

Position Description

Postdoctoral Fellow

Position Number: 00060579
Position Title: Postdoctoral Fellow
Date Written: April 2018

Faculty / Division: UNSW Medicine
School / Unit: School of Medical Sciences
Position Level: Level A

ORGANISATIONAL ENVIRONMENT

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.

Demonstrates Excellence

Delivers high performance and demonstrates service excellence

Drives Innovation

Thinks creatively and develops new ways of working. Initiates and embraces change

Builds Collaboration

Works effectively within and across teams. Builds relationships with internal/external stakeholders to deliver outcomes

Embraces Diversity

Values individual differences and contributions of all people and promotes inclusion

Displays Respect

Treats others with dignity and empathy. Communicates with integrity and openness

OVERVIEW OF RELEVANT AREA AND POSITION SUMMARY

UNSW Medicine is a national leader in learning, teaching and research, with close affiliations to a number of Australia's finest hospitals, research institutes and health care organisations. With a strong presence at UNSW Kensington campus, the faculty have staff and students in teaching hospitals in Sydney as well as regional and rural areas of NSW including Albury/Wodonga, Wagga Wagga, Coffs Harbour and Port Macquarie.

The School of Medical Sciences is the largest School within UNSW Medicine, and one of the largest at UNSW. The School is based largely within the Wallace Wurth (Medicine) Building on the Kensington campus, but also includes the UNSW Lifestyle Clinic on High Street, Randwick. Located within School is the EMBL Australia node in Single Molecule Science at UNSW. The group conducts research into cytoskeletal dynamics and cellular mechanobiology of T cells and tumour cells, notably during migration through complex 3-dimensional matrices. The group is also part of the ARC Centre of Excellence in Advanced Molecular Imaging at the University.

The Postdoctoral Fellow will conduct research at the interface of cell and computational biology, mathematics and statistics, agent-based modelling, live-cell microscopy, image analysis-based tracking and swarm robotics within the Biro group at the EMBL Australia node in Single Molecule Science at UNSW. The position will drive a research project, provide experimental support other students and researchers, help define and drive new research directions aligned with the overall goals of the group and the single molecule science unit and help supervise students and research assistants.

The role of Postdoctoral Fellow reports to Group Leader and has no direct reports.

RESPONSIBILITIES

Specific responsibilities for this role include:

- Design and perform research experiments in the area of Computational Biology and Modelling
- Participate directly in the study design and implementation
- Analyse and interpret research data and communication to the Project Leader
- Assist in the preparation of manuscripts, abstracts, posters and grant/fellowship applications as appropriate
- Promote the aims and objectives of the Centre through activities such as presenting research findings at relevant meetings and making presentations at national and international scientific conferences.
- Establish and maintain collaborations with potential and current research partners.
- Train and supervise research staff and students, as required
- Perform administrative duties as required associated with the function of the research group
- Cooperation with all health and safety policies and procedures of the university and take all reasonable care to ensure that their actions or omissions do not impact on the health and safety of others in the university

SELECTION CRITERIA

- A PhD in computational biology, maths/stats, computer science, robotics, bioinformatics, physics, or related field
- Demonstrated expertise in programming and mathematical/statistical methods

- A track record in publishing scientific research papers in a relevant area or field, and experience in grant writing
- Excellent oral and written communications skills and attention to detail
- Experience in student / technical staff supervision or teaching
- Proven ability to work effectively as a member of a multidisciplinary team
- Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training

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.