

Job Description



Position Title	Research Officer	Level	A
Reports to (role)	Honorary Research Fellow, Global Malaria Epidemiology Team Lead	Career Stream	Research
Team	Child Health Analytics		
Location	The Kids Research Institute Australia Perth Children's Hospital, 15 Hospital Ave, Nedlands		

PURPOSE OF POSITION

This Research Officer will contribute to our mission of mapping the burden of *Plasmodium falciparum* and *Plasmodium vivax* malarias. The role will involve application of geospatial modelling approaches across a wide range of epidemiological settings, interpretation of results, and liaising with external research collaborators.

This Research Officer will work collaboratively with other scientists within the wider Malaria Atlas Project (MAP) group to produce global, national, and sub-national estimates of the burden of malaria and be expected to follow and contribute to coding and data-management standards. The role will involve developing, maintaining, and analysing datasets related to key interventions used to reduce malaria transmission. The role will require managing large epidemiological datasets, producing visualisations of these data and results of analysis; and the preparation of scientific reports and peer-reviewed publications.


KEY RESPONSIBILITIES

Key Responsibilities	Tasks required to achieve Key Responsibilities	Measures
Geospatial modelling	<ul style="list-style-type: none"> Under the supervision of senior staff within MAP, help implement and develop MAP's spatiotemporal modelling infrastructure to predict malaria transmission and burden. Develop or adapt statistical methodologies as necessary to address research needs. Work collaboratively with researchers at MAP and partner organizations such as WHO, IHME, and CHAI to produce estimates of malaria, acting as a source of information and advice to other members of the group. Apply due diligence by scrutinizing model results for all deliverables, reviewing and refining theories as appropriate. 	<ul style="list-style-type: none"> Application of models to produce project outputs. Creation of novel modelling approaches. Proactively engage with group members, creating documentation. Create testing strategies and apply an understanding of malaria epidemiology.
Research Management	<ul style="list-style-type: none"> Contribute to data-gathering efforts to support the production of global malaria burden estimates. 	<ul style="list-style-type: none"> Proactive engagement with MAP staff. Identify and acquire key data sources.

	<ul style="list-style-type: none"> • Produce coverage estimates of key interventions including insecticide treated bednets, seasonal malaria chemoprevention, indoor residual spraying, and novel malaria vaccines. • Create visualisations of data and present these to a variety of audiences with different technical understanding. • Identify and troubleshoot technical or scientific problems, working collaboratively with database experts and scientific programmers. • Maintain rigorous data- and code-management practices, including thorough documentation and version control, to ensure data replicability and cross-compatibility with past and future MAP products. 	<ul style="list-style-type: none"> • Cultivate relationships with key stakeholders to foster collaboration. • Create and present visualisations. • Identification and resolution of issues. • Document code and store it in the code repository.
Publications and engagement	<ul style="list-style-type: none"> • Contribute ideas for new research projects and for generating research funding. • Contribute to and lead the preparation of scientific reports and journal articles for publication of research findings in open access journals. • Present the research findings at selected international conferences. • Travel to collaborator sites in Europe, the United States, Africa, and Asia. 	<ul style="list-style-type: none"> • Raise and explore possibilities with senior staff in the group. • Write articles for publication in peer-reviewed journals. • Attend conferences as appropriate.
Time-management	<ul style="list-style-type: none"> • Manage own academic research and administrative activities, including small-scale project management to coordinate multiple aspects of the work to meet deadlines. 	<ul style="list-style-type: none"> • Complete expected work within project timescales.
Workplace Safety	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • PhD or equivalent experience in mathematics, statistics, epidemiology, or a similar quantitative discipline
Essential Skills, Knowledge & Experience:	<ul style="list-style-type: none"> • Demonstratable expertise in Bayesian or frequentist statistical modelling • Expertise developing new statistical methods or adapting existing approaches to new applications. • Expertise in scientific computing, big data, data science, or distributed computing. • Ability to manage own academic research and meet defined milestones on time. • Demonstrable evidence of having worked successfully within a collaborative, team-based research setting. • Excellent communication skills (oral and written).
Desirable Skills, Knowledge & Experience:	<ul style="list-style-type: none"> • Knowledge of malaria epidemiology and experience in malaria research. • Experience modelling or mapping infectious disease burden. • Demonstrable commitment to using best practices in writing code, including the use of source control, documentation, and coding standards. • Experience of using Cloud platforms such as AWS. • Experience writing code for others to use and the use of Git repositories. • Competitive publication record for career stage.

DIRECT REPORTS	N/A
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Approved by:	<i>Peter Gething</i> 
Date approved:	19.09.2025
Reviewed by P&C:	19.09.2025

Job Description



Position Title	Senior Research Officer	Level	B
Reports to (role)	Honorary Research Fellow, Global Malaria Epidemiology Team Lead	Career Stream	Research
Team	Child Health Analytics		
Location	The Kids Research Institute Australia Perth Children's Hospital, 15 Hospital Ave, Nedlands		

PURPOSE OF POSITION

This Senior Research Officer will contribute to our mission of mapping the burden of *Plasmodium falciparum* and *Plasmodium vivax* malarias. The role will involve application of geospatial modelling approaches across a wide range of epidemiological settings, interpretation of results, and liaising with external research collaborators. This role would suit candidates with substantial experience developing statistical models and strong background working in the field of malaria.


This Senior Research Officer will work collaboratively with other scientists within the wider Malaria Atlas Project (MAP) group to produce global, national, and sub-national estimates of the burden of malaria and be expected to follow and contribute to coding and data-management standards. The role will involve developing, maintaining, and analysing datasets related to key interventions used to reduce malaria transmission. The role will require managing large epidemiological datasets, producing visualisations of these data and results of analysis, and leading in the preparation of scientific reports and peer-reviewed publications.

KEY RESPONSIBILITIES

Key Responsibilities	Tasks required to achieve Key Responsibilities	Measures
Geospatial modelling	<ul style="list-style-type: none"> Help implement and develop MAP's spatiotemporal modelling infrastructure to predict malaria transmission and burden. Develop or adapt statistical methodologies as necessary to address research needs. Work collaboratively with researchers at MAP and partner organizations such as WHO, IHME, and CHAI to produce estimates of malaria. Act as a source of information and advice to colleagues at MAP. Apply due diligence by scrutinizing model results for all deliverables, including reviewing and refining methods as appropriate. 	<ul style="list-style-type: none"> Application of models to produce project outputs. Creation of novel modelling approaches. Proactively engage with group members, creating documentation. Create testing strategies and apply an understanding of malaria epidemiology.

Research Management	<ul style="list-style-type: none"> • Contribute to and, as appropriate, lead data-gathering efforts to support the production of global malaria burden estimates. • Produce coverage estimates of key interventions including insecticide treated bednets, seasonal malaria chemoprevention, indoor residual spraying, and novel malaria vaccines. • Create visualisations of data and present these to a variety of audiences with different technical understanding. • Identify and troubleshoot technical or scientific problems, working collaboratively with database experts and scientific programmers. • Maintain rigorous data- and code-management practices, including thorough documentation and version control, to ensure data replicability and cross-compatibility with past and future MAP products. 	<ul style="list-style-type: none"> • Proactive engagement with MAP staff. • Identify and acquire key data sources. • Cultivate relationships with key stakeholders to foster collaboration. • Create and present visualisations. • Identification and resolution of issues. • Document code and store it in the code repository.
Publications and engagement	<ul style="list-style-type: none"> • Contribute ideas for new research projects and for generating research funding. • Contribute to and, as appropriate, lead the preparation of scientific reports and journal articles for publication of research findings in open access journals. • Present the research findings at selected international conferences. • Travel to collaborator sites in Europe, the United States, Africa, and Asia. 	<ul style="list-style-type: none"> • Raise and explore possibilities with senior staff in the group. • Present research findings internally, to collaborative partners, and at conferences and meetings. • Write articles for publication in peer-reviewed journals.
Time-management	<ul style="list-style-type: none"> • Manage own academic research and administrative activities, including small-scale project management to coordinate multiple aspects of the work to meet deadlines. 	<ul style="list-style-type: none"> • Complete expected work within project timescales.
Workplace Safety	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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:	PhD or equivalent experience in mathematics, statistics, epidemiology, or a similar quantitative discipline
Essential Skills, Knowledge & Experience:	<ul style="list-style-type: none"> • Strong knowledge of malaria epidemiology and 3+ years' experience in malaria research at the post-doctoral level or higher. • Demonstratable expertise in Bayesian or frequentist statistical modelling. • Expertise developing new statistical methods or adapting existing approaches to new applications. • Expertise in scientific computing, big data, data science, or distributed computing. • Ability to manage academic research and meet defined milestones on time. • Demonstrable evidence of having worked successfully within a collaborative, team-based research setting. • Excellent communication skills (oral and written).
Desirable Skills, Knowledge & Experience:	<ul style="list-style-type: none"> • Experience modelling or mapping malaria burden and/or key malaria interventions. • Experience supervising students and/or junior research staff. • Demonstrable commitment to using best practices in writing code, including the use of source control, documentation, and coding standards. • Experience of using Cloud computing platforms such as AWS. • Experience writing code for others to use and the use of Git repositories. • Competitive publication record and for career stage. • Experience writing successful applications for research funding.
DIRECT REPORTS	Research Assistant

Approved by:	<i>Peter Gething</i> 
Date approved:	19.09.25
Reviewed by P&C:	19.09.25