



## Position Description

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| <b>Position Title:</b>             | Associate Professor (Bioimaging)                              |
| <b>Position Classification:</b>    | Level D   |
| <b>Position Number:</b>            | 317891  |
| <b>Faculty/Office:</b>             | Research Infrastructure Centres, Office of the DVC (Research) |
| <b>School/Division:</b>            | Centre for Microscopy, Characterisation and Analysis          |
| <b>Centre/Section:</b>             |   |
| <b>Supervisor Title:</b>           | Director  |
| <b>Supervisor Position Number:</b> | 307221  |

## Your work area

The Centre for Microscopy, Characterisation and Analysis (CMCA) is the University's characterisation and analysis core facility, and its mission is to enable research excellence by providing access to world-class analytical infrastructure and expertise. The Centre comprises ~35 academic, 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 spectroscopy, X-ray diffraction, biological and molecular mass spectrometry, MRI and small animal imaging, scanning probe microscopy, and X-ray micro-CT.

The Centre's Bioimaging Facility comprises a range of bioimaging capabilities including pre-clinical MRI, small-animal CT, fluorescence and luminescence imaging and high-frequency ultrasound and optical microscopy (SIM, STORM and FLIM super-resolution microscopy, multiphoton microscopy, live-cell imaging). These instruments are located in the CMCA laboratories in the Perkins North Building on the Queen Elizabeth II (QEII) medical campus, a short distance from the UWA Crawley campus. The Bioimaging Facility is a node of the National Imaging Facility (NIF), which is currently undergoing expansion within Western Australia to provide researchers with access to research dedicated human MRI and PET-CT imaging, to be housed in collaboration with partner organisations at the QEII campus.

## Reporting Structure

Reports to: CMCA Director

## Your role

As an expert in imaging, the appointee will provide academic leadership and management of the CMCA's bioimaging facility, which includes MRI and CT imaging capabilities and optical microscopy to enable high-impact biomedical and bioscience research. You will be responsible for the day-to-day operation of the facility, line-managing academic and professional staff, overseeing the coordination of user training and maintenance of the facility, and taking responsibility for the quality of data produced by the facility. You will contribute to leadership of the CMCA Laboratories in the Perkins North Building, and as the WA NIF Node Leader, and will be a key member of the CMCA management team, providing advice on bioimaging and liaising with stakeholders at the national and state levels. As an academic, you will perform a range of academic activities, including independent and collaborative research, teaching and training, and research student supervision.

## Your Key responsibilities

Take responsibility for the leadership and management of the CMCA's Bioimaging Facility as an open-access, user facility, including the coordination and supervision of staff, and resource management.

Supervise a team of academic and professional staff involved in the day-to-day operation of the Facility, and provide mentorship to other academic and professional staff.

Take responsibility for the quality of data produced in the facility, and oversee quality control procedures in the acquisition, processing and interpretation of data by researchers and support staff in your team.

Provide academic and technical expertise to Facility users in areas of preclinical MRI and live animal imaging, optical microscopy, and including experiment design, sample prep, data acquisition, data visualisation, statistical evaluation and interpretation.

Initiate and undertake an independent research program utilising bioimaging, and engage in collaborative research projects within the University and across the wider research community, including joint supervision of higher degree by research students.

Contribute to the management of the CMCA by representing the Bioimaging Facility on the management team.

Lead or provide support to the imaging and optical microscopy Technique Groups, and engage in strategic planning, future upgrades and acquisitions.

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.

Coordinate NIF-related activities, liaise with NIF national management, and represent the WA NIF node at national level.

Contribute to the expansion of the NIF Bioimaging Facility in WA to incorporate human MRI and PET-CT imaging.

Promote the Centre's facilities and help to coordinate its national roles engaging with stakeholders and leading researchers to ensure outstanding collaborative research outcomes.

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

Other duties as directed.

### **Your specific work capabilities (selection criteria)**

PhD in biological or biomedical science, physics, or engineering;

Advanced knowledge and extensive experience in an imaging discipline (preferably MRI, CT, live-animal imaging) in a bio-medical research setting;

Highly developed team leadership and people management experience

Ability and willingness to direct and maintain a multi-user bioimaging facility and supervise staff and research students;

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

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.

### **Special Requirements (selection criteria)**

Willingness to travel intrastate, interstate and/or overseas

## Compliance

### Workplace Health & 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>

### Inclusion & Diversity

All staff members are required to comply with the University's Code of Ethics, Code of Conduct and Inclusion and Diversity principles. Details of the University policies on these can be accessed at <http://www.hr.uwa.edu.au/policies/policies/conduct/code>, <http://www.web.uwa.edu.au/inclusion-diversity>.