

## Research Fellow in X-ray Imaging: Whole Organ to Cellular Resolution

Working for University College London but based at ESRF

<b>UCL Department/Division</b>	Department of Mechanical Engineering
<b>Location of position</b>	International non-UCL site
<b>Location of the work (non-UCL site)</b>	European Synchrotron Research Facility, Grenoble
<b>Grade</b>	7
<b>Hours</b>	Full Time
<b>Salary</b>	£32,817 - £40,322 per annum

### Duties and Responsibilities

UCL is seeking to appoint a Research Fellow to be based at ESRF Grenoble as part of an international, interdisciplinary project (funded by the Chan Zuckerberg Initiative) to develop a new tomography imaging modality using the world's brightest synchrotron, ESRF-EBS, to scan whole human bodies with 1 $\mu$ m local resolution. You will work with the bioimaging, AI, and biophysical modelling groups at UCL, medics in Germany, and X-ray physicists in France. The goal is to develop and apply this novel technique to help better understand human physiology and how diseases such as Covid-19 progress and cause damage.

Your role will be to help develop this tomography technique (**HiP-CT**) focussing on developing and implementing machine learning correlative image analysis techniques, performing scans and interpreting the results, working with clinicians and biologists worldwide.

Duration of the position is available until 30 June 2023 with a possible 4 year extension after this date.

### Key Requirements

You will have a PhD and extensive knowledge and expertise in a relevant field, ideally with experience in X-ray (or other modality) image analysis using, ideally using deep learning techniques. Your expertise should be at a level appropriate for the conduct of research and publishing new knowledge in leading international research journals. You will need to show a high level of initiative and an ability to work collaboratively and independently. You should have good team-working skills and a strong command of English. Ideally, you would have a proven track record in biological image analysis, handling and performing X-ray (lab or synchrotron) imaging of biological samples, and large data handling.

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 £28, 331 - £30, 942 per annum) with payment at Grade 7 being backdated to the date of final submission of the PhD thesis

### Further Details and How to Apply

The full advertisement and job description are at: <http://bit.ly/HiP-CT-PDRA01>.

If you wish to discuss the post informally, please contact Professor Peter Lee at email address: [peter.lee@ucl.ac.uk](mailto:peter.lee@ucl.ac.uk).

If you have any queries regarding the application process, please contact Mr Varun Lobo-Senior Staffing and Resources Officer via [mecheng.hr@ucl.ac.uk](mailto:mecheng.hr@ucl.ac.uk).

**Closing Date:** 24 Jan 2021

