



# PROJECT LEAD (BRAIN MACHINE INTERFACES)

**DEPARTMENT/UNIT** Electrical and Computer Systems Engineering

FACULTY/DIVISION Faculty of Engineering

CLASSIFICATION Level 10A

WORK LOCATION Clayton campus

### 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 <a href="www.monash.edu">www.monash.edu</a>.

Monash Vision Group (MVG) has been developing technologies to stimulate the visual cortex that have received research approval. The MVG team has also been working on a cortical recording device. The stimulator and recorder work together for a bidirectional brain interface. MVG is part of the Department of Electrical and Computer Systems Engineering (ECSE), in the Faculty of Engineering, Clayton. The group is directed by Professor Arthur Lowery.

Recently, MVG was awarded a MRFF Frontiers grant (Stage 1). This grant is to support the planning process for a Stage 2 grant, up to \$100M, which is contingent on the quality of the outcomes of Stage 1, and will be competitive against other Stage 1 awardees.

Monash Vision Group is now in the process of developing plans to commercialise its technologies, and has embarked on a rigorous planning process with the aim of developing Business Plans for two commercial companies that will use its Brain Machine Interface technology. The planning process is expected to take one year, during which external funding will be sought. The planning will involve: market research with clinicians and patients, competitive analysis, building relationships with health-care providers and government technology auditing, supply chain planning, regulatory and legal issues, manufacturing planning and certification and partner development.

#### **POSITION PURPOSE**

This multi-faceted role is responsible for leading the development and delivery of business plans for two new world-class, leading-edge companies in the Brain-Machine Interface area. These complex and detailed plans, developed over the course of up to one year, will form the basis of Stage 2 funding application that, if successful, will set the future direction of the program.

Modified date: May 2019

Key to the success of this position is the ability to lead a small internal team and identify, engage and manage external specialist consultants with deep technical knowledge of commercialisation of medical implants to collaborate on environmental scanning activities. This market intelligence coupled with internal data relating to MVG's technologies and manufacturing capability will be leveraged to ensure the technologies and potential markets identified are compatible and therefore commercially viable.

The role offers an opportunity to join an exciting new area of medical and engineering endeavour at an early stage, with the possibility of a future leadership positions in the proposed spin-outs.

Reporting Line: The position reports to the Chief Investigator and Director, MVG under broad direction

Supervisory Responsibilities: This position provides direct supervision to two staff and a number of consultants

Financial Delegation: Yes, in accordance with the Universities Delegation Schedule

Budgetary Responsibilities: Yes, in line with key responsibilities

### **KEY RESPONSIBILITIES**

- 1. Lead, direct and manage the MRFF Cortical Frontiers team and associated external specialist consultants ensuring the governance (Advisory Board and Chief Investigator) is apprised of challenges, success and opportunities at all times
- **2.** Identify, source and assign necessary project resources, which may include managing a procurement tender process and negotiating and managing contracts with external providers
- **3.** Identify, through consultation and inward-outward analysis, and in conjunction with Monash Vision Group, the two most promising opportunities for Brain-Machine Interfaces
- **4.** Oversee the development and delivery of complete and achievable "Ready-to-Go" Business Plans for two companies and use these plans to develop and complete funding applications, in conjunction with MVG and university bodies
- **5.** Lead the identification of manufacturing and medical device regulatory risks and devise strategies to reduce these and thus plan the most efficient path to regulatory approval
- 6. Partner with key health care and research providers for the delivery of clinical and pre-clinical trials.
- 7. Lead, direct and undertake research, devise solutions and provide high level, practical and impartial advice to senior management on complex, multi-faceted project issues
- **8.** Lead and manage the preparation of business cases, position papers, briefings and reports for senior management and project stakeholders, including presentation of information
- **9.** Initiate, develop and maintain strong partnerships with key stakeholders, including influencing support for project objectives by networking and hosting stakeholder meetings
- **10.** Lead, manage and be accountable for identifying risks, issues and dependencies relating to large scale, complex projects and ensure that effective controls and risk mitigation strategies are in place
- **11.** In conjunction with the Chief Investigator and Director, MVG, the position is responsible for managing a budget of over one million dollars

## **KEY SELECTION CRITERIA**

#### **Education/Qualifications**

- 1. The appointee will have:
  - A post-graduate qualification, preferably in business or engineering; and
  - substantial experience in either creating new industries, or managing new product directions of established industries; or

an equivalent combination of relevant experience and/or education/training

### **Knowledge and Skills**

- 2. Outstanding relationship management and consulting skills, including the ability to interact, influence and negotiate with a variety of stakeholders within and outside the university
- 3. Strong commercial acumen with a consultative approach to business development coupled with a clear understanding of how research and medical devices can be used to influence outcomes for individuals, organisations and the community
- **4.** Extensive and exceptional project management experience and skills, with a proven record of successfully planning all aspects of large, complex biomedical engineering projects
- **5.** Outstanding planning and organisational skills, with experience establishing priorities, allocating and managing significant resources and meeting deadlines
- **6.** Demonstrated excellence in leading, motivating and developing a team of professionals to achieve project objectives
- **7.** Exceptional analytical, evaluation and research skills including demonstrated ability to quickly assimilate new concepts and information and deliver positive, innovative solutions
- **8.** Outstanding interpersonal and communication skills, including the ability influence senior management, develop professional and effective communications for a range of audiences and deliver engaging presentations
- 9. Ability to write complex documents such as business plans and grant applications

#### OTHER JOB RELATED INFORMATION

- Interstate and overseas travel may be required
- There may be a requirement to work additional hours from time to time
- There may be peak periods of work during which taking of leave may be restricted

# **LEGAL COMPLIANCE**

You should ensure that 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.