POSITION DESCRIPTION

POSITION TITLE: Outstanding Future Researcher - Bioinformatician (infectious diseases)
DIVISION / SECTION: Menzies School of Health Research, Global and Tropical Health
SUPERVISOR: Division Leader, Global and Tropical Health
CLASSIFICATION LEVEL: Academic Level C
SALARY RANGE: $114,540 - $130,880
STATUS (FTE): 1.0 FTE
DURATION: 3 years
NO. OF POSITIONS REPORTING DIRECTLY: 0
NO. OF POSITIONS REPORTING INDIRECTLY: 0

ABOUT CDU:
Charles Darwin University (CDU) is a sustainable, innovative, creative and inclusive new world university located in northern Australia teaching 24,000 students from more than 55 nationalities across 11 campuses and training centres, in over 100 regional and remote locations. CDU is a research-intensive university with outstanding performance and recognised excellence in Indigenous and tropical health, environmental science and public policy. Our research portfolio has real world impact, well beyond our unique location in northern Australia. This CDU-funded position will be hosted by Menzies School of Health Research.

ABOUT MENZIES:
Menzies School of Health Research is a Research School of Charles Darwin University and one of Australia’s leading medical research institutes dedicated to improving Indigenous, global and tropical health. Menzies has a history of over 30 years of scientific discovery and public health achievement. Menzies works at the frontline, joining with partners across the Asia-Pacific and with Indigenous communities across northern and central Australia.

SUMMARY OF POSITION:
This Darwin-based position will work with members of the Global and Tropical Health Division and their collaborators at relevant Australian and international institutions to develop a cross-cutting pathogen genomics program for Northern Australia and our region. Specifically, this role will provide leadership for projects currently underway and in development involving infectious diseases of major regional public health importance. Pathogens of interest currently include Plasmodium species, bacteria and mycobacteria. The role will focus on these key interest areas, but also provide advice, consultation and collaboration across a diverse range of genomic epidemiology, surveillance and diagnostic projects. The position will also contribute to the strategic planning regarding Menzies/CDU bioinformatics computational capacity.

Opportunities for mentoring and networking with others outside the Northern Territory working in pathogen genomics will be fostered by the supervisor and Menzies-based colleagues to support the successful applicant.

Aboriginal and/or Torres Strait Islander people are strongly encouraged to apply.
PRIMARY RESPONSIBILITIES:
1. Work with other Chief Investigators, team members, and external collaborators in genomic and genetic epidemiology analyses on priority infectious diseases, including supervision of postgraduate students.
2. Provide leadership and mentorship to support the development of a genomics/bioinformatics program at the Menzies Global and Tropical Health division to link in with other national collaborating institutions and genomics consortia, including on prospective multi-institutional funding applications.
3. Undertake reviews of literature and protocols related to relevant projects to provide specialist advice and prepare ethics applications where required.
4. Contribute to relevant grant applications, and prepare manuscripts for publication and reports, including publications in highly-ranked journals, such as those ranked as Q1 by Scimago. Ensure that all publications of the Outstanding Future Researcher carry affiliation of Charles Darwin University and Menzies School of Health Research.
5. Contribute to the academic program and broader Menzies objectives including participation in the seminar series and attendance at divisional or institutional meetings and events.
6. Advise the Menzies/CDU bioinformatics system administrator in the further development of computational infrastructure to build upon on-site genomics capability.
7. Any other tasks as reasonably required by the supervisor.

SELECTION CRITERIA:
Essential:
1. PhD and post-doctoral experience in a relevant bioinformatics / pathogen genomics field.
2. Excellent publication record related to pathogen genomics, as demonstrated by a record of publications in Q1 journals (Scimago) as first or corresponding author
3. Demonstrated record of impact, as established by citations and engagement with industry, government or NGOs, with respect to peer-researchers in the field.
4. Demonstrated record of supervision of PhD students to completion and high quality of PhD supervision.
5. Familiarity with coding in python and R.
6. Proven experience with the software, tools and databases for analyzing next-generation sequencing data.
7. Proven ability to work with others as an integral member of a team, and to engage with senior genomics collaborators.
8. Ability to be solutions focused and troubleshoot technical and process challenges.
9. Excellent communication and organizational skills, and experience supervising students and post-doctoral researchers.
10. Ability to interact effectively with people from diverse cultures.
11. Ability to install and utilise bioinformatic software on relevant computational platforms.
12. An understanding and awareness of relevant Workplace Health and Safety as well as Equal Opportunity principles and legislation along with a commitment to maintaining a healthy and safe workplace for all Menzies staff, students, volunteers and visitors.

Desirable:
1. Specific experience in Plasmodium or TB related pathogen genomics.
2. Experience with Bayesian phylogenetics including the program BEAST.
3. Experience with human genomics.
4. Demonstrated ability to secure grant funding.