

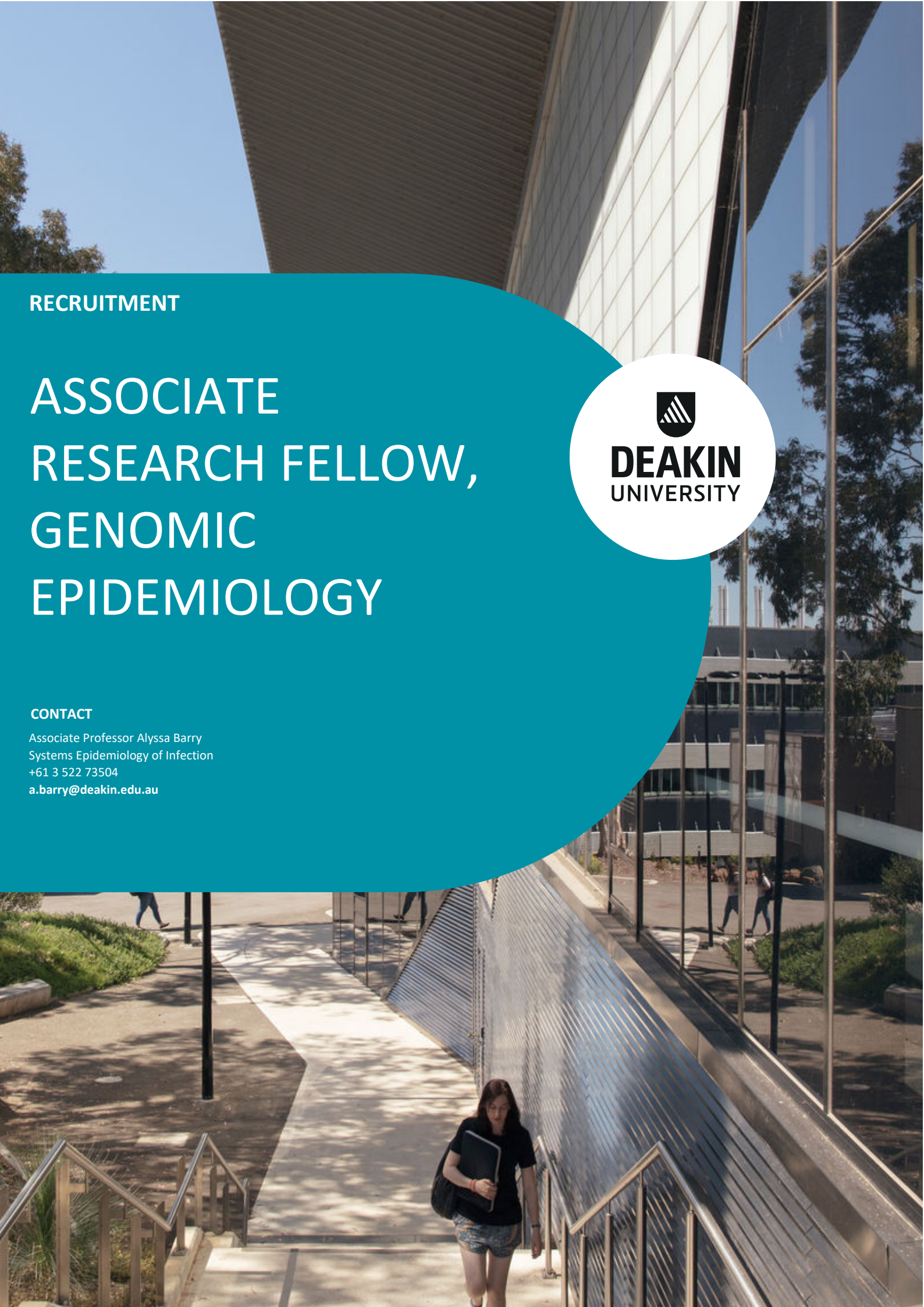
RECRUITMENT

ASSOCIATE RESEARCH FELLOW, GENOMIC EPIDEMIOLOGY



CONTACT

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About Deakin

**TOP
2%**
of the world's
universities¹

No.1
in Victoria for
student satisfaction
2010–2017²

No.214
ARWU global ranking
of world universities³
research capabilities

Deakin's growing reputation is reflected in its rapid rise in international rankings; Deakin entered the prestigious Academic Ranking of World Universities for the first time in 2014 and now ranks an estimated 214 (ARWU 2017). Deakin is ranked 29 in the QS ranking of the world's top universities under 50 years. Ninety percent of Deakin's research was rated at or above world standards in the Australian Government's Excellence in Research for Australia (ERA).

Established in 1974, Deakin University was named after the leader of the Australian Federation movement and the nation's second Prime Minister, Alfred Deakin.

Deakin University has five campuses, one in Melbourne's eastern suburbs, two in the port city of Geelong and one in Warrnambool on the south-west coast of Victoria. Deakin's fastest growing campus is in the Cloud where over 14 000 students study predominantly online. All students, regardless of their campus or mode of study, benefit from Deakin's award-winning digital environment.

Deakin is proud of its inclusive and student-focussed culture and its reputation for using innovative digital solutions to provide an engaging and personalised learning experience. Deakin is committed to lifelong learning, providing students with choices about how, when and where learning occurs.

Deakin's four faculties offer courses across the arts, design, science, sport, nutrition, architecture, business, law, medicine, optometry, engineering, nursing, allied health, psychology and teaching.

With 58 000 students Deakin is one of Australia's largest universities and is ranked in the top 2 per cent of the world's universities in the major international rankings (ranked 29 in the QS ranking of the world's universities under 50 year).

As a Victorian university with a global impact, Deakin is translating its research into the commercial outcomes that will drive the innovation Australia's economy needs now and into the future. Research at Deakin focusses on innovation and robust partnerships with industry and business and it is building a formidable international reputation in areas of emerging national social, economic and political priority in its core areas of health, carbon fibre, energy and cyber security. Deakin has integrated its research growth plan into its overall strategy of service, developing its base in advanced manufacturing, which is vital for the Geelong community and Information technology, which is strong in the surrounds of its Melbourne campus.

Our strategy

Deakin's vision and mission is articulated in its strategic plan *LIVE the future: 2017-2020*. Through *LIVE the future*, Deakin aspires to be Australia's premier university in driving the digital frontier, enabling globally connected education for the jobs of the future, and research that makes a difference to the communities Deakin serves.

Informed by its Australian and Victorian context and engaged locally in the communities it serves, Deakin advances:

- Learning – offering students a brilliant education where they are and where they want to go
- Ideas – making a difference through world-class innovation and research
- Value – strengthening our communities, enabling our partners and enhancing our enterprise
- Experience – delighting our students, our alumni, our staff and our friends.

These four interconnecting elements form the acronym *LIVE*, and together they articulate the Deakin promise to its students, staff, alumni, partners and friends.



Faculty of Health

Deakin Health is recognised in Australia and internationally for its teaching, training, research and service. We are one of the fastest growing health faculties in Australia. Our teaching, research and service contribute to improved health and wellbeing, and to strengthening the health and human services sectors in Australia and the Asia-Pacific. We assist governments, communities and organisations to develop a wide variety of health and social programs and policies.

The Faculty of Health teach a large variety of health disciplines and sub-disciplines at campuses and health services in Geelong, Burwood, Ballarat, Warrnambool and other locations in Melbourne, Western Victoria and further afield. Our courses are delivered both on campus and online via our Cloud Campus using a state-of-the-art blend of face-to-face and online teaching methods.

The Faculty is made up of five schools:

- School of Exercise and Nutrition Sciences
- School of Health and Social Development
- School of Medicine
- School of Nursing and Midwifery
- School of Psychology

Through our Schools and research groups we work collaboratively with a wide range of external organisations. These include federal and state governments, schools, public and private hospitals, health centres, non-government organisations such as Diabetes Australia, community groups, international bodies such as the World Health Organization, commercial companies, and other universities and research institutes at home and overseas. A number of highly productive partnerships across the sector include joint appointments at professorial level.

Deakin Health is guided by a strong and vibrant commitment to improving the health and wellbeing of all people in Australia and our surrounding region. Please join us in this important work.

Deakin's Promise to Equity, Diversity and Inclusion

At Deakin we value diversity, embrace difference and nurture a connected, safe and respectful community. We recognise that our academic workforce is increasingly diverse with a variety of backgrounds, experiences and responsibilities. In many cases, academic careers can be put on hold through career breaks or part-time work arrangements to take on caring duties, gain experience in other industries, for medical reasons or other personal circumstances.

Achievement relative to opportunity places more emphasis on the quality as opposed to the quantity of research outputs. In your application, we encourage you to comment on your achievements relative to opportunity.

School of Medicine

Statement of purpose: To enhance the communities we serve through outstanding clinical training and research.

Aspiration: To address the workforce needs and advance the health and well-being of regional, rural, remote, Indigenous and marginalised individuals and communities.

Values: We foster a culture of diversity, inclusiveness, respect and social accountability, with a focus on excellence, innovation and work readiness.

We accepted our first medical students in 2008 to our postgraduate medical degree, and our graduating interns have already established strong links with regional and rural hospitals, together with the Melbourne city hospitals. The Doctor of Medicine (MD) degree is a 4 year course, with first 2 years based at the University campus in Warrn Ponds, followed by 2 years of clinical education and experience in one of our clinical schools.

The School has also developed other new undergraduate and postgraduate programs, namely Optometry, Medical Imaging, Agricultural Health and Medicine, Units in the Bachelor of Biomedical Science and Health Science Majors, Bachelor of Health and Medical Science Honours, MBA (Healthcare Management), Graduate Certificate of Hospital Administration, and a Masters Degree in Surgical Research. The School has a significant number of M Phil (Masters by Research) and PhD students in both basic sciences and clinical research. Our research capability and performance has grown rapidly. This involves academic staff at the Warrn Ponds campus and those working in primary and secondary care throughout the region.

The School has four research “pillars”: Infection, Immunity and Cancer; Neurosciences; Metabolic/Musculoskeletal medicine; and Rural Health research. School staff participate in the Institute for Mental and Physical Health and Clinical Translation (iMPACT) and work with our community partners to achieve world-class results.

Our Research Centres and partners include:

- Metabolic Research Unit (MRU)
- Centre for Rural Emergency Medicine
- Geelong Centre for Emerging Infectious Diseases
- National Centre for Farmer Health
- Epworth Hospital Geelong
- St John of God Hospital Geelong
- University Hospital Geelong
- CSIRO Australian Animal Health Laboratory
- The Western Alliance Academic Health Science Centre
- The Kardinia Health GP Superclinic

As a School we are committed to providing excellent education, research facilities and services for students and staff. We look forward to welcoming you to the School of Medicine.



Associate Research Fellow, Genomic Epidemiology

ASSOCIATE RESEARCH FELLOW, GENOMIC EPIDEMIOLOGY

The Associate Research Fellow, Genomic Epidemiology (Postdoctoral Fellow) will work with A/Professor Alyssa Barry and her team, contributing to the laboratory's internationally renowned malaria genomic epidemiology research. Research in the laboratory focuses on the systems epidemiology of infectious diseases where the research team is applying genomics and other 'omics approaches to understand the interplay of host, pathogen and environment in driving disease epidemiology. This knowledge is used to understand pathogen biology and evolution (particularly drug resistance and immune escape) and to develop novel tools for disease surveillance. The team is working closely with researchers and public health officials in malaria endemic countries, which ensures the translation of this

research into more effective disease control strategies.

The Associate Research Fellow will initiate and conduct research in the area of malaria genomic epidemiology, on a NHMRC-funded project that aims to gain insight into host and parasite factors that contribute to disease outcomes in human populations. They will also contribute to other projects focusing on infectious disease surveillance using genomic approaches.

The role will be primarily based at the Deakin University Geelong Waurn Ponds campus or by negotiation, at the Burnet Institute in Melbourne. The role may include intermittent travel to malaria endemic countries including Papua New Guinea for fieldwork and collaborative research with our research partners. The successful candidate will be a team player that can work independently with limited supervision. They will have

expertise in both the generation and analysis of genomic data and preferably, experience in the application of genomics in disease epidemiology or public health.

The Associate Research Fellow is expected to contribute to the research output of the Deakin University School of Medicine and Burnet Institute.

This is a new fixed-term position funded by a grant from the NHMRC under the Project Grant Scheme. The other project partners are the Burnet Institute, the Walter and Eliza Hall Institute, Papua New Guinea Institute of Medical Research, Ehime University (Japan) and Case Western Reserve University (USA).

The position is available for two years in the first instance with potential for extension depending on funding and performance.

Performance expectations

Annual performance objectives and expected outcomes will be defined for this role in accordance with the Minimum Standards and Typical Duties for Academic Levels (MSTDALs) and Faculty Research Expectation Models (FREMs). Specific duties will be allocated with reference to the applicable Workload Allocation Model (WAM). These documents are updated from time to time and are available on request.

Associate Research Fellow, Genomic Epidemiology

PRINCIPAL ACCOUNTABILITIES

The Associate Research Fellow is expected to contribute towards the research effort of the University and develop their research expertise through the pursuit of defined research projects relevant to the particular field of research.

The principal accountabilities of the Associate Research Fellow are:

- Initiate and conduct research under limited supervision either as a member of a team, or independently (where appropriate), to achieve the objectives of the NHMRC funded project.
- Contribute to building an active international research record, prepare findings for oral and written communication including publications and the generation of external research income.
- Effectively produce data, maintain data protocols and enter data into databases. Conduct data cleaning, screening and analysis.
- Constructively contribute to a vibrant research team, including participating with colleagues in developing countries and maintaining links and partnerships with industry and the wider community.
- Promote the activities of the University, particularly those relating to research and research training, within academic and professional communities locally and in Australia.

KEY DUTIES

- Remain up-to-date with current literature and methods relevant to the area of responsibility.
- Be involved in professional activities, including attendance at conferences and seminars in the field of expertise (subject to availability of funds).
- Undertake experimental design and operation of advanced laboratory and technical equipment or conduct advanced research procedures.
- Contribute to training undergraduate and higher research degree students in relation to the research project(s).
- Develop research-related material for teaching or other purposes, with appropriate guidance from other staff.
- Undertake some administrative functions primarily connected with the area of research.
- Provide advice to postgraduate students within the field of the staff member's research.
- Attend meetings associated with the research project(s) with which the researcher is involved and other meetings as directed by the supervisor.

SPECIFIC EXPERIMENTAL/RESEARCH TASKS

- Work collaboratively within the team and the broader team of collaborators
- Conduct genomic sequencing of Plasmodium isolates using short and long read sequencing platforms.

- Analyse genomic data and conduct population genomic analyses
- Stay up to date with the current literature and genomics “state of the art”
- Produce high quality reports and manuscripts for publication
- Report the results of research at national and international conferences, symposiums and meetings
- Contribute to supervision and mentoring of students as directed by the supervisor
- Travel to field sites in PNG to conduct training workshops and for collaborative research.

OCCUPATIONAL HEALTH AND SAFETY

- Following safe work procedures and instructions.
- Taking reasonable care for the safety of self and others.
- Seeking guidance for all new or modified work procedures.
- Ensuring that any hazardous conditions, near misses and injuries are reported immediately to a supervisor.
- Participating in meetings, training and other health and safety activities.
- Using equipment in compliance with relevant guidelines, without wilful interference or misuse.
- Must cooperate with the University in relation to actions taken by the University in order to comply with the Occupational Health and Safety and Environmental legislation.

Associate Research Fellow, Genomic Epidemiology

ORGANISATIONAL RELATIONSHIPS

The Associate Research Fellow reports to the Associate Professor of Systems Epidemiology of Infection within the School of Medicine. They will work closely with other members of the research group at Deakin University and the Burnet Institute, and with collaborators and other relevant Deakin University and Burnet staff and students.

ORGANISATIONAL CONTEXT

The appointee will work with support, guidance and/or direction from the Associate Professor of Systems Epidemiology of Infection, and with an increasing degree of autonomy as the researcher gains greater skills and experience.

SELECTION CRITERIA - ESSENTIAL

QUALIFICATIONS

- PhD in molecular biology, molecular epidemiology or genomics

EXPERIENCE, KNOWLEDGE AND SKILLS

- Demonstrated ability to plan and conduct high quality biological research, resulting in a high research output relative to opportunity.
- Primary authorships on scholarly publications such as research journal articles, conference papers, reports, or

professional or technical contributions and/or demonstrated skills in the preparation of research manuscripts.

- Demonstrated skills in genomic data collection, data entry and analysis.
- Experience with Next Generation Sequencing and analysis techniques.
- Experience in working with R programming language.
- Demonstrated ability to work effectively as a member of an interdisciplinary team and to assist with the supervision of research students.
- Demonstrated organisational skills including the ability to maintain a high standard of laboratory and data record keeping and meet competing deadlines.
- Good interpersonal skills, including the ability to interact well with research staff, technical staff and students.
- Excellent oral and written communication skills and research presentation skills.
- Demonstrated ability to liaise and/or negotiate with team members and collaborators from diverse cultural backgrounds.

- Experience with Python and other programming languages.

SELECTION CRITERIA – DESIRABLE

- Experience in microbiology and/or infectious diseases.
- Experience in pathogen genomics and epidemiology/population health/public health.

Appointment process and how to apply

Application

Thank you for your interest in the position of Associate Research Fellow, Genomic Epidemiology.

Please direct all correspondence and enquiries to;

Associate Professor Alyssa Barry
Systems Epidemiology of Infection
+61 3 522 73504
a.barry@deakin.edu.au

How to apply

Please apply online via:

deakin.edu.au/about-deakin/work-atdeakin

Include cover letter, curriculum vitae and a response to the Selection Criteria.

Interview process

An initial screening of prospective candidates will take place.

Short-listed candidates will be interviewed by a panel of esteemed colleagues.

Details of professional referees will be required prior to interview.

Remuneration and benefits

An attractive remuneration package is offered. Salary will be commensurate with qualifications, experience and research record.

Relocation support may also be available.

Term of appointment

Appointment is for a 2 year full-time fixed term position which is subject to an initial 12 month probationary period. There is the potential for contract extension depending on funding and performance.

Special Requirements

This role has been identified as having contact with children and requires the incumbent to apply for and maintain a Working With Children Check (refer to Deakin's Recruitment Procedure for further details).

A National Police Record Check is required for this role.

The candidate must be willing to travel to field sites in malaria endemic countries and contribute to capacity building activities. The candidate may also be required to travel to conferences and workshops, dependent on funding.

Our locations

Deakin has five campuses, one in **Burwood**, two in Geelong (**Waterfront** and **Waurm Ponds**), one in **Warrnambool** and the vibrant Cloud Campus where over 25% of our students study. All students, regardless of their campus or mode of study, benefit from Deakin's award-winning digital environment.

Melbourne has been named the worlds' most liveable city for more than 5 years running*.

Further information regarding our locations and relocating to Victoria can be found here:

[Our locations](#)

[Considering Relocation](#)

[Geelong/SurfCoast timelapse](#)

**The Economist's annual study*

GEELONG WAURN PONDS CAMPUS

Geelong Waurm Ponds Campus is located on the western edge of Geelong and is a thriving regional campus attracting over 8,000 undergraduate and postgraduate on-campus students. It boasts open and inviting spaces for socialising and studying, innovative architecture, spacious new buildings and wireless hotspots. The campus features expansive landscaped grounds and extensive sporting facilities.

