
Position Title:	Research Fellow
Position Classification:	Level B
Position Number:	317558
Faculty/Office:	Engineering and Mathematical Sciences
School/Division:	Electrical, Electronic and Computer Engineering
Supervisor Title:	Research Fellow
Supervisor Position Number:	306963

Your work area

You will be a member of BRITelab in the Department of Electrical, Electronic and Computer Engineering within the Faculty of Engineering and Mathematical Sciences at UWA, under the supervision of Dr Brendan Kennedy. The group works in the area of biomedical optics and, specifically, on the development of advanced imaging systems for use in a range of clinical applications. The successful applicant will primarily be based within the BRITelab team at the Harry Perkins Institute of Medical Research on the Sir Charles Gairdner Hospital campus, which is located approximately 1 km from the main University campus. In addition to biomedical optics, the Department of Electrical, Electronic and Computer Engineering performs world-leading research in areas such as microelectronics, control systems and signal processing. This is complemented by excellent research in biomedical engineering performed in the Department of Mechanical and Chemical Engineering and the Department of Computer Science and Software Engineering.

Reporting Structure

Reports to: Senior Research Fellow
Direct reports: Nil
Team:

Your role

The appointee will perform research in the field of biomedical optics, specifically in developing new optical imaging techniques. BRITelab has a particular focus on the development of optical coherence tomography and optical elastography. The appointee will work with colleagues in BRITelab, as well as in close collaboration with surgeons and pathologists, to develop novel probes for eventual deployment in surgery. In particular, the applicant will be responsible for developing and testing hardware aspects of a handheld imaging probe.

Key responsibilities

- Work as a full-time researcher in the Department of Electrical, Electronic and Computer Engineering
- Design and implement novel optical hardware setups for a range of applications
- Develop methods to process and analyse data acquired
- Publish research outcomes in journal articles
- Present research outcomes at local and international conferences
- Collaborate effectively with researchers in the Faculty and beyond
- Participate in undergraduate and research student supervision and/or mentoring
- Actively pursue research funding and collaborative research opportunities
- Assist in acquiring experimental results in a clinical setting

Your specific work capabilities (selection criteria)

- A PhD in a relevant field
- Research background in optics and preferably in optical coherence tomography and/or other imaging modalities
- Evidence of a strong ability in at least one of the following research areas: optics, photonics, medical imaging, microscopy
- Strong research publication record
- Supervision or mentoring of honours or PhD students
- Demonstrated ability to work effectively both independently and as part of a group
- Excellent written and verbal communication skills
- Ability and willingness to perform research administration tasks

Special Requirements (selection criteria)

Nil

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>