





1 Advertisement

Post Title: Research Fellow in Pharmacology

School/department: Sussex Drug Discovery Centre, School of Life Sciences

Hours: Full or part time considered up to a maximum of 1 FTE, core hours 10am-4pm. Requests for <u>flexible working</u> options will be considered (subject to business need).

Contract: fixed term 12 months

Reference: 10206

Salary: Starting at £35,333 to £42,155 per annum, pro rata if part time.

Placed on: 22 November 2022.

Closing date: 12 December 2022. Applications must be received by midnight of the

closing date.

Expected Interview date: To be confirmed

Expected start date: January 2023

The <u>School of Life Sciences</u> at the University of Sussex is at the forefront of research in the UK. In the recent Research Excellence Framework assessment (REF 2021), 100% of our <u>Impact cases</u> in Biological Sciences and Chemistry were rated as world-leading or internationally excellent. The School has received substantial recent University investment and is embarking on an exciting and extensive, muti-million pound refurbishment and improvement project.

The Sussex Drug Discovery Centre (SDDC) wishes to recruit a talented pharmacology or cell biology research fellow for a commercially funded project co-led by Prof Roger Corder (Visiting Professor, University of Sussex) and Prof John Spencer, director of SDDC. The position is fixed term and offers a leading role within a multi-disciplinary team of drug discovery scientists. The post will involve studies of the mechanism action of polyphenols on endothelial cells using in-house isolated, purified and modified molecules of interest, target identification studies, preparation of samples for proteomics studies, confocal microscope investigations of labelled analogues and siRNA studies.

This is a unique opportunity to join a research group working in a multidisciplinary environment on an exciting and emerging area of natural product-inspired research. An overview of research within SDDC can be found at http://www.sussex.ac.uk/sddc/index

The University of Sussex values the diversity of its staff and students and we welcome applicants from all backgrounds

The School of Life Sciences is committed to increasing the diversity of its staff and providing an inclusive working environment. The School currently holds an Athena SWAN Silver Award, has developed a Race Equity Action Plan and hosts an active Equality, Diversity and Inclusion working group.



Applications are particularly welcomed from Black and minority ethnic candidates, and women, trans and non-binary candidates, who are under-represented in the School of Life Sciences.

Applications to posts from candidates who wish to work part-time or as job-sharers are welcome. The University offers various schemes to provide real benefits to parents, these can be found at Family Friendly Policies

Potential candidates are strongly encouraged to make informal contact with Prof John Spencer J. Spencer @sussex.ac.uk before applying.

Visa Sponsorship Queries:

This role has been assigned an eligible SOC code and meets the salary requirements for Skilled Worker Sponsorship. Please consult our <u>Skilled Worker Visa information page</u> for further information about Visa Sponsorship.

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

2. The School of Life Sciences

The <u>School of Life Sciences</u> has a mission statement to understand the mechanisms that drive biological and chemical processes; to develop innovative and diverse approaches to enhance human health, technology and the environment. It undertakes research, teaching and engagement across a wide range of the Life Sciences, from Chemistry through a range of biological and medically-related areas to Conservation Biology. The breadth and depth of cutting-edge research and innovative teaching practice requires a diverse community who work across boundaries to deliver excellence. Multidisciplinarity is a key strength at Sussex, and the School of Life Sciences is part of two collaborative cross-School funded Strategic Research Programmes: Sussex Neuroscience (SN) and the Sussex Sustainability Research Programme (SSRP). Sussex Neuroscience brings together broad-ranging neuroscience approaches from the Schools of Life Sciences, Psychology, Engineering and Informatics, as well as the Brighton and Sussex Medical School. SSRP brings together Life Sciences, Global Studies and the University of Sussex Business School to address the United Nations sustainable development goals.

The School of Life Sciences is the largest in the University in terms of research activity, with an annual research income of around £13 million. The School has a teaching and research faculty of around 90, over 140 research staff, and an administrative team of around 20. The School is structured into five Departments led by a Head of Department. These are Biochemistry & Biomedicine, Genome Damage and Stability Centre, Neuroscience, Evolution, Behaviour & Environment and Chemistry, working closely with the Sussex Drug Discovery Centre. The Head of School Professor Sarah Guthrie leads the Head of School Executive, which includes two Deputy Heads of School (one focussed on research and enterprise, the other on education), the School Administrator and the Director of Technical Services. Wider School organisation and administration is overseen by the School Management Committee, which includes the Heads of Departments and others in Directorship roles.



Our School aims to develop scientists that are able to connect with global issues and develop innovative solutions to the challenges that face the planet. We therefore work to ensure that our research positively impacts our local community, the economy and society as a whole. We have and continue to develop relationships with business, policy and community partners ranging from local SMEs to large scale multinational organisations. Academics, researchers, and students at all levels are encouraged to engage with non-academic partners through activities such as technology and skills sharing, licencing IP, contract research or consultancy, working closely with colleagues in the Sussex Innovations and Business Partnership team.

In the recent Research Excellence Framework (REF2021), 90.6 % of our Biological Sciences outputs and 84.8% of our Chemistry outputs were rated as world-leading or internationally excellent. In both areas, 100% of our Impact cases were rated as world-leading or internationally excellent. We are proud that our research has diverse impact that includes enabling and enhancing diagnosis of cancer and rare genetic diseases, using novel chemical methods to produce new medicines, saving endangered species, influencing policy and practice in pesticide use to protect bees and establishing conservation, economic and health initiatives in Papua New Guinea and Ecuador.

Our vibrant post-graduate research community is made up of around 130 PhD students who are key to our success, undertaking cutting-edge research across all our areas of interest in the Life Sciences. We are part of a number of cross-School and multi-partner PhD programmes: the Sussex Neuroscience PhD programme, 2 Leverhulme-funded Doctoral Scholarship programmes (Sensation and Perception to Awareness and Biomimetic Embodied AI), the UKRI funded UK Food Systems Centre for Doctoral Training and the BBSRC South Coast Biosciences (SoCoBio) Doctoral Training Partnership.

The School's teaching is firmly based on our research excellence and offers students an intellectually stimulating and supportive experience, with opportunities for personal research experience and use of modern technology to enhance learning. The School has a population of around 1500 undergraduates studying a <u>range of subjects</u> across the School's expertise. For each degree we offer a 3-year BSc and a 4-year integrated Masters (MSci or MChem). We also offer a Life Sciences Foundation Year, which is ideally suited for students whose A-level (or equivalent) qualifications don't meet the requirements for direct entry on to our BSc/MSci degrees. We have a population of around 85 postgraduate taught students undertaking <u>MSc or MRes courses</u> across our subject expertise.

The School is committed to the <u>University's core values</u> of kindness, integrity, inclusion, collaboration and courage. The Equality, Diversity and Inclusion Committee (with representation on the School Management Committee) promotes and encourages our values across the School, <u>championing initiatives</u> that meet the <u>University's goals</u> of being Equal, Diverse, Accessible and Flexible. We currently hold an Athena SWAN Silver Award and have a BAME Awarding Gap Committee who closely liaise with the University's Race Equality Charter committee. The School also hosts a wellbeing room and a multi-faith prayer room within its estate and the University supports the <u>Trans Rights are Human Rights</u> UK initiative. We believe that equality, diversity and inclusion is everyone's business and aim to provide a friendly and supportive environment for all who work, study and visit the School of Life Sciences.

3. Job Description and Person Specification

Job Title: Research Fellow in Pharmacology



Grade: Research Fellow I, Grade 7

School: School of Life Sciences (Sussex Drug Discovery Centre)

Location: Chichester II

Responsible to: Prof John Spencer, Prof Roger Corder

Direct reports: n/a

Key contacts: Members of research group, members of faculty within the

School and University.

Role description: Research Fellow I is an early career-grade research position.

Post-holders will be expected to contribute to the work of the research team, and also to develop their research skills with

support from more experienced members of staff.

PRINCIPAL ACCOUNTABILITIES

• To engage in individual and/or collaborative research activity resulting in high-quality publications; and to develop research funding and knowledge exchange income individually or in collaboration with others, as appropriate, depending on the size and scope of the bid.

• To contribute to School teaching activities.

KEY RESPONSIBILITIES

Research, Scholarship & Enterprise

- **1.** Develop research objectives and proposals for own or joint research, at acceptable levels, with assistance if required.
- 2. Conduct research projects individually and in collaboration with others.
- 3. Analyse and interpret research findings and draw conclusions on the outcomes.
- 4. 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.
- 5. Contribute to the preparation of proposals and applications to external bodies, for example for funding purposes.
- 6. Individually or with colleagues, explore opportunities for enterprise activity, knowledge exchange income and/or consultancy, where permissible.
- 7. Build internal contacts and participate in internal networks and relevant external networks in order to form relationships and collaborations.
- 8. Continually update knowledge and understanding in field or specialism, and engage in continuous professional development.

Teaching & Student Support

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

Contribution to School & University



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

INDICATIVE PERFORMANCE CRITERIA

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

Role-specific duties

- 1. Cell culture experience, cell-based functional assays (e.g. Ca²⁺ measurements) and associated laboratory expertise.
- 2. Experience in a number of cell and molecular biology techniques (for example; qPCR, siRNA, CRISPR, immunofluorescence, FACS, western blotting).
- 3. Experience in use of cell screening technologies (ScanR microscopy, plate based assays) for compound screening.
- 4. Experience in cell viability, target identification and proteomics assays.
- 5. To become proficient in the use and maintenance of the biological database, entering data, validating data and trouble-shooting issues.
- 6. To establish effective interdisciplinary collaborations with scientists both at the University of Sussex and within external organisations.

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- 12. Evidence of successful engagement in teaching or supervision.

PERSON SPECIFICATION

ESSENTIAL CRITERIA

- 1. Normally educated to doctoral level, or other equivalent qualification, or appropriate level of experience, as appropriate to the discipline (see role-specific criteria below).
- 2. Evidence of engagement in high-quality research activity.



- 3. Excellent presentation skills, with the ability to communicate effectively, both orally and in writing, with students, colleagues and external audiences.
- 4. Ability to work individually on own initiative and without close supervision, and as part of a team.
- 5. Ability to exercise a degree of innovation and creative problem-solving.
- 6. Excellent organisational and administrative skills.
- 7. Ability to prioritise and meet deadlines.
- 8. Excellent IT skills.

ESSENTIAL ROLE-SPECIFIC CRITERIA

- 9. High level of technical laboratory expertise.
- 10. Experience in cell culture.
- 11. Experience in a number of cell and molecular biology techniques (for example; qPCR, siRNA, CRISPR, immunofluorescence, FACS, western blotting).
- 12. Experience in cell-based assays, cell viability, knockdown assays.
- 13. Ability to develop new techniques and introduce new technology.
- 14. Good communication skills written and verbal.
- 15. Ability to work with others across scientific disciplines.
- 16. Ability to work both independently and within a team.
- 17. Ability to design innovative solutions to problems.
- 18. An understanding of the principles of cell-based compound screening.
- 19. PhD in biochemistry/pharmacology/equivalent biological discipline or masters degree followed by equivalent research experience.
- 20. High degree of self-motivation and enthusiasm
- 21. Attention to detail and rigour in data generation and evaluation

DESIRABLE CRITERIA

- 1. Experience in target identification and labelling studies.
- 2. Familiarity with data analyses using Graphpad Prism.
- 3. Experience of working in a drug discovery laboratory (industry, academia, biotech).
- 4. Experience in use of high throughput cell screening technologies (ScanR microscopy, plate based assays) for compound screening.



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 5. Experience of fluorescence microscopy and confocal imaging.
- 6. Experience in cell culture assay development, and application of ELISA methods.
- 7. Emerging track record of high-quality publications in reputable journals and other appropriate media of similar standing.
- 8. Experience of generating research or knowledge exchange income.
- 9. Supervision of junior research staff.