Liverpool Programme directly. http://www.liverpoolcathedral.org.uk/home/micah-liverpool.aspx

GiveGetGo Volunteer Programme
Applicants who have successfully completed the GiveGetGo Volunteer Programme at the University in Partnership with the Transform Lives Company who meet the essential criteria for the post will be offered a guaranteed interview. Please note that individuals will be confirmed through the GiveGetGo Volunteer Programme directly. https://www.liverpool.ac.uk/working/jobvacancies/givegetgo/

Accessibility
If you require copies of documentation in alternative formats, for example, large print or Braille, please contact jobs@liverpool.ac.uk or telephone 0151 794 6771.
If you have any other requirements which will help you access the application or interview process or employment opportunities at the University of Liverpool, please let us know by contacting jobs@liverpool.ac.uk or telephone 0151 794 6771.

Pension
The Occupational Pension Scheme associated with this appointment is the Universities Superannuation Scheme (USS). You are encouraged to familiarise yourself with the full particulars of the scheme which can be found here.

Outcome of applications
Vacancies at the University often attract a large number of candidates and it is not always possible to respond individually to every application. If you have not heard from the recruiting department within 6 weeks after the closing date please take it that your application has not been successful.