UNSW is currently implementing a ten year strategy to 2025 and our ambition for the next decade is nothing less than to establish UNSW as Australia’s global university. We aspire to this in the belief that a great university, which is a global leader in discovery, innovation, impact, education and thought leadership, can make an enormous difference to the lives of people in Australia and around the world.

Following extensive consultation in 2015, we identified three strategic priority areas. Firstly, a drive for academic excellence in research and education. Universities are often classified as ‘research intensive’ or ‘teaching intensive’. UNSW is proud to be an exemplar of both. We are amongst a limited group of universities worldwide capable of delivering research excellence alongside the highest quality education on a large scale. Secondly, a passion for social engagement, which improves lives through advancing equality, diversity, open debate and economic progress. Thirdly, a commitment to achieving global impact through sharing our capability in research and education in the highest quality partnerships with institutions in both developed and emerging societies. We regard the interplay of academic excellence, social engagement and global impact as the hallmarks of a great forward-looking 21st century university.

To achieve this ambition we are attracting the very best academic and professional staff to play leadership roles in our organisation.

UNSW BEHAVIOURS

UNSW recognises the role of employees in driving a high performance culture. The behavioural expectations for UNSW are below.

Please refer to the UNSW Behavioural Indicators for the expectations of your career level (level B/C).
OVERVIEW OF RELEVANT AREA AND POSITION SUMMARY

The Graduate School of Biomedical Engineering (GSBmE) is internationally recognised for its contributions to medical device technologies by dedicated researchers who conduct world class research in medical engineering and science, as well as its educators who offer a high-quality learning experience. The vision of GSBmE is to provide the best research and teaching outcomes relevant to the development of applications in the human health sector to help in the diagnosis, treatment and quality of life of Australians with life-threatening or debilitating diseases and conditions. GSBME provides concurrent undergraduate/postgraduate coursework programs and postgraduate coursework and research programs in the multidisciplinary area of biomedical engineering. It also undertakes rigorous novel research programs in a range of biomedical engineering fields. The School currently has 17 full time staff and approximately 500 undergraduate coursework students, 100 postgraduate coursework students and over 50 PhD students.

For further information about the School, please visit http://www.engineering.unsw.edu.au/biomedical-engineering/

The purpose of this role is to conduct independent research and deliver excellent teaching in the area of Biocomputational Modelling to support the School’s research and teaching strengths in Computational Physiology, Biomechanics, Computational Neuroscience/Electrophysiology or Mathematical Biology.

A level B academic is expected to carry out activities to develop their scholarly research and professional activities both nationally and internationally and to contribute significantly to achieving the teaching and service missions of the School and Faculty.

A Level C academic is expected to develop an internationally recognised research program in the field and to contribute significantly to achieving the teaching and service missions of the School and Faculty.

The role of position reports to the Head of School and has nil direct reports.

RESPONSIBILITIES

It is expected that the appointee at level B or C will progress on a continual satisfactory and upward trajectory in their performance and specific performance expectations will be set individually with the Head of School/Supervisor.

Specific responsibilities for the role of Lecturer (Level B) include (but are not limited to):

- Conduct research of high quality and high impact including attainment of competitive government and industry research funding and publication of outcomes in high quality research outlets.
- Deliver high quality teaching and student experience utilising sound pedagogical methodologies and innovative technologies and from time to time, deliver teaching across a broad engineering discipline.
- High quality supervision of major honours and postgraduate research projects.
- Actively engage with industry and the community to develop significant productive relationships, attract industry funding and participate in professional activities.
- Work collaboratively with peers across the Faculty and UNSW in all aspects of academic endeavour and contribute to mentoring of other staff.
- Involvement in broad administrative functions of the School and/or University, coordination of subjects, attend departmental and/or faculty meetings, involvement in Open Days and recruitment activities and play a major role in planning and/or committee work or other responsibilities, as directed by the Head of School.
- Ensure hazards and risks are identified and controlled for tasks, projects and activities that pose a health and safety risk within your area of responsibility.
The specific duties of the **Senior Lecturer** (Level C) include (but are not limited to):

- Conduct research of high quality and high international impact including attainment of competitive government and industry research funding and publication of outcomes in high quality research outlets
- Play a significant role in research projects including, where appropriate, leadership of a research team
- Deliver high quality teaching and student experience utilising sound pedagogical methodologies and innovative technologies and from time to time, deliver teaching across a broad engineering discipline
- High quality supervision of honours and postgraduate research projects
- Actively engage with industry and the community to develop significant productive relationships, attract industry funding and participate in professional activities
- Work collaboratively with peers across the Faculty and UNSW in all aspects of academic endeavour and contribute to mentoring of other staff
- Involvement in broad administrative functions of the School and/or University, coordination of subjects, attends departmental and/or faculty meetings, involvement in Open Days and recruitment activities and play a major role in planning and/or committee work or other responsibilities, as directed by Head of School
- Ensure hazards and risks are identified and controlled for tasks, projects and activities that pose a health and safety risk within your area of responsibility.

**SELECTION CRITERIA**

Applicants from industry and professional backgrounds should demonstrate their equivalent level of standing as demonstrated by professional experience.

**Lecturer**

- PhD in Biomedical Engineering related to Computational Physiology, Computational Neuroscience/Electrophysiology, Mathematical Biology, Biomechanics or related area.
- A proven track record in using multiphysics modelling packages such as Comsol for the development of models of cells, tissues, organs, physiological processes and/or medical device operation.
- Demonstrated track record in research with outcomes of high quality and high impact with clear evidence of the desire and ability to continually achieve research excellence as well as the capacity for research leadership.
- Demonstrated ability and willingness to deliver high quality and innovative teaching and student experience to both undergraduate and postgraduate students.
- A track record of significant involvement with the profession and/or industry.
- High level communication skills and ability to network effectively and interact with a diverse range of students and staff.
- Demonstrated ability to work in a team, collaborate across disciplines and build effective relationships.
- Willingness to undertake any compliance and supervisor training as required.
- Ability and capacity to implement required UNSW health and safety policies and procedures.
Senior Lecturer

- PhD in Biomedical Engineering related to Computational Physiology, Computational Neuroscience/Electrophysiology, Mathematical Biology, Biomechanics or related area.
- A proven track record in using multiphysics modelling packages such as Comsol for the development of models of cells, tissues, organs, physiological processes and/or medical device operation.
- Demonstrated track record in research with outcomes of high quality and high international impact with clear evidence of the desire and ability to continually achieve research excellence as well as the capacity for research leadership.
- Demonstrated ability and willingness to deliver high quality and innovative teaching and student experience to both undergraduate and postgraduate students.
- Experience in successfully recruiting and supervising high calibre students.
- Demonstrated ability to interact with the profession and industry.
- High level communication skills and ability to network effectively and interact with a diverse range of students and staff.
- Demonstrated ability to work in a team, collaborate across disciplines and build effective relationships.
- Willingness to undertake any compliance and supervisor training as required.
- Ability and capacity to implement required UNSW health and safety policies and procedures.

PRE EMPLOYMENT CHECKS REQUIRED FOR THIS POSITION

Verification of qualifications

*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.*