

### **POSITION DESCRIPTION:**

### **SECTION A: Position Context**

Position Title	Health Modeller
Position Number	
Classification	RA2 – RA4 (\$70,641 - \$78,281)
Location	85 Commercial Road Melbourne
Effective Date	January 2020

## Purpose:

The Health Modeller will work on multidisciplinary projects, to apply existing epidemiological and costing models to real world applications.

Working with the Modelling & Biostatistics team within the Burnet Institute, the position holder will:

- Develop and apply mathematical models to address major public health issues, predominantly for maternal and child health, but also for major infectious diseases including HIV, TB, malaria and viral hepatitis;
- Work with a team of mathematical modellers, economists, health and policy experts, computer scientists and epidemiologists to refine epidemiological and costing models; and
- Provide modelling and analytical support to governments and other partners notably the World Bank and international health agencies - to improve resource allocative efficiency within the heath sector.

# **Supervision Reporting Relationships:**

This positions' supervisor/manager	Nick Scott
Other positions reporting to this position	N/A

### **SECTION B: Key Responsibility Areas**

The key responsibility areas (KRAs) are the <u>major outputs</u> for which the position is responsible and are <u>not a comprehensive statement</u> of the position activities.

	Key Responsibility Areas		
1.	Work with a modelling team to collaboratively develop and apply detailed mathematical models of key health and disease areas, using appropriate epidemiological, statistical, mathematical, and economic techniques		
2.	Communicate with maternal and child health experts, epidemiologists, public health experts, government officials, and global health and international aid agencies		
3.	Contribute to the preparation of documentation required for project initiation, including scope of work and technical supporting documentation		
4.	Undertake research projects with a high degree of autonomy		
5.	Contribute to and produce scientific and technical papers		
6.	Occupational Health & Safety	Refer to the "Burnet OHS responsibilities and roles" document for full details on specific OHS obligations and responsibilities of employees	
7.	Training	Responsible for completing all required training in line with the position / role.	

# **Occupational Health and Safety**

The Burnet has a commitment to providing a safe and healthy workplace in accordance with the Occupational Health and Safety Act 2004. All staff are obliged to take all reasonable care to ensure that their actions do not place themselves or others at risk.

# **SECTION C: Key Selection Criteria**

Qualifications			Essential/ Preferable
	Either	Undergraduate degree in modelling, statistics, physics, computer science, or a similar field	Essential
	•	Undergraduate degree in health sciences, biomedicine or a similar field plus experience with data analysis and computing	

Experience / Knowledge / Attributes		
1.	Excellent written and oral communication skills	
2.	Demonstrated project experience, including the ability to successfully complete projects, both independently and as part of a team	
3.	Experience with scientific computing and/or mathematical modelling.	
4.	Experience in one or more of:  • maternal and child health or nutrition  • epidemiology  • health costing and economics  • communicable diseases	Preferable
5.	Demonstrated interest in data mining and data visualization	Preferable

### Other Requirements

The Burnet Institute is a child safe organisation. The incumbent of this position may be required to undergo a Police Check or Working with Children Check as a condition of their employment.

### **SECTION D: Burnet Overview**

Burnet Institute is a leading Australian medical research and public health organisation focused on achieving better health for vulnerable communities in Australia and internationally by accelerating the translation of research, discovery and evidence into sustainable health solutions. The Institute is headquartered in Melbourne with programs that operate across Asia, the Pacific and in Africa.

Burnet's culture links innovative discovery-oriented research and implementation research with development and humanitarian action. World-class laboratory and field-based research is integrated into multidisciplinary programs aimed at the prevention, detection and treatment of diseases of global significance. This unique approach allows the Institute to make a tangible and sustainable impact on health in both developed and developing countries.

The Institute has three major thematic programs – Disease Elimination, Behaviours and Health Risk, and Maternal and Child Health, and two expansion programs – Healthy Ageing and Health Security. Staff within these Programs are supported by cross-cutting communities of practice; the disciplines of Life Sciences, Public Health and International Development.

# **Modelling & Biostatistics Group Overview**

Our modelling team works at the forefront of guiding resource allocation decisions for HIV, TB, malaria, viral hepatitis and nutrition. In close partnership with the World Bank we have developed a collection of 'Optima' models to link interventions and their costs with their impact, perform scenario analyses, predict epidemiological trends and optimise spending. Optima tools have already been used by over 50 countries across Eastern Europe, Asia, South America, and Africa to guide resource allocation towards the most cost-effective mix of programs, and to assist with national strategic and operational planning. We are now looking to apply these methods to maternal and child health.

#### **Further Information:**

For further information, please contact Nick Scott.