Senior Microscopist: Head of Microscopy Group

University of Southampton; Cancer Sciences
Salary: **£38,460 to £48,677 Per annum**
Full Time Permanent
Application instructions: https://jobs.soton.ac.uk/Vacancy.aspx?id=22856&forced=2
Closing Date: **Sunday 22 March 2020**

Applications are invited for the above position in the laboratory of Professors Ober and Ward who are relocating their research group from the USA. Their interdisciplinary research program is dedicated to the development of advanced microscopy approaches, in particular single molecule methods and subcellular trafficking studies. These approaches are being applied to the development of novel antibody-based therapeutics that, to date, have led to several new therapeutics that are currently in advanced clinical trials. Their research is supported by major grants from the Wellcome Trust, Cancer Research UK and collaborating biopharma companies.

Over recent decades the research group has pioneered several new microscopy approaches, in particular single-molecule technologies, such as multi-focal plane microscopy for the study of three dimensional subcellular dynamics of proteins. The new microscopy laboratory will consist of several microscope systems in custom-built space. The envisaged techniques include single molecule microscopy, primarily three-dimensional approaches, using multi-focal plane microscopy.

A key responsibility is the continued development of advanced microscopy techniques, including multifocal plane microscopy, remote focusing approaches for single molecule microscopy etc. You will also develop and use multiphoton and confocal techniques, including fluorescence lifetime approaches, in addition to more routine methods such as multi-color live-cell microscopy in combination with TIRF illumination. The microscopes will include commercial systems and systems built in-house. You will help to build a cutting edge microscopy laboratory containing self-built and commercial systems. The microscopy group will include several post-doctoral fellows and Ph.D. students, who will also be engaged in methods development and advanced experimentation.

A further responsibility will be the oversight and maintenance of the microscopy equipment in the group. You will be an efficient/capable manager able to carry out your own research projects and

oversee laboratory members in a highly interdisciplinary setting. The position requires significant, independent interactions with collaborators within and outside the university.

You will have a major impact on the scientific mission of the laboratory by carrying out and supervising advanced microscopy research projects related to the use of existing methods and instrumentation development. You will be involved in applying state-of-the-art technologies to cutting edge biological projects, including the setup and maintenance of the microscopes for use by the research group/collaborators.

The post is located in the Centre for Cancer Immunology at the Southampton General Hospital, a newly constructed research building that is the result of a significant fund-raising campaign. The Centre builds on a 40 year history of pioneering immunology and cancer research at Southampton. It is the first dedicated cancer immunology centre in the UK that brings the complete research pipeline under one roof: from pioneering discovery science to applied research and preclinical modelling and crucially onto first-in-human clinical trials and beyond. It is home to world-class research facilities, state-of-the-art scientific laboratories and a Clinical Trials Unit. This position is one of at least 20 new research and other staff who will work with existing investigators to build on the exciting progress already made in the field of cancer immunology.

While direct experience of the role described in the job description is not a prerequisite, scientific experience in microscopy and optics at Ph.D. level is required. Expertise in single molecule microscopy and cellular microscopy is desirable. You will possess relevant academic qualifications/work experience, good IT skills, ability to plan/organise your workload, use your initiative, work well under pressure and communicate effectively/professionally with a range of stakeholders within and outside the organisation. This will be an ideal position for example, for an applicant, with extensive experience in optics at the post-doctoral level, wishing to continue their excitement for research in combination with the managerial components of this position.

Informal enquiries should be directed to Professor Raimund J. Ober, r.ober@soton.ac.uk.