



Make  
it matter.

## POSITION DESCRIPTION

# Research Assistant

---

Position Level	5
Faculty/Division	Science
Position Number	00204783
Original document creation	25/10/2024

---

### Position Summary

The Research Assistant will support ongoing projects by the Wook Lab within the School of Biotechnology & Biomolecular Sciences, Faculty of Science. The position will assist and contribute to the investigation of the pregnancy and early life virome (population of all viruses infecting humans) dynamics and its potential contribution to chronic diseases (e.g. type 1 diabetes, coeliac disease, asthma and allergy).

The Research Assistant will assist with research tasks related to these projects, such as critically appraising genomic data through in-depth bioinformatics analyses and preparing data for peer-review publication.

The Research Assistant reports to Dr Ki Wook Kim and has no direct reports.

### Accountabilities

Specific accountabilities for this role include:

- Assist with curation, exploration, visualisation and statistical analyses of complex high-throughput sequencing datasets (metagenomic and human genome) for their association with clinical outcomes of interest (e.g. type 1 diabetes).
- Assist with research projects focused on the human virome, involving a combination of bioinformatics and biostatistics under the direction of the supervisor.
- Assist with troubleshooting of research protocols and implementing new bioinformatic pipelines.
- Assist with supervision of research and/or data analysis performed by other team members related to bioinformatics.
- Assist with discipline-appropriate research activities, e.g. writing of scientific articles, protocols and literature reviews.

- Participate in and/or present at conferences and/or workshops relevant to the project as required.
- Critically appraise current bioinformatic methods and conduct systematic literature reviews.
- Collaborate and maintain relationships with researchers and stakeholders associated with the projects and research groups and participate in meetings and discussions as required.
- 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 tertiary qualification in Bioinformatics, Computer Science, Molecular Biology or Virology.
- Knowledge and experience in phylogenetics are desirable.
- Developed bioinformatics and data analysis skills working with molecular sequencing data.
- Proficiency with at least one programming language, preferably R or Python, and demonstrated experience in the use of relevant software and statistical packages.
- Experience developing workflows using scripting, ideally with domain-specific languages (e.g. Snakemake, Nextflow).
- Experience working with the command line in UNIX-like computing environments, high-performance computing clusters, and preferably cloud computing.
- Proven high level organisational skills, ability to establish priorities, with excellent attention to detail.
- Excellent interpersonal skills and the ability to communicate effectively with a variety of internal and external stakeholders from diverse backgrounds and levels of seniority.
- Demonstrated ability to identify, analyse and solve problems to provide accurate and appropriate outcomes.
- Ability to make sound judgements and work both independently and as part of a team.
- 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.

### 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.