Job Description

Position Title	Research Assistant/Research Officer	**Level**	A/B
Reports to (role)	The Professor Fiona Stanley Chair in Child Health Research	**Career Stream**	Research
Team	Global Disease Modelling		
Location	The Kids Research Institute Australia, Perth Children's Hospital, 15 Hospital Ave, Nedlands		

PURPOSE OF POSITION

The Research Assistant/Research Officer (level dependent on experience) will support the conceptualisation, development, optimisation and application of cutting-edge mathematical and statistical methodologies to estimate health impact and understand the role of existing and novel vaccines against Group A Streptococcus (Strep A). This work is crucial for supporting global efforts towards reducing disease burden reduction and eliminating health conditions caused by Strep A infection. This role will support Research and Development (R&D), policy and implementation decisions regarding Strep A vaccines in clinical trials, their combined use with other interventions, and their potential applications to reduce or eliminate disease.

This role will work collaboratively with Global Disease Modelling (GDM) team members, various scientists, clinicians, funding bodies, global health partners, and policymakers to address the burden of Strep A associated disease and mortality.

KEY RESPONSIBILITIES

Key Responsibilities	Tasks required to achieve Key Responsibilities	Measures
Technical Skills - Modelling	• Conduct data support, data integration, statistical analysis, and model development for Strep A and related disease burden: extend and refine existing models to include new data sources and add new functionality. • Assist with modelling analysis, new mathematical and statistical and machine learning models, and workflows related to addressing questions on Strep A vaccine impact for different stakeholders. • Contribute to building innovative tools to support the automation of the collection, quality assurance, manipulation, analysis, interpretation and dissemination of data and modelling inputs and outputs.	• New methodologies are developed and applied. • Quality of model inputs, workflows and analysis. • Effective dissemination of research outcomes. • Quality of data collation, archiving and analysis. • Research is conducted using best practice, ensuring the reusability and scalability of code within teams. • Model/analysis outputs are delivered to

	• Contribute to adapting and enhancing existing models to address specific epidemiological or operational questions. Under the guidance of senior team members, design and implement scalable, efficient solutions to support disease models and address questions on disease dynamics and vaccine impact. • Undertake and support literature reviews, data searches and data extraction, including extraction of needed metrics for Strep A modelling from published literature and official reports. • Maintain data-and code-management practices, including thorough documentation and version control, to ensure data replicability and cross-compatibility with past and future group products. • Manage own coding, research, project deliverables, and administrative activities, including small-scale project management to co-ordinate multiple aspects of the work.	stakeholders while meeting reporting and output deadlines. • Confidential data is securely maintained. • Project timelines are met. • Positive feedback from internal and external stakeholders.
Team Development and Participation	• Establish and maintain clear lines of communication and ensure team members are informed of project progress. • Undertake professional development training as required for specific projects. • Stay updated with advancements in disease modelling, AI-assisted modelling, and health data science, contributing innovative ideas to the team's research and development efforts. • If appropriate, present research findings from this work at selected national and international meetings or conferences.	• Acknowledged as working collaboratively and effectively. • Deliver expected work within project timescales. • Continuous self-training in appropriate technologies, scientific and research related disciplines. • Positive feedback from line manager and team members.
Workplace Safety	• Take reasonable care for your own safety and health and avoid harming the safety and health of others through any act or omission at work. • Identify and assess workplace hazards and apply hazard controls. • Report every workplace injury, illness or near miss, no matter how insignificant they seem. • Abide by Institute policies and procedures.	• Responsibilities are embedded in work practices. • Hazards are effectively managed or reported. • Accidents and incidents are reported in a timely manner. • All applicable safety policies and procedures are sought, understood and implemented.

ESSENTIAL CRITERIA	
Qualifications:	Bachelor's degree with Honours in a relevant quantitative subject area (e.g. epidemiology, statistics, mathematics, public health). A master's degree or PhD is preferred.
Essential Skills, Knowledge & Experience:	• Strong computer, organisational, analytical and problem-solving skills. • Experience in mathematical and/or statistical modelling. • Experience with R, R studio, Python or other equivalent software. • Demonstrable ability to think abstractly about real-world systems and design mathematical/statistical models answering questions about them. • Excellent ability to use numerical analysis methods to develop algorithms and perform computations. • Ability to work independently and as part of a collaborative team to initiate, plan and deliver research projects from conception to publication. • Fluent with asynchronous communication and working in a hybrid environment. • Demonstrated written and verbal communication skills with proficiency in scientific writing. • A high attention to detail and willingness to diligently self-scrutinize deliverables and coordinate with other team members.
Desirable Skills, Knowledge & Experience:	• Strong interest in the epidemiology of Strep A disease and/or other infectious (vector borne) diseases and health systems research in local and global contexts.

DIRECT REPORTS	0

Approved by:	Melissa Penny, Team Head.
Date approved:	*18.11.2026*
Reviewed by P&C:	*18.11.2026*