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

Postdoctoral Scientist in Liver-Brain Axis: Understanding the mechanisms underlying the detrimental effects of MASLD on the brain

Job Title	**Postdoctoral Scientist**
Group	Liver-Brain Axis
Reporting to	Dr Anna Hadjihambi (PI)
Duration	up to 3 years (project ends December 2028)
Starting salary	£45,031 - £49,871, depending on experience
Annual leave	30 days per annum plus bank holidays
Pension	Minimum employer contribution 8% (increased with higher rate of personal contribution)
Hours	Full time, 36.5 hours per week
Start date	December 2025 (flexible)
Closing date	20th October 2025

The Liver-Brain Axis Group, led by Dr Anna Hadjihambi, a neuroscientist, at The Roger Williams Institute of Liver Studies, is seeking a highly motivated and experienced post-doctoral scientist with a strong background in Neuroscience/Neurobiology. Our team brings together neuroscientists and physiologists committed to interdisciplinary research that leverages expertise in the nervous system to better understand and develop novel treatments for brain dysfunction associated with liver disease. This position provides a unique opportunity to contribute to a cutting-edge translational project 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 associated 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 the faculty and with interdisciplinary national and international collaborators at the crossroads of physiology, hepatology, neuroscience and biomedical engineering. We are looking for an experienced researcher to contribute to this project by investigating the brain circuits or signalling pathways along the liver-brain axis, which lead to the reported MASLD associated brain alterations. Areas of interest for this position include, but are not limited to, stereotaxic microinjections of viral vectors, circuit tracing, chemogenetic manipulations, brain imaging combined with head-fixed behavioural protocols, as well as associated data analysis and interpretation.

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 regarding animal research to the Biological Support Unit (BSU)

Experience, skills and knowledge

<u>Essential</u>

- Strong background in Neuroscience/Neurobiology (or relevant disciplines)
- Experience with *in vivo* experiments in mice with priority in:
  - Microinjections
  - Circuit tracing
  - Chemogenetic manipulations
  - Head-fixed awake experiments
  - Use of pharmacology
- 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)

<u>Highly desirable</u>

- Personal animal license
- Experience with:
  - Managing/maintaining chronic disease animal models
  - Immunohistochemistry/immunofluorescence staining
  - Functional and molecular imaging and associated analysis
  - Manuscript preparation and funding applications

Advantages of working with us

- Annual pay reviews with progression through our pay scale, matched to King's College London
- 30 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 with focus on essential and highly desirable skills
- names and contact details of two referees

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

Please name documents you send as follows:

<surname, first name, RS72, *{CV}* **or** *{covering letter}*> **Quote Job Ref: RS72**

For further information about the Foundation for Liver Research and 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.