POSITION DESCRIPTION

Research Associate

Position Level | A
Faculty/Division | Medicine
Position Number | 00094050
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Position Summary

The Kirby Institute is a leading global research institute dedicated to the prevention and treatment of infectious diseases. Established in 1986 in response to the then emerging HIV epidemic, the Kirby Institute now contributes to knowledge on a broad range of diseases, including viral hepatitis and sexually transmissible infections. Focussing on the coordination of national surveillance programs, population health and epidemiological research, clinical and behavioural research and clinical trials, the Kirby Institute’s research projects are conducted in partnership with communities most affected by epidemics.

The Kirby Institute aims to find ways to control infections, develop new therapies and preventative vaccines, as well as providing critical leadership to decision makers in Australia and internationally on the most effective, efficient, and sustainable strategies to address epidemics.

The Immunovirology & Pathogenesis Program (IVPP) is predominantly a laboratory-based group. The program has a range of investigator driven projects focussed on viral immuno-pathogenesis especially with regards HIV and SARS-CoV-2 with particular interests in developing novel immuno-therapeutics for COVID-19. IVPP’s work is underpinned by state-of-the-art functional and phenotypic cellular assays and a variety of molecular assays and genetic manipulations. Currently, the laboratory is involved in a number of clinical studies regarding the treatment and prevention of viral infections.

The primary purpose of this Senior Research Associate position is to drive the collaborative research effort in the response to the SARS-CoV-2 pandemic. The collaborative effort current encompasses understanding the immune correlates of effective immune responses against SARS-CoV-2, especially with regards to neutralising antibody responses. This will encompass the generation of novel reagents and the conduct and development of SARS-CoV-2 high content screening assay development of analysis plans for the complex data sets generated. The appointee will need to have expertise in cellular, molecular research techniques and have experience in PC3 containment facilities.

The role of Research Associate reports to the Associate Professor and has no direct reports.
**Accountabilities**

- Independently develop reagents and screening assays (cellular and molecular) for SARS-CoV-2 therapeutic screening.
- Work with analytic teams and IT professionals to develop analysis plans for large high content datasets.
- Develop and work on SARS-CoV-2 reverse genetics platforms.
- Independently develop whole viral genome sequencing for analysis of primary and expanded viral stocks.
- Develop analysis plans for the dissection of the complex data sets derived from these assays
- Prepare and present research findings at local, national and international seminars and conferences as required.
- Work with a continuum of stakeholders to submit key reports and manuscripts that will impact the Covid-19 response.
- Prepare concept sheets, laboratory protocols, study designs, ethics committee and institutional bio-safety committee submissions, as well as proposals (inclusive of budgets) and reports to various granting bodies.
- Prepare manuscripts relating to this research for publication in high impact journals, and assist in the preparation of patent applications.
- Actively seek and secure external funding fellowships and grants
- Supervise research projects conducted by Honours and post graduate research students
- Develop and train future staff and students to conduct assays and perform analysis
- Work with others in the program ensure upkeep and maintenance of essential equipment and where required help with the conduct and documentation of routine neutralisation assays
- Keep accurate records of all experimental data, as well up-to-date protocols, and procedures
- Other duties as requested by the Supervisor
- 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**

- PhD in virology or cell biology (or a related/relevant discipline) or an equivalent level of knowledge gained through any other combination of education, training, or experience
- Proven evidence of publications in reputable peer reviewed journals and proven ability to prepare research findings for presentation
- Experience of working with and liaising with a range of collaborators including commercial partners
• An in depth understanding of biological risk and mitigation, with knowledge of Australian OGTR guidelines and compliance

• Demonstrated research experience in biomedical research, including experience in advanced cellular and molecular biology techniques for the characterisation of Human immune responses. Experience in working in PC3 containment environment is desirable

• Proven ability to establish new laboratory-based assays independently

• Proven ability in working effectively as a member of a multidisciplinary team and in supervising technical staff and students

• Excellent oral and written communication skills and attention to detail with relevant computing and data analysis 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.