



Position Title:	Lecturer (fixed term)
Position Classification:	Level B
Position Number:	317316
Faculty/Office:	Central DVC-R
School/Division:	Centre for Microscopy, Characterisation and Analysis
Centre/Section:	Research Infrastructure Centre
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 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: Optical Microscopy Technique Group leader

Direct Reports: None

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

Role statement

As an expert in super-resolution optical microscopy, the appointee will provide academic leadership and support to the Nikon Centre of Excellence in Optical Microscopy, and general support to the broader Optical Microscopy facilities of the CMCA, to enable high-impact biomedical and bioscience research. The appointee will oversee the development of applications in the new super-resolution optical microscopy laboratory.

Key responsibilities

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;

Take responsibility for maintenance, care, and security of the laboratory, coordinating routine maintenance, troubleshooting and repair;

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

Direct and supervise postgraduate research projects, and contribute to the facility's teaching and training programs;

Provide support to the Optical Microscopy Technique Group, in maintaining current knowledge of developments, and engaging in strategic planning regarding future upgrades and acquisitions;

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

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 science, biomedical science, optical microscopy, or related discipline;

Demonstrated knowledge and experience in optical microscopy of biological samples, including super-resolution microscopy;

Experience in image processing and large-scale data management;

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

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

Ability to work in an interdisciplinary environment;

Ability to work effectively with other CMCA staff, including the Optical Microscopy Technique Group Leader and Research Officer, and the Data Analysis Management and Visualisation academic lead;

Good communication and interpersonal skills.

Desirable:

Experience in the development and delivery of high quality training programs;

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>