**UQ Winter Research Project Description**

Please use this template to create a description of each research project, eligibility requirements and expected deliverables. Project details can then be uploaded to each faculty, school, institute, and centre webpage prior to the launch of the program.

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| **Project title:** | **Enhancing Automated Surveillance Reports: Revising R Code for Improved Public Health Reporting** |
| **Hours of engagement & delivery mode** | Project duration is 4 weeks, approx. 30 hours a week.  The placement is on-site in the UQ Poche offices at Toowong. |
| **Description:** | The ATLAS Indigenous Primary Care Surveillance and Research Network was established to better explain the longstanding disparity in sexually transmissible infections (STIs) and blood-borne viruses (BBVs) among Aboriginal and Torres Strait Islander peoples. ATLAS extracts and analyses de-identified clinical data to monitor STIs and BBVs from around 90 Aboriginal and Islander clinical services nationally and is required to provide both service-specific six-monthly reports shared via email and ongoing access to an interactive dashboard for each clinic to view and use its own data.  This four-week internship focuses on refining and updating the existing R code used for automating STI and BBV surveillance reports. The regular reports delivered to participating services address 12 performance measures considered to be best practice in STI and BBV screening and clinical management. This project aims to align automated reports with recent changes in reporting needs, ensuring enhanced usability.  The student will revise current R-based report automation to incorporate the changes necessary for addressing feedback from stakeholders. The student will be familiarised with existing report structures, data sources, and current R scripts and identify the required modifications based on updated reporting needs. |
| **Expected learning outcomes and deliverables:** | Deliverables for the project will be updated R scripts for generating a new version of surveillance reports, alternatively, the student will have the option to produce the reporting workflow in Python; and a short comparison report, summarising changes to the report and supporting documentation for ongoing use and maintenance of files.  Throughout this project, the student will develop skills in public health data analysis and reporting and gain experience working with real-world surveillance data. The student will learn how to automate epidemiological reporting using existing structured workflows and best practices in data validation, reproducibility, and documentation. |
| **Suitable for:** | This project would suit an advanced undergraduate or postgraduate student in public health, epidemiology, data science, or a related field.  Basic knowledge of R programming and an interest in public health informatics is required. |
| **Primary Supervisor:** | Shellee Williams |
| **Further info:** | Please contact Carol El-Hayek, ATLAS manager [c.elhayek@uq.edu.au](mailto:c.elhayek@uq.edu.au)  Can be contacted by students prior to submitting an application |