

## RESEARCH ASSOCIATE

### Neuromuscular Tissue Engineering

Job Ref: REQ17459

**As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.**

Over a number of years, the Research Group led by Professor Mark P. Lewis has developed a tissue engineered model of skeletal muscle which shows some of the structural, physiological and biochemical features of native skeletal muscle. The group is now further developing these "lab-grown muscles" for studies in exercise physiology, motor neuron disease pathogenesis, drug testing, and sport and exercise medicine/orthopaedic research. This specific role is concerned with the determination of innervated tissue (system) level viability, using a highly strained neuromuscular junction exemplar.

#### Job Description

**Job Family & Grade:** Specialist & Supporting Academic (Research) Grade 6

**Job Purpose:** To contribute to a research group working on advanced tissue engineering of skeletal muscle.

#### Job Duties:

- Undertake, support and evaluation activities within the research group.
- Perform relevant experiments and collect data to satisfy the project proposal/description.
- Input data, using appropriate technology and software.
- Perform data analysis.
- Attend meetings of the relevant research groups and undertake his/her own personal and professional development.
- Develop and disseminate the research including preparation of manuscripts for submission to scientific journals and learned bodies.
- Oversee laboratory work of postgraduate students in biochemistry and molecular biology laboratories, where appropriate.
- Continue the development of the range of analytical techniques undertaken in the laboratory.
- Contribute to a small amount of teaching which is relevant to the career progression of the individual.

#### Points to Note:

The purpose of this job description is to indicate the general level of duties and responsibility of the post. The detailed duties may vary from time to time without changing the general character or level of responsibility entailed.

#### Special Conditions:

Required to work outside of standard hours to meet the demands of *in vitro* biology.

All staff have a statutory responsibility to take reasonable care of themselves, others and the environment and to prevent harm by their acts or omissions. All staff are therefore required to adhere to the University's Health, Safety and Environmental Policy & Procedures.

All staff should hold a duty and commitment to observing the University's Equality & Diversity policy and procedures at all times. Duties must be carried out in accordance with relevant Equality & Diversity legislation and University policies/procedures.

Successful completion of probation will be dependent on attendance of the University's mandatory courses which include Respecting Equality & Diversity, Information & Security Awareness and, where appropriate, Recruitment & Selection training.

**Organisational Responsibility:**

Reports to Professor Mark Lewis

## Person Specification

Your application will be reviewed against the essential and desirable criteria listed below. Applicants are strongly advised to explicitly state and evidence how they meet each of the essential (and desirable) criteria in their application. Stages of assessment are as follows:

- 1 – Application
- 2 – Test/Assessment Centre/Presentation
- 3 – Interview

### ESSENTIAL CRITERIA

Area	Criteria	Stage
<b>Experience</b>	Experience of the two major 3D skeletal muscle tissue culture methods	1,3
	Experience with cell culture and cellular and molecular analysis of neuronal cells	1,3
	Ability to develop analytical assays at the molecular and cellular level	1
	Prepared manuscripts for publication in peer reviewed journals	1
<b>Skills and abilities</b>	Ability to manage data sets with standard statistical procedures	1
	Work with their own initiative to prioritise work and meet deadlines	1
	Possess complex high level analytical and problem solving skills	1
	Project management skills	1,3
	Concern for thoroughness and accuracy	1,3
	Ability to write in a logical coherent manner	1
	Cell Culture	1
	Molecular Biology	1
	Microscopy	1
	Ability to form good working relationships both internally and externally to the University	1,3
	Good communication skills	1,3
<b>Training</b>	A willingness to undertake further training as appropriate and to adopt new procedures and techniques as and when required	1,3
<b>Qualifications</b>	PhD or equivalent experience (or soon to be submitted PhD) in neuromuscular tissue engineering	1
<b>Other</b>	Commitment to observing the University's Equal opportunities policy at all times, with responsibility for ensuring the compliance of others	3

## Conditions of Service

This position is offered on a full-time, fixed-term contract to 31<sup>st</sup> December 2017 (starting July 2017). The salary will be within the Specialist & Supporting Academic (Research) job family Grade 6 (£29,301-£31,076 per annum); starting salary to be confirmed on offer of appointment.

The appointment will be subject to the University's normal Terms and Conditions of Employment for Academic and Related staff/Operational and Administrative staff, details of which can be found [here](#).

The University is committed to enabling staff to maintain a healthy work-home balance and has a number of family-friendly policies which are available at <http://www.lboro.ac.uk/services/hr/a-z/family-leave-policy-and-procedure---page.html>.

We also offer an on-campus nursery with subsidised places, subsidised places at local holiday clubs and a childcare voucher scheme (further details are available at: <http://www.lboro.ac.uk/services/hr/a-z/childcare-information---page.html>)

In addition, the University is supportive, wherever possible, of flexible working arrangements. We also strive to create a culture that supports equality and celebrates diversity throughout the campus. The University holds a Bronze Athena SWAN award which recognises the importance of support for women at all stages of their academic career. For further information on Athena SWAN see <http://www.lboro.ac.uk/services/hr/athena-swan/>

## Informal Enquiries

Informal enquiries should be made to Professor Mark Lewis, Dean of School and Professor of Musculoskeletal Biology by email to [M.P.Lewis@lboro.ac.uk](mailto:M.P.Lewis@lboro.ac.uk)

## Application

The closing date for receipt of applications is **Thursday 1<sup>st</sup> June 2017**.