

Position Title: Research Associate / Research Fellow

Position Classification: Level A / B

Position Number: New

Faculty/Office: Engineering and Mathematical Sciences

School/Division: Electrical, Electronic and Computer Engineering

Supervisor Title: Senior Research Fellow

Supervisor Position Number: 306963

About the University

Over 100 years ago, The University of Western Australia was founded with the aim of advancing the welfare and prosperity of its community.

UWA has risen to changing social and economic challenges, while achieving international standards, educating world-class graduates, producing ground breaking research and engaging in our community.

Delivering practical benefits to the community has always been at our core. We do this through the creation and sharing of knowledge, to foster a deeper understanding of our subject, ourselves and the world around us. That's because we believe that understanding is the key to a better future. Through understanding comes progress and through progress we can help create a better future for all.

UWA is already ranked in the top 1% of the world's universities, but our goal is to be recognised as in the world's top 50, for education as well as research.

The University of Western Australia has an international reputation for excellence and enterprise and has been rated as one of the best comprehensive universities in Australia. It is one of the country's leading research institutions as demonstrated by our Nobel Laureate and is the only WA member of the prestigious "Group of Eight" research universities.

The University is undergoing a period of transformational change to gain greater efficiencies, improve value, services and satisfaction. In this period of change the University remains focussed on being a world leader. The attraction and retention of the world's best employees is critical to achieving the University's strategic aim of being in the top 50 universities by 2050.

Vision and Values

The University of Western Australia vision is achieving international excellence.

Its core values underpinning our activities are a commitment to:

- A high performance culture designed to achieve international excellence
- Academic freedom to encourage staff and students to engage in the open exchange of ideas and thought
- Continuous improvement through self-examination and external review
- Fostering the values of openness, honesty, tolerance, fairness, trust and responsibility in social, moral and academic matters
- Transparency in decision making and accountability
- Equity and merit as the fundamental principles for the achievement of the full potential of all staff and students

All staff are expected to comply with the Code of Ethics and the University's Code of Conduct and demonstrate a commitment to its Equity and Diversity and Safety principles and the General Capabilities of personal effectiveness, working collaboratively and demonstrating a focus on results. 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 and http://www.safety.uwa.edu.au/policies.

Your work area

You will be a member of BRITElab in the School 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 School 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 School of Mechanical and Chemical Engineering and the School 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, in accordance with a research contract in place between UWA and OncoRes Medical, a start-up company focussed on the development of optical imaging solutions for surgery. 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 the probe.

Key responsibilities

- Work as a full-time researcher in the School of Electrical, Electronic and Computer Engineering under the direct supervision of Dr Brendan Kennedy
- 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 (or near completion) 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 relative to applicant's experience
- 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

Position Approvals

Approvals are now electronic. No signature section needed.