THE UNIVERSITY OF MELBOURNE

Florey Department of Neuroscience and Mental Health
Faculty of Medicine, Dentistry and Health Sciences

Postdoctoral Research Fellow

POSITION NO	0046779
CLASSIFICATION	Level A
WORK FOCUS CATEGORY	Research Focused
SALARY	$69,148* - $93,830 p.a. (*PhD entry Level A.6 $87,415)
SUPERANNUATION	Employer contribution of 9.5%
WORKING HOURS	Full-time
BASIS OF EMPLOYMENT	Fixed Term position available for 3 years Fixed term contract type: Research
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers, under 'Job Search and Job Alerts', select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Professor Colin Masters Tel +61 3 9035 6575 Email c.masters@florey.edu.au *Please do not send your application to this contact*

For information about working for the University of Melbourne, visit our websites:
about.unimelb.edu.au/careers

Date Created: dd/mm/yyyy   **Last Reviewed:** dd/mm/yyyy   **Next Review Due:** dd/mm/yyyy

Position Summary

This Postdoctoral Research Fellow position provides an opportunity for an emerging researcher to build their research career. This is a unique opportunity to engage with key industry partners that have a history of translating innovative research into impactful solutions. The position is open to people who have completed a PhD within five years prior to appointment (minimum of 2 years).

1.   Key Responsibilities

1.1   RESEARCH AND RESEARCH TRAINING

- Conduct top quality research in Alzheimer's Disease, within the Alzheimer's Disease Trajectory Analysis Stream of the Centre.
- Design and implement state-of-the-art algorithms to analyse complex multimodal data for the purposes of investigating new technologies to address the rising incidence of Alzheimer's disease.
- The production of conference and seminar papers and publications and presentations at conferences and seminars where appropriate
- Mentor and co-supervise PhD students
- Contribute to publications arising from research, such as publication of books and in peer reviewed journals

1.2   LEADERSHIP AND SERVICE

- Actively participate at Department and/or Faculty meetings and with guidance, contribute to planning activities or committee work to support capacity-building in the School/discipline.
- Identification of sources of funding to support individual or collaborative projects, relating to teaching, research and engagement practice in the discipline
- Effective training of research support staff where required
- Participate in community and professional activities related to the relevant disciplinary area
- Effective modelling and promotion of Faculty and University values including diversity and inclusion and high standards of ethics and integrity: http://mdhs.unimelb.edu.au/beyond2018/people-and-culture/our-values.
- Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 4.

2.Selection Criteria

2.1   ESSENTIAL

- A PhD completed within five years prior to appointment (minimum of two years).
- An emerging research track record and recognition of high quality research outputs, evidenced by publications and the development of research initiatives.

- Strong background in either:

    a) Biostatistics, or

    b) Machine Learning, with a key focus on deep learning

- Experience in model integration.

- Excellent programming skills.

- Experience in working with minimal supervision, and ability to prioritise tasks to achieve project objectives within timelines.

- Demonstrate capacity to communicate research concepts to technical and non-technical audiences.

- Excellent written and verbal communication skills, demonstrated by presentation of research results at conferences, internal forums, and through manuscript submissions.

- Excellent interpersonal skills, including an ability to interact with internal and external stakeholders (academic, administrative and support staff) in a courteous and effective manner.

2.2 DESIRABLE

- A background in either neuropsychology, neuroscience, or biology.

- An understanding of neuropsychology tests used in the neurodegeneration field.

- Bioinformatics analysis of Genomic, Lipidomic, Proteomic, and Metabolomic data.

- Signal processing experience with MRI and PET images.

3.   *Equal Opportunity, Diversity and Inclusion*

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the University's People Strategy 2015-2020 and policies that address diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous desire to strive for excellence and reach the targets of Growing Esteem.

4.   *Occupational Health and Safety (OHS)*

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

http://safety.unimelb.edu.au/topics/responsibilities/

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.

5.   Other Information

5.1   FLOREY DEPARTMENT OF NEUROSCIENCE AND MENTAL HEALTH

http://mdhs.unimelb.edu.au/profile/florey-department-neuroscience-and-mental-health

Research undertaken at the Florey Department of Neuroscience and Mental Health spans a variety of disease states with about 70 per cent devoted to basic science and 30 per cent to translational research. Areas studied include stroke, epilepsy, Alzheimer's disease, Parkinson's disease, multiple sclerosis, Huntington's disease, motor neurone disease, traumatic brain and spinal cord injury as well as threats to mental health including depression, schizophrenia, bipolar disorders and addiction.

World class research platforms available include imaging technology, histology, bioinformatics, statistics and decision-making analysis, brain bank and clinical trials.

5.2   FACULTY OF MEDICINE, DENTISTRY AND HEALTH SCIENCES

www.mdhs.unimelb.edu.au

The Faculty of Medicine, Dentistry & Health Sciences has an enviable research record and is the University of Melbourne's largest faculty in terms of management of financial resources, employment of academic and professional staff, teaching of undergraduate and postgraduate (including research higher degree) students and the conduct of basic and applied research. The Faculty's annual revenue is $628m with approximately 55% of this income related to research activities.

The Faculty has a student teaching load in excess of 8,500 equivalent full-time students including more than 1,300 research higher degree students. The Faculty has approximately 2,195 staff comprising 642 professional staff and 1,553 research and teaching staff.

The Faculty has appointed Australia's first Associate Dean (Indigenous Development) to lead the development and implementation of the Faculty's Reconciliation Action Plan (RAP), which will be aligned with the broader University – wide plan. To enable the Faculty to improve its Indigenous expertise knowledge base, the Faculty's RAP will address Indigenous employment, Indigenous student recruitment and retention, Indigenous cultural recognition and building partnerships with the Indigenous community as key areas of development.

5.3   THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville is recognised as the hub of Australia's premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide-range of knowledge-based

industries. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded.

Further information about working at The University of Melbourne is available at http://about.unimelb.edu.au/careers.

5.4   GROWING ESTEEM, THE MELBOURNE CURRICULUM AND RESEARCH AT MELBOURNE: ENSURING EXCELLENCE AND IMPACT TO 2025

Growing Esteem describes Melbourne's strategy to achieve its aspiration to be a public-spirited and internationally-engaged institution, highly regarded for making distinctive contributions to society in research and research training, learning and teaching, and engagement. http://about.unimelb.edu.au/strategy-and-leadership

The University is at the forefront of Australia's changing higher education system and offers a distinctive model of education known collectively as the Melbourne Curriculum. The new educational model, designed for an outstanding experience for all students, is based on six broad undergraduate programs followed by a graduate professional degree, research higher degree or entry directly into employment. The emphasis on academic breadth as well as disciplinary depth in the new degrees ensures that graduates will have the capacity to succeed in a world where knowledge boundaries are shifting and reforming to create new frontiers and challenges. In moving to the new model, the University is also aligning itself with the best of emerging European and Asian practice and well-established North American traditions.

The University's global aspirations seek to make significant contributions to major social, economic and environmental challenges. Accordingly, the University's research strategy *Research at Melbourne: Ensuring Excellence and Impact to 2025* aspires to a significant advancement in the excellence and impact of its research outputs. http://research.unimelb.edu.au/our-research/research-at-melbourne

The strategy recognises that as a public-spirited, research-intensive institution of the future, the University must strive to make a tangible impact in Australia and the world, working across disciplinary and sectoral boundaries and building deeper and more substantive engagement with industry, collaborators and partners. While cultivating the fundamental enabling disciplines through investigator-driven research, the University has adopted three grand challenges aspiring to solve some of the most difficult problems facing our world in the next century. These Grand Challenges include:

▸ Understanding our place and purpose – The place and purpose grand challenge centres on understanding all aspects of our national identity, with a focus on Australia's 'place' in the Asia-Pacific region and the world, and on our 'purpose' or mission to improve all dimensions of the human condition through our research.

▸ Fostering health and wellbeing – The health and wellbeing grand challenge focuses on building the scale and breadth of our capabilities in population and global health; on harnessing our contribution to the 'convergence revolution' of biomedical and health research, bringing together the life sciences, engineering and the physical sciences; and on addressing the physical, mental and social aspects of wellbeing by looking beyond the traditional boundaries of biomedicine.

▸ Supporting sustainability and resilience – The sustainability and resilience grand challenge addresses the critical issues of climate change, water and food security,

sustainable energy and designing resilient cities and regions. In addition to the technical aspects, this grand challenge considers the physical and social functioning of cities, connecting physical phenomena with lessons from our past, and the implications of the technical solutions for economies, living patterns and behaviours.

Essential to tackling these challenges, an outstanding faculty, high performing students, wide collaboration including internationally and deep partnerships with external parties form central components of Research at Melbourne: Ensuring Excellence and Impact to 2025.

5.5 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at http://www.unimelb.edu.au/governance