POSITION DESCRIPTION

Title:	Postdoctoral Research Scientist - Bioinformatics
Group & Centre:	Centre for Innate Immunity and Infectious Diseases
Employment Agreement	Hudson Institute of Medical Research Enterprise Agreement 2015
Classification	RES Level A
Date Last Updated:	August 2019

1.   About Hudson Institute

The Hudson Institute is a premier Australian discovery and translation medical research institute. By unravelling the biology underlying disease the Institute uses this information for transformative and innovative solutions to major health problems.

The Hudson Institute has diverse strengths and research excellence encompassing paediatric and perinatal medicine, cancers, infectious and inflammatory diseases, endocrinology and reproductive health. Progressing our research requires a focused and directed strategy that incorporates thematic and programmatic excellence across the Institute. The Institute Centre's coordinate their research activity to take advantage of novel approaches and new models of disease.

As the major research partner at the Monash Health Translation Precinct (MHTP) the Institute is key to the research agenda of the precinct and drives research solutions to disease, leading to better health outcomes. Sophisticated cutting edge technologies co-located with clinical and laboratory research activities in the newly built Translational Research Facility at the MHTP enable the rapid translation of breakthrough discoveries to clinical care. This co-location of the Institute alongside its partners Monash Health, one of the largest health care organizations in Australia, and Monash University, the largest tertiary education and research organisation in Australia, enable the Institute to translate research discoveries rapidly to patient outcomes. The research undertaken by the Hudson Institute addresses the major burdens of disease identified as priorities by the Federal Government and National Health and Medical Research Council and integrates its research priorities with the themes of Monash Partners, a NHMRC accredited Advanced Health Research and Translation Centre.

2.   Overview of the Position

This role will focus on developing and applying cutting-edge microbiome computational analysis approaches to complement existing bacterial culturing and genomics technologies within the Microbiota and Systems Biology Laboratory. The position will provide the opportunity for close interactions with laboratory based research scientists and clinical scientists and investigation and analysis of large high-throughput metagenomics and transcriptomic research and clinical datasets. In this role, you will also assist in student supervision and bioinformatics support.

Essential Skills

- An PhD in Biology, Bioinformatics, Computational Biology or Computer Science
- Demonstrated skills in Python and/or R programming
- Expertise in Linux/Unix operating systems
- Proven ability to work independently and manage multiple projects simultaneously
- Excellent verbal and written communication skills
- Strong attention to detail

Ideal Skills

- Demonstrated expertise in the analysis of next generation sequencing datasets
- Experience in the analysis and interpretation of large datasets and delivering complex projects to completion.
- Demonstrated experience in software development, documentation and code management
- Knowledge of metagenomic, bacterial genomics and transcriptomic analysis methods and algorithms
- Skills in the use of relational databases
- Experience in cloud computing environments
- Detailed knowledge of biologically relevant statistics and machine learning

3.   Accountabilities, Characteristics and Responsibilities

Area	Requirement
Qualifications, Experience and Attributes:	▪ Post-doctoral qualification or other relevant research qualification in health and medical disciplines ▪ 0 to 4 years post-doctoral research experience in health and medical disciplines
Publications and Research Output	▪ Working towards establishing a publications history ▪ Will have work published in refereed journals, books, conference & seminar papers ▪ Will have evidence of other significant research outputs including conference papers, reports, professional or technical contributions which provide evidence of research ability and potential for future development
Prizes Awards and Grants	▪ Will contribute to grant writing
Leadership and Contributions to Research Training	▪ Will oversee or coordinate other research/technical staff and/or students (possibly in a shared supervisory role) ▪ May supervise students at undergraduate levels or higher in a shared supervisory role
Peer Recognition	▪ Plans, leads and facilitates internal collaborative processes ▪ Presents at national & sometimes international meetings where appropriate ▪ Involvement in appropriate professional activities

4. Working Relationships

Internal
- Laboratory Head
- Laboratory Staff
- Scientific Support staff

External
- Monash e-Research
- MHTP Medical Genomics Facility
- Collaborators

5. About the Hudson Institute

Vision and Values:

Our Vision: We strive to enhance human health and the quality of life through ground-breaking, collaborative, medical research discoveries and innovation, and ensure its direct impact on the community.

Our Mission: To capitalise on our multidisciplinary research strengths and academic and health partnerships to provide transformative and innovative solutions to major health problems.

Our Values:

Innovation: We inspire and enable world class researchers at the frontiers of science and medicine to find new and transformative solutions to people's greatest health challenges.

Collaboration: Our multidisciplinary, integrated approach creates an enriched, energetic environment that encompasses the entire lifespan; this allows our researchers and clinicians to leverage each other's knowledge to spark creative ideas and make unexpected discoveries.

Community: We care deeply about improving the health and wellbeing of people in the community and we are committed to rewarding their investment in science.

Excellence: Integrity and passion underpin our pursuit of the highest level of knowledge achieving significant outcomes whilst nurturing and inspiring the next generation of scientists.

Other relevant information:
- The Hudson Institute is a totally smoke free workplace.
- The position is subject to terms set out in the Hudson Institute Enterprise Agreement (2015), Policies and Procedures and any subsequent variation to these.
- The Hudson Institute is an Equal Employment Opportunity Employer.
- The Hudson Institute has a commitment to Occupational Health and Safety. It is a condition of employment that staff comply with all health and safety related policy and procedures and take part in activities designed to improve the health and safety of the workplace.
- It is a requirement of the position to participate in the annual Performance Planning and Review process.

Victoria

6. Endorsement

Name: (Supervisor)			
Signed:		**Date:**	
Name: (Employee)			
Signed:		**Date:**	
Name: (HR)			
Signed:		**Date:**	