

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

**Summer Research Placement
8 weeks, between [20/6/2019-15/08/2019]**

Job Summary

Stipend is £200 per week.

Informal enquiries may be made to:

Dr Lauryn New
L.E.New@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: 14/02/2022

Job Description

The dorsal vagal complex (DVC) in the brain senses insulin levels to lower hepatic glucose production (HGP) and to decrease food intake. High-fat diet (HFD) feeding and obesity causes loss of insulin sensitivity in the DVC and affects its ability to regulate HPG and food intake. This project aims to determine which specific neuronal populations of the DVC are responsible for responding to insulin and regulating HPG and food intake as well as understanding how glial-neuronal crosstalk within the DVC may be involved in these processes

Reports to:

Dr Lauryn New

Main Duties and Responsibilities:

The successful candidate will carry out immunofluorescent staining of ex-vivo rat brain tissue to characterise the neuronal and glial cells which may be involved in neuronal regulation of homeostatic feeding behaviours including food intake, energy expenditure, and brain glucose-sensing. You will be responsible for leading the investigation into the cell populations within the rat brainstem which express the anorexigenic endozepines DBI and ODN. You will be responsible for sectioning tissue and carrying out double labelling immunofluorescent protocols for the detection of ODN and DBI alongside several well-known markers of neurones, glia, and specific markers of neurochemistry. You will also quantify and analyse these findings using ImageJ software in order to produce high quality figures. There will also be scope to carry out similar work in tissue from high-fat diet fed insulin resistant

animals and/or in animals which have virally mediated overexpression or knockdown of DBI

Person Specification

Essential

- Strong organisational and time-keeping skills
- Ability to multitask
- Strong initiative and a pro-active approach
- Excellent communication skills

Desirable

- Interest in neuroscience (does not have to be doing neuroscience as a degree but an interest in how the brain controls physiology would make the project more enjoyable)

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/>