



Position Title:	Lecturer/Senior Lecturer (continuing)
Position Classification:	Level B/C
Position Number:	303565
Faculty/Office:	Central DVC-R
School/Division:	Centre for Microscopy, Characterisation and Analysis
Centre/Section:	
Supervisor Title:	Director
Supervisor Position Number:	307221

Your work area

The Centre for Microscopy, Characterisation and Analysis (CMCA) comprises ~35 academic, research, technical and administrative staff supporting a diverse range of instrument platforms including secondary ion mass spectrometry (SIMS), electron microscopy and microanalysis, optical, confocal, and multiphoton microscopy, flow cytometry, NMR, X-ray diffraction, biological and molecular mass spectrometry, small animal imaging, scanning probe microscopy, and micro-CT. The CMCA's mission is to enable research excellence by providing access to world-class scientific infrastructure and expertise in characterisation to researchers and industry.

The Centre's optical microscopy facilities comprise a wide range of instruments from basic to advanced, including super-resolution optical microscopy, epifluorescence, digital slide scanning, confocal microscopy, multiphoton microscopy, live-cell imaging, total internal reflection fluorescence, laser microdissection and laser tweezers, and microinjector and micromanipulator. These instruments are largely located in the Harry Perkins building on the Queen Elizabeth II hospital campus, with other instruments located on the main UWA campus. CMCA hosts a Nikon Centre of Excellence in Optical Microscopy, one of only ten in the world, and the only one in Australia. The centrepiece of the Nikon Centre is three recently installed platforms providing: N-SIM, N-STORM, and FCS/FLIM.

For further information, please contact Professor Matt Kilburn matt.kilburn@uwa.edu.au

Reporting Structure

Reports to: CMCA Director

Direct Reports: Research Officer

Teams: Optical Microscopy Technique Group, Biomedical Application Group, Biological Sciences Application Group

Role statement

As an expert in optical microscopy, the appointee will provide academic leadership for the Optical Microscopy facilities of the CMCA, to enable high-impact biomedical and bioscience research. You will initiate and conduct collaborative research with a broad range of researchers accessing the facilities and you will be encouraged to develop your own research in the development and/or application of optical microscopy and related techniques. You will be responsible for the day-to-day management of the laboratory, overseeing and coordinating user training and maintenance of the facility. You will take responsibility for the quality of data produced in the laboratory, and oversee quality control procedures in the acquisition, processing and interpretation of data by researchers and support staff in your team.

You will perform the full range of academic activities, including individual and collaborative research, teaching and training, and student supervision. You will lead the Optical Microscopy Technique Group and contribute to the Biomedical and Biological Science Application Groups within CMCA. As academic leader, you will represent the facility locally, nationally and internationally, and be the main point of contact for researchers and stakeholders who are supported by the facility's activities.

Key responsibilities

Take responsibility for the management of the CMCA's Optical Microscopy laboratories as a user facility, including coordination of routine maintenance, troubleshooting and repair, and monitoring the scientific quality, outputs and usage of the facility;

Provide academic and technical expertise to users in all areas of optical microscopy including experiment design, sample prep, data acquisition, statistical evaluation and interpretation;

Initiate and undertake an independent research program utilising optical microscopy and engage in collaborative research projects within the University and across the wider research community;

Direct and supervise postgraduate research projects, and contribute to the Centre's teaching and training programs for researchers wishing to access the Optical Microscopy facility;

Lead the Optical Microscopy Technique Group, maintaining current knowledge of developments in the field, and engaging in strategic planning, future upgrades and acquisitions;

Contribute to the experimental development and implementation of new methodologies in advanced optical microscopy, including SIM, STORM, FCS, FLIM, multiphoton and TIRF;

Coordinate or contribute to competitive funding applications, including applications for new instrumentation and ancillary facilities;

Supervise a Research Officer involved in the day-to-day support of the Facility, and provide mentorship to other academic and professional staff;

Promote the Centre's facilities and help to coordinate its national roles engaging with stakeholders (for example, AMMRF) and leading researchers to ensure outstanding collaborative outcomes;

Other duties as directed.

Your specific work capabilities (selection criteria)

Essential:

PhD in biological sciences, biomedical science or related discipline;

Demonstrated knowledge and experience in optical microscopy in a bio-medical research setting;

Demonstrated ability to carry out independent research, and willingness to participate in collaborative research;

Ability and willingness to direct and maintain a multi-user microscopy facility;

Experience in image processing and large-scale data management;

Demonstrated ability to attract research funding through competitive grant applications;

Excellent written and verbal communication skills, and the ability to work effectively as part of a dynamic, multidisciplinary team;

Excellent organisational skills and demonstrated ability to set priorities and to meet deadlines.

Compliance

Workplace Health and Safety

All supervising staff are required to undertake effective measures to ensure compliance with the Occupational Safety and Health Act 1984 and related University requirements (including Safety, Health and Wellbeing Objectives and Targets).

All staff must comply with requirements of the Occupational Safety and Health Act and all reasonable directives given in relation to health and safety at work, to ensure compliance with University and Legislative health and safety requirements.

Details of the safety obligations can be accessed at <http://www.safety.uwa.edu.au>

Equity and Diversity

All staff members are required to comply with the University's Code of Ethics and Code of Conduct and Equity and Diversity principles. Details of the University policies on these can be accessed at http://www.hr.uwa.edu.au/publications/code_of_ethics, <http://www.equity.uwa.edu.au>