

POSITION DESCRIPTION

POSITION TITLE Post-doctoral Research Fellow

CLASSIFCATION RES 4.1 - RES 4.8 (\$90,675- 104,157 base per annum),

depending on skills and experience

ROLE Full time (36.25 hours per week)

LOCATION St Vincent's Hospital, Fitzroy, with flexibility to work from home in

accordance with company guidelines

ABOUT US

The Bionics Institute is an internationally recognised, independent medical research institute that solves medical challenges with technology. We lead the world in the research and development of innovative medical devices and therapies to improve human health. Our multidisciplinary team comprises world-class scientists, engineers and researchers, and our laboratories are located in St Vincent's Hospital Melbourne, close to our clinical collaborators.

Together we transform the lives of people with a range of conditions, including Alzheimer's disease, hearing impairment, Crohn's disease, Parkinson's disease, stroke and arthritis.

ABOUT THE ROLE

The Vagus Nerve Stimulation (VNS) Centre of Excellence is a newly established research initiative within the Bionics Institute, with a mission to fast-track translation of VNS for the effective treatment of human diseases.

Reporting to the Head of the VNS Centre of Excellence, the primary focus of the Research Fellow will be to contribute to research programs using computational modelling of biological systems. You will develop and apply modelling approaches to investigate and assess factors that may enhance the efficacy of VNS across a range of disease models. This role will play an important part in advancing the translation of VNS therapy.

The role involves close collaboration with project leads and principal investigators within the VNS Centre of Excellence and will work closely with several specialised multidisciplinary teams across the Bionics Institute, including the Animal Research, Histology and Engineering teams.

Key responsibilities

- Contribute to a key area of work in line with the Bionics Institutes mission and values.
- Develop, design and implement computational models of biological systems and other knowledge to achieve project aims specific to project research.
- Synthesise and critique relevant literature as a tool for informing VNS stimulation parameters for disease treatment.



- Undertake data analysis and assist in experimental design to incorporate findings from simulations.
- Effectively communicate research to a multidisciplinary audience.
- Contribute to authorship of papers.
- Lead small (<\$500k) grant applications; contribute to large (>\$500k) grants.
- Supervise HRD students and provide analytical training to staff and collaborators.
- Make original contributions to the preparation of funding body progress reports, and other forms of community engagement.
- Maintain best practices in laboratory operations and research integrity.
- Contribute to Intellectual Property development required for device development.

Core Competencies for the Role

Task complexity - Some complexity

Work involves a number of variables which complicate the work tasks, but the position holder can overcome problems by applying own knowledge and experience within the field or position.

Knowledge required - General

Degree level theoretical knowledge, and knowledge of up-to-date professional standards and precedent.

Judgement and problem solving - Interpretive

Uses own judgement to solve problems in own work area. Can apply own skills and knowledge to assess best approach to a work task or problem. At this level, position holder is expected to start to show initiative to recommend and apply work process improvements. Has latitude to decide on work scheduling and priorities and can exercise own judgement over when to refer a matter to a higher level.

Level of supervision and independence - General

Position holder is told what outcomes are expected and when they are expected to be achieved. Position holder can determine own priorities and some work methods and has some scope to be able to choose from established procedures to achieve work goals. Supervision is typically weekly or fortnightly and specific outcomes are reviewed.

Organisational relationships and impact - Strong

Position holder is able to apply their knowledge of their work area and understand the impact of their actions on other work areas and employees. Can provide advice or assistance to others based on in-depth knowledge within field of expertise. Has started to develop ability to recommend changes to processes and procedures to improve operations.

ABOUT YOU

You will bring proven expertise in computational modelling of biological systems, sound knowledge of biomedical engineering and a research track record.

An exceptional communicator with a passion for translational biomedical engineering research and innovation, you thrive at the intersection of engineering and medicine. Driven



to develop technologies that improve patient outcomes, you work effectively both independently and within multidisciplinary teams, demonstrating initiative, critical thinking, and a collaborative mindset. Your ability to translate complex technical concepts into practical applications enables you to meaningfully contribute to advancing biomedical engineering solutions from the bench to the bedside.

Working closely with diverse teams, you have a particular strength in articulating complex computational modelling concepts to a multidisciplinary audience. You will build strong relationships across the Bionics Institute, drawing on your well-developed interpersonal, communication, and coordination skills to collaborate effectively across multiple projects and levels.

SELECTION CRITERIA

Essential

- PhD in Biomedical Engineering or equivalent experience
- At least 1 year of experience in computational modelling of biological systems
- Experience with preclinical or in vivo experimentation

Desired

- Knowledge of peripheral interfaces and neuromodulation
- Experience in electrophysiology testing
- Experience in first-author paper writing
- Some experience in contribution to grant-writing

Additional Requirements: Prior to any offer being made, all preferred candidates will be required to provide:

- National police check via Fit2Work.
- Evidence of holding the legal right to work in Australia with no restrictions.

OUR COMMITMENT TO DIVERSITY, EQUITY, AND INCLUSION

As our research transforms the lives of people across all walks of life, we recognise that a diverse, engaged, and united team makes us stronger, and we hire qualified people from all different backgrounds and experience levels.

We encourage employees to speak with your manager or a member of our HR team about the type of working arrangements that would help you thrive in your role at the Bionics Institute

BENEFITS OF WORKING WITH US

At Bionics Institute, you'll be part of a team making a **tangible difference in global health**. We offer:

- Competitive salary with **salary packaging** of up to \$18,550 per annum to increase your take home pay.
- Flexible and hybrid working arrangements.
- Annual performance bonus of up to 10% of annual salary.
- Ongoing professional development and mentorship.



• A collaborative, inclusive workplace that values diversity.

JOIN US!

If you believe you have the attributes to be an integral part of the team, please submit your application by clicking the 'Quick Apply" link on SEEK that takes you to a login page and include a CV and a brief cover letter (max 2 pages) that addresses the selection criteria

POSITION DESCRIPTION

A full position description is available on the Bionics Institute's website. If you have further questions about this opportunity, please contact a member of our HR Team on HR@bionicsinstitute.org.

Applications Close 30th November at 11.59 pm. However, applications will be considered as received, and the position may be filled ahead of the closing date.