

**Four Year DPhil/PhD in association with the Rosalind Franklin Institute and the Oxford Interdisciplinary Bioscience Doctoral Training Partnership**

Candidates are invited to apply for a **Rosalind Franklin Institute** studentship in association with the [Oxford Interdisciplinary Bioscience Doctoral Training Partnership \(DTP\)](#) programme. The programme is supported by the **Biotechnology and Biological Sciences Research Council (UKRI-BBSRC)** and aims to equip a new generation of researchers with the skills, insight and knowledge needed to tackle the most important challenges in bioscience research.

Led by the **University of Oxford**, the Interdisciplinary Bioscience DTP brings together the expertise and facilities of nine world-class research institutions. These include: **The Pirbright Institute, Oxford Brookes University, Diamond Light Source, ISIS Neutron and Muon Source, STFC Central Laser Facility, The Research Complex at Harwell, Novo Nordisk Research Centre Oxford and The Rosalind Franklin Institute.**

We provide an innovative, individually-tailored graduate training programme that includes taught courses in interdisciplinary skills. Students also undertake a 12-week professional internship to gain direct experience of the areas of work into which they can apply their skills.

At this time, we are specifically inviting applications for studentships that will be supervised by researchers associated with the Rosalind Franklin Institute. Students will be registered at the University of Oxford or Oxford Brookes University and all supervisory teams will include an academic supervisor at the University of Oxford or Oxford Brookes University. Students will benefit from the training provided by the DTP and have the opportunity to undertake 12 week exploratory projects with two different supervisory teams before deciding on their substantive DPhil/PhD project.

**Potential research areas include:**

- (1) Chemistry in the cell, zero size labels of biomolecules for imaging. This is based on combining protein engineering and chemical synthesis. Ben Davis, Shabaz Mohammed
- (2) Structural biology in the cell. Cryo electron tomography to study large multi protein complexes and assemblies inside the cell. Jim Naismith, Maud Dumoux, Michael Grange
- (3) Mass spectrometry of the cell. Pushing mass spectrometric imaging to sub cellular level. Josie Bunch, Zoltan Takats, Bela Pais
- (4) AI and machine learning for imaging. Mark Basham
- (5) Protein production UK. Engineering proteins and protein tools such as nanobodies for rapid structure determination. Ray Owens, Lucile Moynie
- (6) Correlative imaging. Moving electron microscopy into the time domain. Angus Kirkland, Judy Kim

We welcome applications from students from a life or physical science background who hold, or are on target to achieve a first-class or strong upper second-class undergraduate degree (or equivalent international qualifications), as a minimum, in a relevant academic subject. Successful applicants will be awarded funding that will include a stipend at the UKRI standard stipend level and home fees.

**Full details of the programmes and information on how to apply can be found at <https://www.biodtp.ox.ac.uk> or by e-mailing [dtpenquiries@biodtp.ox.ac.uk](mailto:dtpenquiries@biodtp.ox.ac.uk)**