



THE **ROGER WILLIAMS**
INSTITUTE OF **LIVER STUDIES**



Post-doctoral Scientist in Liver-Brain Axis:

Understanding the mechanisms underlying the detrimental effects of MASLD on the brain

Job Title	Post-doctoral Scientist
Group	Liver-Brain Axis
Reporting to	Dr Anna Hadjihambi (Principal Investigator)
Duration	3 years
Salary	£44,501 per annum
Annual leave	27 days per annum plus bank holidays
Hours	Full time, 36.5 hours per week
Starting date	June 2025 (flexible)

The Liver-Brain Axis Group, led by Dr Anna Hadjihambi at The Roger Williams Institute of Liver Studies, is seeking for a highly motivated Post-Doctoral scientist with a strong background in Neuroscience and/or Physiology. This position offers an exciting opportunity to work on a translational interdisciplinary research programme funded by the UKRI Future Leaders Fellowship.

The aim of this research is to advance our understanding of the abnormal physiological processes associated with metabolic dysfunction associated steatotic liver disease (MASLD), focusing on the brain and cerebrovascular system. This project will investigate the hypothesis that reduced metabolic supply is responsible for the cognitive impairment and decreased quality of life reported in patients with MASLD and develops as a result of disease-induced autonomic dysfunction.

We aim to study whether MASLD induced changes in the brain's blood vessels can be reversed by resolving liver disease, or if the cerebrovascular damage is irreversible, thus making the brain more fragile during ageing. This role provides a unique opportunity to engage in basic and translational science and combine state-of-the-art experimental animal *in vivo* methods and molecular biology techniques, to address clinically compelling questions.

The Roger Williams Institute of Liver Studies is a unique clinical academic partnership between the Foundation for Liver Research, King's College London and King's College Hospital that encompasses a multi-disciplinary team focussed on liver research and the improvement of outcomes for patients with liver diseases. This role would be employed by the Foundation for Liver Research, registered charity no. 1134579.

Role and remit

The successful candidate will be working closely with faculty and with interdisciplinary national and international collaborators at the crossroads of physiology, hepatology, neuroscience, and data science. The focus of this role will be on characterising alterations in the autonomic nervous system

induced by MASLD. Areas of interest for this position include, but are not limited to, *in vivo* electrophysiology of different branches of the vagus nerve, confocal imaging, biotelemetry implantations and associated data analysis and interpretation. All *in vivo* experiments will be performed at our collaborator's laboratory in University College London and will require equipment sharing.

Key responsibilities

- Plan and execute experiments both independently and in collaboration with other team members, the PI, and collaborators.
- Data collection and interpretation to generate new ideas to drive the project forward
- Liaise with collaborators on relevant work packages
- Write and submit conference abstracts and manuscripts to communicate and present the research findings.
- Contribute to mentorship and supervision of junior research team members (including students)
- Organise and lead public engagement events alongside team and institute members
- Prepare and submit relevant records and study forms in regard to animal research to the Biological Support Unit (BSU)

Experience, skills and knowledge

Essential

- Strong background in Neuroscience and/or Physiology (or relevant disciplines)
- Experience with *in vivo* experiments in mice preferably:
- Micro injections
- Cannulation of vessels (acute and/or chronic)
- *In vivo* electrophysiology
- Experience with managing multiple experiments of moderate scale
- Experience with data analysis, statistics, and presentation
- Evidence of working in a team (e.g. collaborative projects)

Highly desirable

- Personal animal license
- Knowledge of the autonomic nervous system
- Experience with confocal imaging and image analysis
- Knowledge of large dataset analysis, interpretation and visualisation
- Experience with manuscript preparation (depending on career stage)

Advantages of working with us

- 27 days annual leave plus bank holidays
- Generous pension scheme with a minimum employer contribution of 8% which increases based on a higher rate of personal contribution
- Flexible, family-friendly working conditions
- **Our core values:**

- We prioritise the **wellbeing** of our scientists through sustainable working practices and balance.
- **Commitment to career development:** We offer various training and development opportunities, as well as support for future fellowship applications.
- **Welcoming Environment:** We celebrate individuality and maintain a friendly atmosphere where everyone feels welcome. We recognise the benefits of engaging with each other's research, development, and wellbeing.
- **Mentorship:** We value mentorship and camaraderie, promoting a supportive atmosphere where all group members aid each other in achieving our goals.
- **Equality, Diversity, and Inclusion:** Everyone in the team is treated equally. Discrimination of any kind is intolerable. We encourage open discussions about the challenges faced by underrepresented groups and ways to address them.
- **Open Communication:** We value direct and honest communication, encouraging sharing both successes and challenges.
- **Intellectual Rigor and Integrity:** We are committed to conducting rigorous, ethical, and transparent research at the forefront of our field, making our results and data accessible for future benefits.
- **Lab Safety Commitment**

We look forward to receiving your:

- [narrative CV](#)
- 1-page covering letter explaining your background and suitability
- names and contact details of two referees

by email to Jenny Dines - j.dines@researchinliver.org.uk - HR Manager, Foundation for Liver Research. We are happy to accommodate any reasonable adjustments that candidates may need during the recruitment process.

Please name documents you send as follows:

<surname, first name, RS68, {CV} or {covering letter}>

Quote Job Ref: RS68

For further information about the Roger Williams Institute of Liver Studies please visit our [website](#). Questions regarding the position should be directed to Dr Anna Hadjihambi by email a.hadjichambi@researchinliver.org.uk