



## Position description

### Research Fellow (Postdoctoral)

<b>Position number</b>	
<b>Department/Unit</b>	Department of Anatomy and Development Biology
<b>Faculty/Division</b>	Faculty of Medicine, Nursing and Health Sciences
<b>Classification (salary rates)</b>	Level A
<b>Employment type</b>	Full-time
<b>Work location</b>	Clayton campus
<b>Date document created or updated</b>	August 2015

#### Position purpose

A Level A research-only academic is expected to contribute towards the research effort of the University and to develop her/his research expertise through the pursuit of defined projects relevant to the particular field of research.

A fully funded Postdoctoral position in neurobiology is available in Dr Brent Neumann's lab in the Department of Anatomy and Developmental Biology, Monash University, Melbourne, Australia.

The Neumann laboratory uses the nematode *C. elegans* as an experimental model system to study developmental neurobiology, with particular emphasis on understanding the mechanisms behind neurodegenerative disease, and how the nervous system can be repaired after traumatic injury. We use a combination of genetics, molecular biology, and microscopy techniques to identify the key molecules and mechanisms regulating these fascinating biological processes. We are seeking a highly motivated postdoctoral fellow to study the mechanisms of axonal degeneration/regeneration. Please visit our lab website for more information: [www.neumannlab.com](http://www.neumannlab.com).

The successful applicant will integrate into a highly collaborative and effective research team, and will be responsible for co-supervising students in the laboratory.

- **Reporting line:** The position reports to Dr Brent Neumann.
- **Supervisory responsibilities:** Co-supervision of students.
- **Financial delegation and/or budget responsibilities:** Not applicable.

#### Organisational context

Monash is a university of transformation, progress and optimism. Our people are our most valued asset, with our academics among the best in the world and our professional staff revolutionising the way we operate as an organisation.

For more information about our University and our exciting future, please visit [www.monash.edu](http://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/](http://www.med.monash.edu.au/).

The **School of Biomedical Sciences** is diverse, dynamic and one of the largest biomedical precincts in Australia. We offer a range of undergraduate and graduate teaching options across various biomedical disciplines. The School is also highly active in research, with \$55 million in grant income from international and Australian funding agencies. Our scientists conduct research in cancer, cardiovascular disease, development and stem cells, drug discovery, immunology and infection, metabolism and obesity, neuroscience and structural biology. Commercially, we encourage collaboration between researchers and investors to accelerate the technology discovery process, and produce commercialised and clinical outcomes important in addressing the needs of society.

The **Department of Anatomy and Developmental Biology** is responsible for the delivery of human anatomy teaching in the medical, physiotherapy, radiography, biomedical science and science degrees. Teaching is conducted at both the undergraduate and postgraduate levels. The teaching of human topographical, systematic and functional anatomy is overseen by the Centre for Human Anatomy Education, which is located within the Department and was constituted to ensure the quality of anatomical sciences education is of the highest national and international standard.

In 2007, the Department introduced the first Bachelor of Science major in Australia in developmental biology. The BSc major provides foundation studies in embryology, histology and anatomy, and covers such topics as human development, reproductive biology, mechanisms of development, birth defects, stem cells, and regenerative biology and medicine.

Research in the department is focused on a broad range of areas in anatomical sciences and developmental biology, extending from computational and functional morphology of extant and extinct vertebrates including humans; the roles of specific genes and gene pathways in organogenesis; the identification and roles of stem cells in development and disease; the causes and consequences of premature birth and the developmental origins of health and disease. Other specific areas of research include: renal development, ocular immunopathology, reproductive biology, embryology, immunology, prostate and gut development and disease, the foetal origins of adult disease and skin biology.

Full details of research in the Department can be found at [www.med.monash.edu.au/anatomy](http://www.med.monash.edu.au/anatomy)

## Key responsibilities

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

- 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 and seminar papers and publications from that research;
- involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise;
- limited administrative functions primarily connected with the area of research of the academic;

- development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff;
- occasional contributions to teaching in relation to her/his research project(s);
- experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures;
- 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;
- advice within the field of the staff member's research to postgraduate students;

## Key selection criteria

1. PhD in cellular or molecular biology, genetics, or a related field from a recognised university
2. A strong research track record including publication(s) in international scientific journals
3. Knowledge and experience in *C. elegans* is desirable but not essential
4. Good organisational and record keeping skills with the ability to meet project timelines and deadlines
5. Ability to work independently and as part of a research team
6. Demonstrated self-motivation, creativity and problem solving skills
7. Proven ability to mentor and advise research graduate students
8. A desire to build an independent research profile

## Other job-related information

- Travel (e.g. to other campuses of the University) may be required.
- Out of hours work (including evenings, weekends and public holidays) may be required.
- There may be peak periods of work during which the taking of leave may be restricted.

## 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.