

**Faculty of Biological Sciences
School of Biomedical Sciences**

**Summer Research Placement
8 weeks, between 1st July and 15th September 2022**

Job Summary

Stipend is £200 per week.

Informal enquiries may be made to Dr James Warren (J.P.Warren@leeds.ac.uk)

To apply, please send your CV and a covering letter (200-300 words maximum)

Closing Date: Noon on 28th January 2022

Interviews: Week commencing 14th February 2022

Job Description

The job involves planning and investigating the effect of changing the composition of self-assembling peptides (SAPs) and glycosaminoglycans (GAGs) which when combined form a self-assembling hydrogel.

The investigation would require assessing and measuring the change in the physical, chemical and material properties of each hydrogel which would in turn influence which candidate system could be taken forward for further investigation into a potentially clinically relevant tissue model linked to early stages of osteoarthritis in the knee.

Reports to: Dr James Warren

Main Duties and Responsibilities

- Making hydrogels from different combinations and concentrations of SAP:GAGs
- Producing different hydrogel compositions and measuring various parameters, such as pH, temperature, over a range of timescales (minutes to days)
- Carry out physical and chemical analysis of the hydrogel systems to assess the effect of changing the composition has
- Carry out basic material characterisation of each hydrogel
- Accurately report experimental data in appropriate format (lab book, data management)
- Present any findings at group meetings during placement period to other members of the lab (other undergraduate students, postgraduates students, PhD students, PDRAs and academics)
- Aid in the contribution and writing of any resulting publications

Person Specification

Essential

- Basic understanding of peptide and sugar chemistry
- Experience of laboratory work

- Good time management and planning skills
- Ability to work accurately and carefully
- Excellent communication skills, both written and verbal, and the ability to communicate your work to other researchers

Desirable

- Understanding and basic experience of handling biological tissue
- Experience of preparing physiological buffers

Additional Information

Details of the terms and conditions of employment for all staff at the university, including information on pensions and benefits, are available on the Human Resources web pages accessible via the links on the right hand side, or at <http://www.leeds.ac.uk/hr/index.htm>

Criminal Record Disclosures

A Criminal Records Disclosure is not required for this position. However, applicants who have unspent convictions must indicate this in the 'other personal details' section of the application.

Disabled Applicants

The post is located in the Faculty of Biological Sciences. Disabled applicants wishing to review access to the building are invited to contact the department direct. Additional information may be sought from the Recruitment Officer, email disclosure@leeds.ac.uk or tel + 44 (0)113 343 1723.

Disabled applicants are not obliged to inform employers of their disability but will still be covered by the Disability Discrimination Act once their disability becomes known.

Further information for applicants with disabilities, impairments or health conditions is available in the applicant guidance.

University Values

All staff are expected to operate in line with the university's values and standards, which work as an integral part of our strategy and set out the principles of how we work together. More information about the university's strategy and values is available at <http://www.leeds.ac.uk/comms/strategy/>