POSITION SUMMARY
To undertake research and coordinate experimentation and performance testing of an implantable neural stimulator for the blind.

As part of a consortium called Bionic Vision Australia (BVA), faculty from the GSBmE and Electrical Engineering have been awarded an Australian Research Council (ARC) Special Research Initiative grant in Bionic Vision Research and Technologies. Pre-clinical safety testing of an implantable device is an essential precursor to clinical testing scheduled for late 2015. The successful applicant will play a leading role in the conduct of this testing.

ORGANISATIONAL ENVIRONMENT
Overview of the Faculty
UNSW Engineering is a real-world focused faculty which is responsive to the marketplace, maintaining strong and extensive industry links as well as professional and commercial connections.

The Faculty is the pre-eminent centre for engineering studies and research in Australia, offering the widest choice of disciplines and offers a cutting edge education for undergraduate, postgraduate, continuing education and research students, incorporating the latest development in each field.

Statistics
Please refer to the School’s website, located at http://www.engineering.unsw.edu.au/biomedical-engineering/
Reporting Relationships

Supervisor’s title: Professor Gregg Suaning
Other positions reporting to the supervisor:
1x Post Doctoral Fellow (NH&MRC funded position)
7x Professional Staff (ARC funded positions)
8x Research Higher Degree students

Positions reporting to this position (show position titles and levels): None
Other relationships: (if applicable): CIs Morley and Lovell and the Project Manager (James) will work with the Supervisor to coordinate and define priorities within this position.

KEY DUTIES & RESPONSIBILITIES

- Coordinate in research, design and testing of neural devices, interfaces and their fabrication processes.
- Perform the role of study director for in vivo coordination of experiments at a Good Laboratory Practice (GLP) equivalent level including scheduling of staff, arrangement of test specimens, surgical preparation and follow-up assessment.
- Development and documentation of experimental protocols for assessment of neural interfaces, packaging and application of neural stimulation of the visual system.
- Coordinate and/or conduct assessments pre- and post-implant including fundus imaging, OCT, behavioural analysis, electrophysiology, immune responses, cellular interactions and histopathology of specimens fitted with a visual prosthesis.
- Documentation of outcomes in reports to GLP requirements
- Coordination and co-authoring of academic manuscripts.
- Development and documentation of procedures and processes.
- Support specialised fabrication of prototypes.
- Coordinate experiments that are often several days in duration.
- Provide sound advice within the field of the staff member’s research to post-graduate students, and work with post-graduate students to achieve BVA objectives.
- Supervise technical staff and students, and assist in supervision of postgraduate students.
- Any other tasks as determined and directed by the senior academics and chief investigators.
- Cooperate with all health and safety policies and procedures of the University and take all reasonable care that all personal actions and omissions do not impact on the health and safety of others in the university.
- Cooperate with all health and safety policies and procedures of the university and take all reasonable care to ensure that your actions or omissions do not impact on the health and safety of yourself or others.
PRINCIPLE ACCOUNTABILITIES

• Working effectively as part of the UNSW node of the Bionic Vision Australia team.
• Being the primary contact for care specialists at specimen housing facilities.
• Interaction with students and staff to ensure on-time and fault-free construction of implantable devices.
• Attendance at meetings associated with research or the work of the organisational unit to which the research is connected.
• Mentoring of junior engineers, research staff and graduate and undergraduate students in aspects of implant assessment and design.
• Documentation of work conducted and data for scientific papers is completed within necessary timeframes

SELECTION CRITERIA

• PhD or equivalent qualification in biomedical engineering, biomedical science, neuroscience or relevant field with experience in electrophysiology, data analysis, and statistics.
• Understanding and experience of the NHMRC Australian code of practice for care and use of animals for scientific purposes
• Understanding and experience in working under Good Laboratory Practice (GLP).
• Understanding and experience in satisfying the requirements of ISO10993.
• Willingness to learn, and contribute to the development of surgical techniques and test approaches.
• Qualification in or relevant industrial experience in a relevant discipline
• Demonstrated experience in design of experimental protocols
• Proficient in the use of Matlab or other appropriate data analysis software.
• A demonstrated comprehensive working knowledge of animal physiology.
• Proficiency in standard computing tools including word-processing, spreadsheets, etc.
• Strong written, presentation, and communication skills.
• Demonstrate tolerance of ambiguity, the need for self-motivation, and flexibility to adapt to new situations.
• Knowledge of OHS responsibilities and commitment to attending relevant OHS training;
• Knowledge of equal opportunity principles.
• Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training
It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.