



Research Fellow (Sleep and Circadian Biomarkers)

Department/Unit	School of Psychological Sciences
Faculty/Division	Medicine, Nursing and Health Sciences
Classification (salary rates)	Level A
Work location	Clayton
Date document created or updated	November 2017

Organisational context

Everyone needs a platform to launch a satisfying career. At Monash, we give you the space and support to take your career in all kinds of exciting new directions. You'll have access to quality research, infrastructure and learning facilities, opportunities to collaborate internationally, as well as the grants you'll need to publish your work. We're a university full of energetic and enthusiastic minds, driven to challenge what's expected, expand what we know, and learn from other inspiring, empowering thinkers. Discover more at www.monash.edu

The **Faculty of Medicine, Nursing & Health Sciences** is the University's largest research faculty. World-class researchers work across disciplines including laboratory-based medical science, applied clinical research, and social and public health research. The Faculty is home to a number of leading medical and biomedical research institutes and groups, and has contributed to advances in many crucial areas. Our expertise in life sciences and biomedicine is recognised both nationally and internationally.

From a teaching perspective, our education curriculum covers a range of disciplines, including medicine, nursing, radiography & medical imaging, nutrition & dietetics, paramedic studies, biomedical sciences, physiotherapy, occupational therapy, behavioural neurosciences and social work. We take pride in delivering outstanding education in all courses, in opening students to the possibilities offered by newly discovered knowledge and in providing a nurturing and caring environment. To learn more about the Faculty, please visit www.med.monash.edu.au/

The **Monash School of Psychological Sciences** is ranked among the best in the world. Our School's mission is to develop students and research outcomes that make significant contributions to improving the lives of others globally. Our overarching vision is to make significant and long-lasting impact that changes the world around us, beginning in infancy and across the lifespan. Drawing on the expertise of our staff and the university's unique research platforms and technology, our mission is to sustain and build on Monash's position with world-class research and teaching in Psychology.

The newly established **Monash Institute of Cognitive and Clinical Neurosciences** will provide an exceptional research environment for discoveries that change our understanding of the brain. Through excellent research and training, a wide network of international partners, and strong industry engagement MICCN will lay the foundation for a pipeline of discovery in areas of critical importance of the human brain and see that knowledge translated into the clinic, the workplace and the community. The Institute represents the largest grouping of cognitive and clinical neuroscientists in Australia and Asia-Pacific.

Position purpose

Working with the Anderson Lab within the Sleep and Circadian Medicine Laboratory and Monash Institute of Cognitive and Clinical Neurosciences (MICCN) the Post-Doctoral Research Fellow will lead a program of work developing metabolomics biomarkers of sleep loss and circadian phase. The Research Fellow will work as part of a large multi-disciplinary team, including experts in sleep loss, circadian medicine and metabolomics. The project is funded through the Cooperative Research Centre for Alertness, Safety and Productivity. The Alertness CRC aims to reduce the burden of impaired alertness on the safety, productivity and health of those facing sleep or circadian challenges (i.e., shift workers). Our innovative research strategy is drawn from disciplines including medicine and public health; biomedical sciences; psychology, cognitive neuroscience and human factors; physics and biophysical modelling; electrical and bioengineering; lighting design; occupational health and safety, and road safety. The consortium has a strong interest in supporting individuals with an existing background and long term work plans to work within an academic, industry, or regulatory sector.

The CRC for Alertness, Safety and Productivity is a research consortium comprising 25 organisations including universities (Monash University, University of Sydney, and Flinders University) along with independent research institutes (Institute of Breathing and Sleep, Woolcock Institute of Medical Research) industry, policy and regulatory agencies and insurers. To find out more, please visit us at <http://www.alertnesscrc.com>

As a future leader in developing biomarkers of sleep loss. The Research Fellow will be involved in the development, running and management of a research program focussed on the collection, management and analysis of metabolomic data from existing data (i.e., biosamples collected during in-lab multi-day protocols) and on-going studies in the laboratory (i.e., biological predictors of fall asleep crash events). There is also opportunity to look at other 'omics' data.

The role will include administration and set-up of the research program, coordinating communications and reporting between different project teams, assisting with maintaining financial records, preparation of reports, and overseeing project collaboration activities. The position requires liaison with academics and support staff locally, regionally and internationally, as well as with scheduling staff, and experimental participants, plus partner organisations within the Alertness CRC. You will also be expected to liaise with research academic and industry professionals, working toward common goals.

A Level A research-only academic is expected to contribute towards the science of this program of work and the research effort of the university and the Alertness CRC. The successful candidate will be encouraged to develop her/his research expertise through the pursuit of defined projects relevant to the particular field of research.

Reporting line: The position reports to the Associate Professor Clare Anderson

Supervisory responsibilities: Co-supervision of Honours or PhD students involved in the project

Financial delegation and/or budget responsibilities: This position has no financial delegation. The successful candidate will be responsible for ensuring the project runs within the required budget

Key responsibilities

Specific duties required of a Level A research-only academic may include:

1. The conduct of research under limited supervision either as a member of a team or, where appropriate, independently and the production or contribution to the production of conference papers and publications from that research
2. Administration of research projects including human ethics and other regulatory approvals, resources, and data management
3. Occasional contributions to teaching in relation to her/his research project(s)
4. Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures
5. Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental, school and/or faculty meetings and/or membership of a limited number of committees
6. Advice within the field of the staff member's research to postgraduate students

Key Selection Criteria

Education/Qualifications

1. The incumbent should possess:
 - a PhD in the biomedical or biosciences domain from a recognised university or equivalent qualifications and research experience in the area
 - an equivalent combination of relevant experience and/or education/training

Knowledge and Skills

2. Strong experience with research in the sleep and circadian medicine field, and a strong desire to remain working within this field OR strong experience in metabolomics with a desire to apply this to sleep and circadian science. Training will be provided for those with expertise in sleep science but not metabolomics data handling and processing or vice versa
3. Experience working with large datasets or a multitude of simultaneous data streams
4. Experience leading, coordinating or facilitating lab-based research studies
5. Strong writing publication and report writing skills, including evidence of publications
6. The ability to prepare and communicate the aims and outputs of research projects in a range of formats including formal and informal oral presentations, refereed research papers and reports
7. The ability to work independently in a research environment (with limited supervision)
8. The ability to work as part of a team, and operate autonomously when required
9. Well-developed computer literacy (i.e. word processing and use of databases)
10. Excellent communication skills

Other job related information

- Travel (e.g. to other campuses of the University) may be required
- There may be peak periods of work during which the taking of leave may be restricted
- Possession of a current Victorian driver licence is desirable

Legal compliance

Ensure you are aware of and adhere to legislation and University policy relevant to the duties undertaken, including: Equal Employment Opportunity, supporting equity and fairness; Occupational Health and Safety, supporting a safe workplace; Conflict of Interest (including Conflict of Interest in Research); Paid Outside Work; Privacy; Research Conduct; and Staff/Student Relationships.