Position Description

Postdoctoral Fellow

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.

VALUES IN ACTION: OUR UNSW BEHAVIOURS

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

- Delivers high performance and demonstrates service excellence.
- Thinks creatively and develops new ways of working. Initiates and embraces change.
- Works effectively within and across teams. Builds relationships with internal and external stakeholders to deliver on outcomes.
- Values individual differences and contributions of all people and promotes inclusion.
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 (SoMS) 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 Museum of Human Disease in the Samuels Building and the UNSW Lifestyle Clinic on High Street, Randwick.

The role of Postdoctoral Fellow is an exciting opportunity to work closely with senior researchers and provide support across a number of ongoing projects in various areas of the research. The successful applicant will drive a research project in the Ananthanarayanan group, experimentally support other students and researchers in the group, help define and drive new research directions aligned with the overall goals of the group and the single molecule science unit.

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

RESPONSIBILITIES

Specific responsibilities for this role include:

- Lead the preparation, research analysis and produce/contribute to conference abstracts and publications for submission to peer-reviewed journals;
- Publish and present research results at academic/industry national and international conferences.
- Provide scholarly supervision and mentor undergraduate, honours level and post graduate research students and actively provide guidance on research methods
- Design, develop and lead research ensuring all research is conducted to methodological and ethical standards
- Formulate study design, programmes, and implementation timelines.
- Collaborate effectively and maintain strong relationships with relevant researchers within the institution, stakeholders and policy makers and contribute to the teaching program within the field of research expertise.
- Develop proposals for national and international competitive research grant funding.
- Complete administrative functions primarily connected to area of research.
- Cooperate 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.
SELECTION CRITERIA

- PhD in bioengineering, cell biology, biophysics, or related discipline. Candidates who have submitted their PhD thesis may also apply, but joining will be contingent on award of degree.
- Demonstrated experience in microscopy techniques, including total internal reflection fluorescence microscopy and confocal microscopy.
- Demonstrated experience in single-molecule imaging, particularly in *in cellulo* mammalian systems.
- Demonstrated experience in single-particle tracking and biophysical characterisation of single-molecule trajectories.
- Demonstrated expertise in cell and tissue culture techniques.
- Demonstrated expertise in protein depletion methodologies including siRNA or CRISPR.
- Demonstrated expertise in cell biology, particularly cytoskeletal and motor protein biology, and cargo trafficking.
- Demonstrated expertise in molecular biology techniques.
- Proven track record in publishing scientific research papers and communicating research at national and international conferences via poster and/or oral presentations.
- Excellent oral and written communication skills, attention to detail and the ability to liaise effectively with all levels of staff, students, management, collaborators and members of the public with relevant data analysis skills.
- Proven ability in working effectively as a member of a multidisciplinary team and in supervising technical staff and students.
- 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.*