Post title: Research Fellow  
School/department: Brighton and Sussex Medical School  
Hours: Full time  
Contract: fixed term for 36 months  
Reference: 4006  
Salary: starting at £33,797 to £40,322 per annum  
Closing date: 12 August 2020. Applications must be received by midnight of the closing date.  
Expected start date: TBC

Applications are invited for a full-time Research Fellow to work in the laboratory of Dr Lisa Mullen at the Brighton and Sussex Medical School on an MRC-funded project to develop a new therapeutic strategy for treating Osteoarthritis using our recently described engineered TIMP-3 to inhibit aggrecanases. The project will involve *in vitro* and *in vivo* characterisation of recombinant TIMP-3 to determine how this protein can be engineered for the greatest therapeutic benefit with a focus on protein biochemistry, cell- and tissue-based assays and analyses of tissue by immunohistochemistry and histology.

Applicants for this position should possess an Honours B.Sc (or equivalent) in Biochemistry or a related subject and a Ph.D (or equivalent) in Biochemistry, Recombinant Protein Engineering, Joint Disease or a related subject. Experience of murine models of joint disease and a good working knowledge of a range of methods for analysing *ex vivo* tissue is essential. Previous experience of relevant laboratory work, Home Office Modules 1-4 and good communication skills are essential, as is the ability to work both independently and as part of a team.

The post is based at the Brighton and Sussex Medical School (BSMS) on the University of Sussex campus. At BSMS, we provide a stimulating and supportive environment with our expertise covering a wide range of experimental systems related to Biomedical Research. Further information about our research can be obtained from our website at http://www.bsms.ac.uk/research/

For informal enquiries and for more information, please contact Dr Lisa Mullen (l.mullen@bsms.ac.uk).

For full details and how to apply see:  

www.sussex.ac.uk/jobs  
www.brighton.ac.uk/jobs  
www.bsms.ac.uk

*The Universities are 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, mathematics, medicine and engineering at Sussex and Brighton.*
Job Title: Research Fellow in Recombinant Protein Therapies
Grade: Research Fellow I, Grade 7
School: Brighton and Sussex Medical School
Location: Medical Research Building
Responsible to: Principal Investigator through to Head of School
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

1. 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.

2. To contribute to School teaching activities.

KEY RESPONSIBILITIES

1. Research, Scholarship & Enterprise

1.1 Develop research objectives and proposals for own or joint research, at acceptable levels, with assistance if required.

1.2 Conduct research projects individually and in collaboration with others.

1.3 Analyse and interpret research findings and draw conclusions on the outcomes.

1.4 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.

1.5 Contribute to the preparation of proposals and applications to external bodies, for example for funding purposes.
1.6 Individually or with colleagues, explore opportunities for enterprise activity, knowledge exchange income and/or consultancy, where permissible.

1.7 Build internal contacts and participate in internal networks and relevant external networks in order to form relationships and collaborations.

1.8 Continually update knowledge and understanding in field or specialism, and engage in continuous professional development.

2. Teaching & Student Support

2.1 Undertake teaching duties, if required.

2.2 Assist in the assessment of student knowledge and supervision of student projects if required.

2.3 Assist in the development of student research skills, for example as part of a postgraduate supervision team.

3. Contribution to School & University

3.1 Attend and contribute to relevant School and project meetings.

3.2 Undertake additional duties, as required by the Principal Investigator and/or Head of School.

4.6 Role-specific duties

4.1 Execute experiments associated with the research project.

4.2 Read literature and design experiments appropriate to the project.

4.3 Contribute to the intellectual development of the project.

4.4 Perform research experiments as specified.

4.5 Mentor junior lab members.

4.6 Contribute to laboratory meetings.

4.7 Generate high quality data suitable for publication.

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.
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.

4. ESSENTIAL ROLE-SPECIFIC CRITERIA

1. Proven research skills in murine models of disease.
2. Home office personal licence (modules 1-4).
3. Research experience in analysis of ex vivo tissue samples via immunohistochemistry.
4. Research experience in confocal microscopy.
5. Willingness to travel nationally for training and research collaboration.
6. Evidence of successful engagement in mentorship and teamwork within a laboratory.
7. Evidence of research productivity.
8. Able to work as part of a team, working co-operatively with senior and junior colleagues and sharing laboratory resources.
9. Able to adapt to a changing environment, learn new skills and use new technologies.

4.9 DESIRABLE CRITERIA

1. Emerging track record of high-quality publications in reputable journals and other appropriate media of similar standing.
2. Experience of generating research or knowledge exchange income.
4. Research experience in ELISA, Western blot and cell-based assays.
5. Interest in, and working knowledge of, pathogenesis of osteoarthritis.
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.