**1 Advertisement**

**Post Title:** Research Fellow in Cancer Cell Signalling  
**School/department:** School of Life Sciences  
**Hours:** Full time or part time up to a maximum of 1FTE  
**Contract:** Fixed term for 1 year (with an option to extend it for another year)  
**Reference:** 6092  
**Salary:** starting at £33,797 to £40,322 per annum, part time if applicable  
**Placed on:** 3 June 2021  
**Closing date:** 31 August 2021 Applications must be received by midnight of the closing date.  
**Expected start date:** 1 October 2021  

**Project: ‘Elucidating the molecular signalling pathways of LMTK3 in cancer’**

A post-doctoral position is available in the laboratory of Georgios Giamas to elucidate the involvement of LMTK3 in cancer progression.

The oncogenic role of Lemur tyrosine kinase 3 (LMTK3) has been well established the last years, as supported by mechanistic and translational data in different tumour types and settings.  
Recently, we solved the crystal structure of the LMTK3 kinase domain, determined its consensus motif and revealed that LMTK3 is a heat shock protein 90 (HSP90) client protein, requiring HSP90 for folding and stability.  
Moreover, we identified a novel, potent LMTK3 small-molecule inhibitor with a good selectivity profile exhibiting potent anticancer activity in a wide panel of human cancer cell lines (NCI-60 panel), and in *in vivo* breast cancer mouse models.  
Since LMTK3 has been proposed as a potential new therapeutic target in breast cancer and considering its involvement in additional tumours, there is urgent pressing need to further decipher the signalling pathways that LMTK3 is implicated in as well as the regulation of LMTK3 by different proteins.  
Amongst the goals of this project are to:  
- identify novel upstream regulators of LMTK3,  
- identify novel phosphorylation substrates of LMTK3,  
- perform (co)/crystallography studies of LMTK3 alone and in combination with different drugs.  

For these aims, a variety of biochemical, structural and molecular/cellular biology techniques will be employed and therefore extensive expertise in these fields is required. The predominant cancer types that will be used as models for this study will be breast and brain tumours (in particular glioblastomas).

We are an active research group and provide a stimulating and supportive research environment combining a variety of *in vitro* and *in vivo* models / tools. An overview of research within the Giamas lab can be found at: [http://www.sussex.ac.uk/lifesci/giamaslab/](http://www.sussex.ac.uk/lifesci/giamaslab/)

The School of Life Sciences is at the forefront of research in the biological sciences in the UK, coming in the top 10 in the REF 2014.
Please contact Prof Georgios Giamas E-mail: g.giamas@sussex.ac.uk; (Tel: +44 1273 873163) for informal enquiries.

The University is committed to equality and valuing diversity, and applications are particularly welcomed from women and black and minority ethnic candidates, who are under-represented in academic posts in Science, Technology, Engineering, Medicine and Mathematics (STEMM) at Sussex.

*Please note that this position may be subject to ATAS clearance if you require visa sponsorship.*

For full details and how to apply see our [vacancies page](http://www.sussex.ac.uk/lifesci/biochemistry/)

2. **The School / Division**

Please find further information regarding the school/division at: [http://www.sussex.ac.uk/lifesci/biochemistry/](http://www.sussex.ac.uk/lifesci/biochemistry/)

3. **Job Description**

Job Description for the post of: Postdoctoral Researcher

**Department:** Biochemistry and Biomedicine

**Section/Unit/School:** Life Sciences

**Location:** Life Sciences; JMS building

**Grade:** 7

**Responsible to:** Principal Investigator through to Head of School

**KEY RESPONSIBILITIES**

**Research, Scholarship & Enterprise**

- Develop research objectives and proposals for own or joint research, at acceptable levels, with assistance if required.
- Conduct research projects individually and in collaboration with others.
- Analyse and interpret research findings and draw conclusions on the outcomes.
- Produce high-quality research outputs for publication in monographs or recognised high-quality journals, or performance/exhibition, as appropriate, and contribute to the School’s REF submission at acceptable levels of volume and academic excellence.
- Contribute to the preparation of proposals and applications to external bodies, for example for funding purposes.
- Individually or with colleagues, explore opportunities for enterprise activity, knowledge exchange income and/or consultancy, where permissible.
- Build internal contacts and participate in internal networks and relevant external networks in order to form relationships and collaborations.
Continually update knowledge and understanding in field or specialism, and engage in continuous professional development.

Teaching & Student Support
- Undertake teaching duties, if required.
- Assist in the assessment of student knowledge and supervision of student projects if required.
- Assist in the development of student research skills, for example as part of a postgraduate supervision team.

Contribution to School & University
- Attend and contribute to relevant School and project meetings.
- Undertake additional duties, as required by the Principal Investigator and/or Head of School.

Role-specific duties
- To identify, develop and apply techniques to pursue the research objectives
- Keeping up with relevant scientific literature
- Keeping accurate and complete records of lab work
- To present scientific work at seminars within the Laboratory and at external meetings
- To contribute to lab-wide discussions on developments within the field
- Progression of specific project to level appropriate for publication in a timely manner, and interfacing with supervisor on regular basis to discuss results and project progression/direction
- To assist in the training of PhD students and other members of the laboratory where necessary.

This Job Description sets out current duties of the post that may vary from time to time without changing the general character of the post or level of responsibility entailed.

INDICATIVE PERFORMANCE CRITERIA
- A PhD or equivalent scholarly or relevant professional activity
- Pursuing a line of independent research within a research group.
- Publishing research (either from a recently completed PhD or new original research).
- Other forms of externally recognised professional practice of creative output of a standing equivalent to regular publication of original research.
- Initiating, developing or participating in links between the University and external bodies such as business and industry, the professions, community organisations and policy-makers.
- Evidence of successful engagement in teaching or supervision.

4. Person Specification

ESSENTIAL CRITERIA
- Normally educated to doctoral level, or other equivalent qualification, or appropriate level of experience, as appropriate to the discipline (see role-specific criteria below).
- Evidence of engagement in high-quality research activity.
- Excellent presentation skills, with the ability to communicate effectively, both orally and in writing, with students, colleagues and external audiences.
- Ability to work individually on own initiative and without close supervision, and as part of a team.
- Ability to exercise a degree of innovation and creative problem-solving.
- Excellent organisational and administrative skills.
- Ability to prioritise and meet deadlines.
- Excellent IT skills.

**ESSENTIAL ROLE-SPECIFIC CRITERIA**

- PhD in biochemistry, molecular/cellular biology or equivalent.
- Extensive knowledge and experience in HPLC/FPLC, protein expression and purification, X-ray crystallography, FACS analysis and mass-spectrometry.
- Extensive and in depth knowledge and experience in Cell biology techniques including: cell cultures (primary and immortalised cell lines), transfections (siRNA, shRNA, CRISPR-CAS), Immunofluorescence/confocal microscopy.
- Extensive and in depth knowledge and experience in Molecular biology and Biochemical techniques including: cloning, site-directed mutagenesis, agarose gels, real-time RT-PCR, mini/maxi DNA preparations, SDS-PAGE, Western blotting,...
- Extensive and in depth knowledge and experience in different Phenotypic assays including: cell proliferation / viability / apoptosis / invasion / migration.
- Good knowledge in other techniques/assays including: ITC, EMSA and NMR.
- Excellent oral and written communication skills.
- Honesty, motivation, demonstrable independence, commitment and a strong work ethic.
- Proven ability to develop new skills and set up new techniques.
- Demonstrable ability to work co-operatively as a member of a research team and lead a research project.
- A track-record of lead (first) author, high-quality, publications in well cited journals within the last 2 years.
- Professional presentation of data.
- A demonstrated ability to write scientific papers and prepare high-quality figures and images.

**DESIRABLE CRITERIA**

- Previous experience working in a cancer cell signalling laboratory.
- Experience of writing research proposals
- Experience with *in vivo* xenograft (and/or transgenic) cancer mice models.

The post holder will be expected to work independently although supervision will be available in the event of a problem.