

**Job title:** MRI Physics (Senior) Research Fellow

## About us

The Department of Imaging Neuroscience is an interdisciplinary Department for neuroimaging excellence and home to the Functional Imaging Laboratory (FIL). We bring together clinicians and scientists who study higher cognitive function using neuroimaging techniques. Our goal is to understand how thought and perception arise from brain activity, and how such processes break down in neurological and psychiatric disease. The Department studies all aspects of higher cognitive function and develops cutting edge data acquisition and analysis methods.

## About the role

This role is within the Physics Group, a highly collaborative team working at the interface of technical development and application in neuroscience studies.

The post is available immediately, and for three years in the first instance. The role will develop advanced laminar fMRI or qMRI protocols for deployment in neuroscience studies. It offers a unique opportunity to be at the forefront of neuroimaging research with access to a 7T and two 3T research-dedicated MRI scanners.

If you need reasonable adjustments or a more accessible format to apply for this job online, or have any queries regarding the application process, please contact the Institute of Neurology HR Team ([ion.hradmin@ucl.ac.uk](mailto:ion.hradmin@ucl.ac.uk)).

Informal enquiries regarding the role can be addressed to Martina Callaghan, [m.callaghan@ucl.ac.uk](mailto:m.callaghan@ucl.ac.uk).

**Application deadline:** not before 23:59, 19 May 2024

For a full job description and to apply for this role please visit UCL's online recruitment portal: <https://www.ucl.ac.uk/work-at-ucl/search-ucl-jobs/details?nPostingId=9433&nPostingTargetId=22372>

## About you

The post requires an enthusiastic, technically able, and highly collaborative individual interested in developing the next generation of tools for naturalistic neuroimaging. You should have a PhD in MRI physics, biomedical engineering or related field, with demonstrable expertise in neuroimaging and expert programming skills (e.g. MatLab, Julia, Python, C/C++).

Applicants must also be specialized in at least two (Research Fellow) or three (Senior Research Fellow) of the following areas:

- fMRI protocol design and data analysis
- pulse sequence programming preferably on the Siemens platform (IDEA/ICE), relevant experience with open platforms such as Pulseseq will be considered;

- image reconstruction including advanced parallel imaging techniques, e.g. compressed sensing, and open platforms such as Gadgetron;
- biophysical modelling, e.g. relaxometry and contrast models, diffusion processes, physiological models or models of neurovascular coupling

This role meets the eligibility requirements for a skilled worker certificate of sponsorship or a global talent visa under UK Visas and Immigration legislation. Therefore, UCL welcomes applications from international applicants who require a visa.

## What we offer

- As well as the exciting opportunities this role presents, we also offer great benefits, some of which are below:
- 41 Days holiday (27 days annual leave 8 bank holiday and 6 closure days)
- Additional 5 days' annual leave purchase scheme
- Defined benefit career average revalued earnings pension scheme (CARE)
- Cycle to work scheme and season ticket loan
- Immigration loan
- Relocation scheme for certain posts
- On-site nursery
- On-site gym
- Enhanced maternity, paternity and adoption pay
- Employee assistance programme: Staff Support Service
- Discounted medical insurance

Visit <https://www.ucl.ac.uk/work-at-ucl/reward-and-benefits> to find out more.

As well as the exciting opportunities this role presents, we also offer some great benefits; visit <https://www.ucl.ac.uk/work-at-ucl/reward-and-benefits> to find out more.

This appointment is subject to UCL Terms and Conditions of Service for Research and Professional Services Staff. Please visit <https://www.ucl.ac.uk/human-resources/conditions-service-research-teaching-and-professional-services-staff> for more information.

## Our commitment to Equality, Diversity and Inclusion

The Institute prides itself on operating in an all-inclusive environment irrespective of personal, physical, or social characteristics. Teamwork is highly valued, individual strengths are recognised and celebrated, and we are committed to advancing the careers of everyone. 12% of Institute staff are actively working on Equality, Diversity and Inclusion (EDI) initiatives; visit our [EDI website](#) for more information about our initiatives and priorities. The Institute also holds an [Athena SWAN Silver award](#), in recognition of our commitment and demonstrable impact in advancing gender equality.

As London's Global University, we know diversity fosters creativity and innovation, and we want our community to represent the diversity of the world's talent. We are

committed to equality of opportunity, to being fair and inclusive, and to being a place where we all belong.

We therefore particularly encourage applications from candidates who are likely to be underrepresented in UCL's workforce; these include people from Black, Asian and ethnic minority backgrounds, disabled people, LGBTQI+ and gender diverse people in all roles, and women in Grade 9 and 10 roles.

As London's Global University, we know diversity fosters creativity and innovation, and we want our community to represent the diversity of the world's talent. 12% of Institute staff are actively working on EDI initiatives; visit <https://www.ucl.ac.uk/ion/equality-diversity-inclusion> for more information about what we're doing. We therefore particularly encourage applications from candidates who are likely to be underrepresented in UCL's workforce; these include people from Black, Asian and ethnic minority backgrounds, disabled people, LGBTQI+ and gender diverse people in all roles, and women in Grade 9 and 10 roles.