

Research Fellow

Division of Medicine

Centre for Advanced Biomedical Imaging

London

Full Time

Reference: 1874819

The appointment will be on UCL Grade 7. The salary range will be £36,028 - £37,008 per annum, inclusive of London Allowance.

Applications are invited for a Research Fellow position in the Centre for Advanced Biomedical Imaging (CABI: www.ucl.ac.uk/cabi), which is a multidisciplinary research centre that brings together experimental imaging technologies from across University College London.

This is an exciting opportunity to join a highly collaborative research project where scientists and clinicians will work together to take a novel cancer therapy from the "bench to bedside". The central concept of the project, known as MINIMA (minimally-invasive image-guided ablation), is to use a MRI system to image, move and heat a small magnetic device inside the body, thereby combining MRI-based diagnosis and hyperthermia-based therapy to improve precision of tumour ablation and create a new class of theranostic cancer treatment.

The role will involve development of an MRI system for imaging and device navigation, and the investigation of a novel MRI-compatible thermoablative device to deliver the cancer treatment schedule, which will include animal studies, imaging, and clinical MRI validation.

The major tasks of the project to enable the development of this brand-new MRI-based theranostic device include: programming the magnetic field gradients generated by an MRI system to navigate the device through the body; demonstrating localised, controllable cell death by heating the device using an external magnetic field; and finally, developing a purpose-built MRI insert that can deliver the required magnetic field strength to enable diagnosis and therapy on a single platform.

The successful candidate will participate in a programme of research as a member of an interdisciplinary team involving Prof Mark Lythgoe, Prof Quentin Pankhurst, Prof Mark Emberton and Prof Shonit Punwani. The post will be in the Division of Medicine, UCL Centre for Advanced Biomedical Imaging and the Centre for Medical Imaging, which is in the heart of London.

The post is available from 01 April 2021 until 31 December 2023 in the first instance.

Applicants should be highly motivated and dedicated individuals with, or close to obtaining, a PhD in MRI physics/biophysics/engineering/programming and/or related fields of chemistry, magnetism or electrical engineering. A strong interest in MRI physics and a track record in its application to experimental in vivo biological systems is essential.

As well as having excellent research and communication skills, you will be a team player keen to work in a collaborative culture with a desire to contribute to the discovery and development of novel therapies.

Please note: appointment at Grade 7 is dependent upon having been awarded a PhD; if this is not the case, initial appointment will be at research assistant Grade 6B (salary £31,542 - £33,257 per annum) with payment at Grade 7 being backdated to the date of final submission of the PhD thesis.

For further details about the vacancy and how to apply online please go to <http://www.ucl.ac.uk/hr/jobs/> and search on Reference Number 1874819.

For informal enquiries, please do not hesitate to get in touch with Prof Lythgoe (m.lythgoe@ucl.ac.uk).

Closing Date: 14/05/2021 - latest time for the submission of applications: 23:59.

Interview Date: TBC

UCL Taking Action for Equality

We will consider applications to work on a part-time, flexible and job share basis wherever possible.

Our department holds an Athena SWAN Silver award, in recognition of our commitment and demonstrable impact in advancing gender equality

Apply link:

https://atsv7.wcn.co.uk/search_engine/jobs.cgi?SID=amNvZGU9MTg3NDgxOSZ2dF90ZW1wbGF0ZT05NjUmb3duZXI9NTA0MTE3OCZvd25lcnR5cGU9ZmFpciZicmFuZF9pZD0wJmpvYl9yZWZfY29kZT0xODc0ODE5JnBvc3RpbmdfY29kZT0yMjQ=