POSITION DESCRIPTION

POSITION TITLE: Research Engineer – Neural Prosthetics

POSITION CLASSIFICATION: RES 4.6 - RES 5.2 ($90,443 - $100,501 per annum)

SUPERANNUATION: At the superannuation guarantee rate, currently 11%

SALARY PACKAGING: $18,550, inclusive of $15,900 for general living expenses and $2,650 for meals and entertainment

ROLE: Full time (36.25 hours per week)

LOCATION: East Melbourne with flexibility to work from home in line with company guidelines and position requirements.

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, arthritis, and diabetes.

About the role

Reporting to the Head of the Neural Prosthetics Research Program, this position will conduct research and development on novel medical devices for the restoration of function and rehabilitation of pain after sensorimotor impairments such as amputations, nerves injuries, and stroke.

Key responsibilities:
- Design and development of sensorimotor technologies.
- Design and development of neuromusculoskeletal interfaces.
- Execute and document technical tests and scientific experiments.
- Write technical and scientific articles.
- Manage and document interdisciplinary projects.

About you

The successful candidate is an experienced professional with a background in the research and development of medical devices for the restoration of function and rehabilitation of pain after sensorimotor impairments. You will demonstrate:

- Strong communication skills with the ability to translate between technical experts and end-user/customer.
- Advanced stakeholder engagement and management skills.
- The ability to influence and negotiate.
- The ability to quickly understand the client's needs and develop targeted solutions.
- The ability to thrive in an interdisciplinary team.

Core Competencies for the Role

Task complexity: Complex

The role requires a high level of technical skill and knowledge in the development of medical devices. The position holder is expected to apply their comprehensive knowledge of sensorimotor technologies and neuromusculoskeletal interfaces to solve problems independently or in collaboration with an interdisciplinary team. This requires novel and complex solution ideation and development.

Knowledge required: General

The successful candidate will have extensive knowledge of medical device development, sensorimotor training systems, neuromusculoskeletal prostheses, and phantom limb pain and its treatment. Complex, significant, and high-level creative planning, program, and technical knowledge. Comprehensive knowledge of related programs, including a focus on the application of Technological developments, technological and scientific writing, and government standards. Generate and use a high level of theoretical and applied knowledge.

Level of supervision and independence: Broad

The role requires a high level of independence and autonomy in managing and executing projects. The successful candidate must be able to work with minimal supervision and take responsibility for project outcomes. The candidate must be able to work collaboratively with colleagues and stakeholders across different departments and organizations. The position holder is also expected to supervise other administrative, technical and/or professional staff members.

Judgement and problem solving: Interpretative / Adaptive

The role requires the ability to exercise good judgement and analytical skills to solve complex problems and make sound decisions. The successful candidate must be able to identify and evaluate potential technical risks, troubleshoot issues, and propose solutions that are innovative and effective. The candidate must also be able to balance competing priorities and make decisions under pressure. This may involve stand-alone work or the supervision of others in order to achieve objectives, which has an impact beyond the immediate work area. The position holder is responsible for the management and documentation of interdisciplinary projects.

Organisational relationships and impact: Strong

The position holder should consider the views and interests of others, applies the knowledge of their work area, and understands the impact of their actions on other work areas and

employees. The position holder is expected to communicate in an interdisciplinary team with the ability to translate between technical experts and end-users. Responsibilities commonly require significant planning, liaison, consultation, and negotiation, often involving external parties and or a comprehensive knowledge of external opportunities, regulations or requirements. Apply a comprehensive knowledge of related programs.

Selection Criteria:

Essential

- Master's degree in biomedical, Mechanical, Industrial Design Engineering, or the equivalent experience.
- Two or more years of work experience in a sensorimotor training systems, and neuromusculoskeletal prosthesis.
- Demonstrate the ability to work in a team environment.
- Proficiency in Computer Aided Design (CAD).
- Experience with rapid prototyping methodology and equipment (3D Printers, milling machines, etc).
- Experience with programming.
- Experience with project and engineering management.
- Experience in sensorimotor training systems using myoelectric signals and somatosensory stimulation.
- Experience in neuromusculoskeletal prostheses based on osseointegration and implanted electrodes.
- Experience in phantom limb pain and its treatment.
- Experience in the development of medical devices and quality management systems (particularly ISO 13485 and ISO 14155).
- Ability to document invasive and non-invasive technologies in patents and scientific articles.

Desired

- Proven experience in interdisciplinary and multicultural research and development environments.
- Experience in executing and documenting technical tests and scientific experiments.
- Strong problem-solving skills and ability to think critically.
- Excellent communication and interpersonal skills for managing interdisciplinary projects.
- Strong analytical skills and attention to detail.
- Ability to work independently and as part of a team.
- Strong time management and organizational skills.

Additional Requirements: Prior to any offer being made, all preferred candidates will be required to provide:
- a national police check via Fit2Work;
- evidence of being fully vaccinated against COVID-19; and
- evidence of holding the legal right to work in Australia with no restrictions.

Application Process

If you believe you have the attributes to be an integral part of the team, please submit your application by emailing your CV and a brief cover letter (max 2 pages) that addresses the selection criteria to HR@bionicsinstitute.org.

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.

We therefore hire qualified people from all different backgrounds and experience levels. We encourage candidates to speak with a member of our HR team if you require adjustments to our recruitment process to support you, and the type of working arrangements that would help you thrive.

Applications Close:

6 December 2023 at 11:59pm. However, applications will be considered as received, and the position may be filled ahead of the closing date.
Please note; if you have previously applied for this position, there is no need to re-apply.

If you have further questions about this opportunity, please contact a member of our HR Team on HR@bionincsinstitute.org.