Position Description

Senior Research Fellow, Associate Professor

Position Summary

The Kirby Institute is a world-leading health research institute at UNSW Sydney. We work to eliminate infectious diseases, globally. Our specialisation is in developing health solutions for the most at-risk communities. Putting communities at the heart of our research, we develop tests, treatments, cures and prevention strategies that have the greatest chance of success.

The Senior Research Fellow, Associate Professor (Level D) will lead the analytical components of, and make significant research contributions to, two externally funded research projects that both involve large and complex single-cell RNA sequencing data sets. Owing to the highly competitive and potentially high impact nature of both research projects, the appointed researcher will have the high-level expertise in computational immunology and experience to lead the computational analysis of data for these projects to timely completion. This will also involve the supervision and training of postgraduate students in the computational and bioinformatics analysis of single-cell RNA sequencing data.

The role of Senior Research Fellow, Associate Professor reports to the Professor and has no direct reports.

Accountabilities

Specific accountabilities for this role include:
• Lead original/innovative computational immunology research focused on the analysis of single-cell RNA sequencing data, including both gene expression and immune receptor data, for two externally funded research projects within the Kirby Institute at UNSW.

• Supervise and train postgraduate students in the computational and bioinformatics analysis of single-cell RNA sequencing data.

• Contribute to high quality and high impact research publications that will be recognised at a national and international level.

• Make contributions to the discipline which are recognised at a national and international level.

• Make an independent contribution through professional practice and expertise which expands knowledge or practice in discipline area.

• Lead or contribute to national and internationally significant research grant schemes.

• Achieve peer recognition at national level (and some at international level) and establish research network/s (based on the norms of the discipline) at an international level.

• Mentor and guide students, group and colleagues and supports and mentor post-doctoral fellows.

• Engage with academic, professional, and international organisations relevant to the objectives of the School and Faculty.

• Participate in major research collaborations.

• 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.

• Align with and actively demonstrate the UNSW Values in Action: Our Behaviours and the UNSW Code of Conduct.

• 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.

Skills and Experience

• A PhD in mathematics, physics, or other quantitative discipline.

• Demonstrated experience in leading and undertaking the computational analysis of large and complex immunological data sets, including single-cell RNA sequencing data and immune receptor repertoire data.

• Significant track record in research leadership in the field of computational immunology, with a particular focus on immune receptor repertoires, with outcomes of high quality and high international impact.

• Proven track record of supervision of postgraduate students and postgraduate training in computational and analytical techniques relevant to the analysis of immunological data, including single-cell RNA sequencing data and immune receptor repertoire data.
• Proven commitment to proactively keeping up to date with discipline knowledge and developments.
• Demonstrated academic excellence and outstanding contribution to research and scholarship.
• Demonstrated leadership in building engagement and partnerships with the profession and/or industry.
• Evidence of highly developed interpersonal and organisational skills.
• An understanding of and commitment to UNSW’s aims, objectives and values in action, together with relevant policies and guidelines.
• 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

About this document
This Position Description outlines the objectives, desired outcomes, key responsibilities, accountabilities, required skills, experience and desired behaviours required to successfully perform the role.

This template is not intended to limit the scope or accountabilities of the position. Characteristics of the position may be altered in accordance with the changing requirements of the role.