

EPSRC and MRC Centre for Doctoral Training in Optical Medical Imaging

Training the next generation of scientific entrepreneurs in healthcare technologies



We are looking to recruit high-calibre postgraduate students from a range of physical-science, engineering, life-science and medical backgrounds to join a globally unique, dynamic, multi-disciplinary, world-class team to receive training in Optical Medical Imaging within ***The Engineering and Physical Sciences Research Council (EPSRC) and Medical Research Council (MRC) Centre for Doctoral in Optical Medical Imaging.***

The EPSRC and MRC CDT in Optical Medical Imaging has been established to ensure that the UK has a strong and sustained pipeline of future scientific leaders and innovators in optical medical imaging encompassing the molecular, cellular, preclinical and clinical applications of physical and biomedical science in this priority area.

Our CDT offers a 4 year program combining excellent training and PhD supervision in world-leading scientific environments. PhD students will benefit from summer and winter schools, industrial placements, clinical mentors and a bespoke, MSc in Healthcare Innovation and Entrepreneurship delivered in partnership with the UoE Business School, the Hunter Centre (UoS) and our industrial partners.

The EPSRC and MRC CDT in Optical Medical Imaging will provide the successful applicants with a dynamic and exciting environment that is at the forefront and interface of physical sciences and clinical application.

We are now offering PhD Studentships in a range of interdisciplinary topics spanning the physical and biomedical sciences, some examples include:

- Optical Imaging Probes for high resolution multiphoton microscopy of Inflammatory processes in Breast Cancer Metastasis.
- Optical imaging of vulnerable atherosclerotic plaques using Surface Enhanced Raman Spectroscopy.

- Coherent Anti-Stokes Raman imaging for investigation of metabolic signatures in Cancer Growth and Treatment.
- Super resolution imaging of stromal proteins in the stem cell niche.
- Optical Imaging of Lung regeneration after instillation of smart optically encoded polymer hydrogels.
- Fluorescence lifetime imaging of bacterial membranes to determine response to novel antibacterials *in vivo*.
- Optical-MRI probes for brain surgical margin evaluation targeting MMP9 and inflammatory monocyte.
- Surface Enhanced Spatially Offset Raman Spectroscopy to detect Bacterial Infection in Prosthetic Joints.
- Cancer Angiogenesis Imaging with fibre-based confocal laser endomicroscopy.

Application Process

To apply please submit a cover letter clearly stating your eligibility and why you are interested in applying for a studentship in ***The EPSRC and MRC CDT in Optical Medical Imaging***, a full up-to-date C.V. (including vacation address) and names and addresses of two academic referees to imaging.cdt@ed.ac.uk by **28th April 2014**.

Informal enquiries can be made to Dr Colin Campbell (colin.campbell@ed.ac.uk) or Dr Karen Faulds (karen.faulds@strath.ac.uk).

Eligibility:

To be eligible for these studentships, students must have obtained or expect to obtain the equivalent of a 2:1 degree in a relevant physical-science, engineering, life-science or medical subject.

A limited number of studentships are available for EU nationals, otherwise students must have settled status in the UK, meaning they have no restrictions on how long they can stay **and** have been 'ordinarily resident' in the UK for 3 years prior to the start of the studentship.

For more information regarding the funding bodies please click the following links: ([EPSRC](#)) ([MRC](#)). If you would like to learn more about the collaborating universities please click the links: Universities of Edinburgh ([UoE](#)) and Strathclyde ([UoS](#)).