

EC Marie Curie Fellowships

The European training network in digital medical imaging for radiotherapy ENTERVISION is an EC funded Marie Curie Initial Training Network in digital medical imaging for radiotherapy which uses ions rather than photons for the treatment of cancer in the 21st century. ENTERVISION brings together ten academic institutes and research centres of excellence, and a leading European company in particle therapy and its applications. The network will train 12 Early Stage Researchers (ESRs) and 4 Experienced Researchers during a 48 month period.

We are looking to recruit two ESRs with both posts starting on 3 January 2012, for a period of 36 months. The two ESRs will be employed in the UK and will be based at the Department of Oncology at the University of Cambridge but will also be co-supervised by researchers at the Surrey Ion Beam Centre, University of Surrey.

Post 1 will focus on digital image processing techniques for application in a 'virtual microscope' application, based on the microscopy end station facility at the Surrey Ion Beam centre. Work will involve the development and integration of image processing routines to enable real-time identification of single cells using conventional white light and phase contrast microscopy. The work will also involve software development and parallel processing techniques in order to achieve capability of real-time image processing.

Post 2 will focus on the use of fast dose recalculation algorithms for radiotherapy treatment planning using parallel processing techniques, specifically with GPGPU (General Purpose Graphics Processing Units), and the development of an interactive virtual-reality environment simulation of a patient in a hadron therapy treatment unit.

The researchers will benefit from close links with image processing groups in the Department of Medical Physics, Engineering, and at the Microsoft Research Labs, Cambridge. During the PhD there will be plenty of opportunities to attend workshops and undertake research at the partner institutions.

The fellowship will provide a living allowance, mobility & travel allowance (depending upon the successful candidate's current residence) and cover University tuition fees (although not College fees).

Applicants should have a good first degree and or Masters degree in the physical sciences, mathematics, medicine, computer science or engineering. Due to the funding requirements applicants will also need to verify that they fulfil the eligibility conditions [FP7 Marie Curie ITN Eligibility conditions](#). If nominated for one of the studentships, the applicant will be expected to formally apply for admission as a graduate student with the Board of Graduate Studies and satisfy any conditions of admission that they set forth.

Additional information may be found at:

http://www.oncology.cam.ac.uk/educ_train/index_studies.html

Informal enquiries with regard to these Fellowships should be directed to Dr Raj Jena via email rjena@nhs.net and telephone 01223 586705.

Completed applications, which should consist of

- CHRIS/6 - downloadable from <http://www.admin.cam.ac.uk/offices/hr/forms/chris6/>)
- Curriculum vitae
- A short letter of motivation
- Information on how you fulfil the eligibility criteria
- Names & contact details of 3 referees from whom references can be sought

should be sent to Mrs Sarah Pearson via post to Hutchison/MRC Research Centre, Box 197, Hills Road, Cambridge, CB2 0XZ or to her via email sal63@cam.ac.uk.