



## POSITION DESCRIPTION

Melbourne School of Population and Global Health  
Faculty of Medicine, Dentistry and Health Sciences

### Research Fellow/Senior Research Fellow in Data Science in Disability

<b>POSITION NO</b>	0045757
<b>CLASSIFICATION</b>	Level B or Level C <i>Level of appointment is subject to qualifications and experience</i>
<b>SALARY</b>	Level B \$ 98,775 - \$117,290 p.a. (pro rata) Level C \$120,993 - \$139,510 p.a. (pro rata)
<b>SUPERANNUATION</b>	Employer contribution of 17%
<b>EMPLOYMENT TYPE</b>	1.0 EFT fixed term position available for four years at Level C or five years at Level B Fixed term contract type: Externally Fund Contract of Employment
<b>OTHER BENEFITS</b>	<a href="http://about.unimelb.edu.au/careers/working/benefits">http://about.unimelb.edu.au/careers/working/benefits</a>
<b>CURRENT OCCUPANT</b>	New
<b>HOW TO APPLY</b>	Online applications are preferred. Go to <a href="http://about.unimelb.edu.au/careers">http://about.unimelb.edu.au/careers</a> , under 'Job Search and Job Alerts', select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.  People with a lived experience of disability are encouraged to apply
<b>CONTACT FOR ENQUIRIES ONLY</b>	Professor Anne Kavanagh Tel +61 3 8344 7214 Email <a href="mailto:a.kavanagh@unimelb.edu.au">a.kavanagh@unimelb.edu.au</a>  <i>Please do not send your application to this contact</i>

For information about working for the University of Melbourne, visit our websites:

[about.unimelb.edu.au/careers](http://about.unimelb.edu.au/careers)

## ***Position Summary***

An exciting position exists for a talented early or mid-career researcher to join a vibrant research team investigating the experiences of people with disability and their families. With the introduction of the National Disability Insurance Scheme (NDIS) and national initiatives such as the Data Integration Partnership for Australia (DIPA), there are unprecedented opportunities for Big Data to address evidence gaps in the disability field.

You will work on large disability datasets that include integrated longitudinal data from many sources including administrative data on health, social and disability services; education, housing and employment data; data from routine surveys and census data. You will play a key role in the development of strategies to access and capitalise on large datasets with disability information; develop and implement protocols for management of the data; extract customised datasets for specific projects; and provide advice and conduct analyses on specified projects.

You will be located in the Disability and Health unit in the Melbourne School of Population and Global Health and will be supervised by Professor Anne Kavanagh, the inaugural Chair in Disability and Health, who is Head of the Disability and Health unit. Professor Kavanagh is also Academic Director of the Melbourne Disability Institute and Lead Investigator on the National Health and Medical Research Council Centre for Research Excellence in Disability and Health.

The Disability and Health unit focusses on identifying the key social determinants of health and wellbeing of people with disability using advanced epidemiological, econometric and statistical methods. The unit houses the *NHMRC Centre for Research Excellence in Disability and Health (CRE-DH)*. The *Melbourne Disability Institute (MDI)* is an interdisciplinary research institute that operates across the University to facilitate applied interdisciplinary research and training that contributes to transforming the lives of people with disability and their families. A major focus of the CRE-DH and the MDI is harnessing the potential of disability and related data to answer key questions about what works in the NDIS, mainstream services and social policies and programs.

You will work with, and support, academics within the Disability and Health unit and across the University.

People with disability are encouraged to apply.

## ***1. Key Responsibilities***

### **1.1 RESEARCH AND RESEARCH TRAINING**

- ▶ Development strategies to access and capitalise on large datasets with disability information
- ▶ Develop and implement protocols for data management including the automation of data manipulation and querying
- ▶ Provide advice and conduct longitudinal analyses on identified projects
- ▶ Work as part of a group of analysts, ensuring code is reproducible and clearly documented
- ▶ Participate in research independently and as a member of a research team to understand and address key drivers of equitable outcomes for people with disability and their families
- ▶ Develop proposals for government, statutory authorities and competitive funding bodies to access disability data to answer key questions facing the sector

- ▶ Support the Disability and Health research team through the management and extraction of complex data for various projects
- ▶ Publications arising from scholarship and research, such as publication in high-ranked peer reviewed journals
- ▶ Supervise research students as required
- ▶ Prepare research proposal applications and submissions to external funding bodies
- ▶ Contribute special lectures or other forms of expert teaching

**In addition to the above, the Senior Research Fellow, Level C appointee will be required to:**

- ▶ Secure independent research funding/ and build research consultancy profile.
- ▶ Significant contribution to publications in high quality peer-reviewed journals.
- ▶ Present at national and international conferences.
- ▶ Play a major role in establishing research group /projects for PhD/Masters students.

## 1.2 LEADERSHIP AND SERVICE

- ▶ Supervision of postgraduate students
- ▶ Supervision of junior research staff and professional staff as required
- ▶ Identification of sources of funding to support individual or collaborative projects, relating to teaching, research and engagement practice in their discipline
- ▶ Active participation in School, University and external committees
- ▶ Organise events related to the Disability and Health unit
- ▶ Engage key stakeholders in research in the design, conduct and dissemination of research
- ▶ Facilitate the translation of research findings into policy and practice

**In addition to the above, the Senior Research Fellow, Level C appointee will be required to:**

- ▶ Supervise and mentor level A and B staff
- ▶ Actively participate in school/faculty committees and undertake a leading role in planning and committee work.

## 1.3 ENGAGEMENT

- ▶ Develop user-friendly data visualisation tools to disseminate findings to the sector
- ▶ Contribute to the professional development of the disability and mainstream service and policy sectors through presentations and online and face to face courses
- ▶ Participate in the professional development provided by the Disability and Health unit and other opportunities
- ▶ Active participation in outreach activities relating to research and scholarship
- ▶ Effective liaison with external networks to foster collaborative partnerships

- ▶ Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 5.

**In addition to the above, the Senior Research Fellow, Level C appointee will be required to:**

- ▶ Engage across the University and externally to lead the development of the disability data initiative

## ***2. Selection Criteria***

### **2.1 ESSENTIAL**

- ▶ PhD or equivalent in a discipline in data science or related fields such as statistics, mathematics, computer science, econometrics
- ▶ Demonstrated high-level skills in the management of large complex administrative data including linked data
- ▶ Advanced analytical techniques drawing on statistics and computer science to analyse large, complex, linked datasets to address real-world problems
- ▶ Strong statistical programming skills for automation of data manipulation and database querying, clear and routinised work flow, and analysis using a range of statistical programming languages (e.g. R and Stata), and ability to query databases using SQL
- ▶ Skills in computer programming using C++ and Python
- ▶ Track record in producing high-quality peer-reviewed publications and other research outputs
- ▶ Demonstrated capacity to work as part of a multidisciplinary team
- ▶ Capacity to supervise post-graduate students and junior research staff
- ▶ Excellent written and verbal communication skills, including the ability to communicate with a range of stakeholders from policy and research environments
- ▶ Demonstrated ability to work independently and collaboratively in a team across a range of backgrounds, to achieve project goals and meet agreed deadlines.
- ▶ A commitment to health equity

**In addition to the above, the Senior Research Fellow, Level C appointee will be required to have:**

- ▶ Excellent skills in the management of large complex administrative data including linked data
- ▶ Excellent statistical programming skills for automation of data manipulation and database querying, clear and routinised work flow, and analysis using a range of statistical programming languages (e.g. R and Stata), and ability to query databases using SQL
- ▶ High-level skills in computer programming using C++ and Python
- ▶ Strong track record in producing high-quality peer-reviewed publications and other research outputs
- ▶ Evidence of high-quality supervisions post-graduate students and/or junior research staff

## 2.2 DESIRABLE

- ▶ High performance computing skills (GPU programming/MPI/OpenMP etc.)
- ▶ Demonstrated skills in data visualisation, including development of interactive tools for internal and external dissemination of results (such as development of R Shiny apps)
- ▶ Track record of research grant procurement
- ▶ Track record of higher degree research student supervision or co-supervision
- ▶ Capacity to work productively with external stakeholders including government, service providers and advocacy groups
- ▶ International links and the scope for enhancing these in the future

## 2.3 SPECIAL

- ▶ Interstate and international travel may be required occasionally

# 3. Other Information

## 3.1 CENTRE FOR HEALTH EQUITY

The Centre for Health Equity consolidates our School's social, behavioural and public health expertise into a single, world-class Centre. Our core focus is on creating and exchanging knowledge that fosters health equity and wellbeing. Our approach is to work at a population level to produce evidence based research and programs that improves lives. By connecting with health professionals, policy-makers, consumer groups and the broader community, we aim to improve fair access to good health and well-being.

### UNITS

- Disability and Health
- Evidence & Child Health
- Gender & Women's Health
- Health Humanities and Social Sciences
- Indigenous Health Equity
- Indigenous Studies

## 3.2 THE MELBOURNE SCHOOL OF POPULATION AND GLOBAL HEALTH

The Melbourne School of Population Health was established in the Faculty of Medicine, Dentistry and Health Sciences in 2001. It became the Melbourne School of Population and Global Health in 2013. Approximately 350 people work in the School. The School employs 223 academic staff, and 111 professional staff. A further 15-20 staff are employed through partner agencies. The School's total budget is in excess of \$50m. There are approximately 120 higher degree research students (predominantly PhD). The School aims to strengthen the understanding, capacity and services of society to meet population health needs and to improve the quality and equity of health care. It employs a population health framework that incorporates public health and preventative medicine, health promotion, clinical medicine and allied healthcare disciplines and an equity and evidence-based approach to health care and health policy. Its research programs aim to elucidate the genetic, environmental, social and economic determinants of health, and to focus on the evaluation of the health systems, programs and services that seek to

prevent disease and injury and to promote health. The School provides research and professional development opportunities for medical undergraduates, postgraduates in a wide range of disciplines, clinicians in all sectors of the health care industry, scientists, professionals and leaders in population health.

The School is currently composed of four Centres, one Institute and two partnership units:

#### **Centres**

- Centre for Health Equity (CHE)
- Centre for Health Policy (CHE)
- Centre for Epidemiology and Biostatistics (CEB)
- Centre for Mental Health (CMH)

#### **Institutes**

- The Nossal Institute for Global Health (NIGH)

#### **Partnership Units**

- Vaccine and Immunisation Research Group (VIRGo)
- Global Burden of Disease Group

Further information about the School is available at <http://www.pgh.unimelb.edu.au/>

### **3.3 THE FACULTY OF MEDICINE, DENTISTRY AND HEALTH SCIENCES**

[www.mdhs.unimelb.edu.au](http://www.mdhs.unimelb.edu.au)

The Faculty of Medicine, Dentistry & Health Sciences has an enviable research record and is the University of Melbourne's largest faculty in terms of management of financial resources, employment of academic and professional staff, teaching of undergraduate and postgraduate (including research higher degree) students and the conduct of basic and applied research. The Faculty's annual revenue is \$630m with approximately 55% of this income related to research activities.

The Faculty has a student teaching load in excess of 8,500 equivalent full-time students including more than 1,300 research higher degree students. The Faculty has approximately 2,195 staff comprising 642 professional staff and 1,553 research and teaching staff.

The Faculty has appointed Australia's first Associate Dean (Indigenous Development) to lead the development and implementation of the Faculty's Reconciliation Action Plan (RAP), which will be aligned with the broader University – wide plan. To enable the Faculty to improve its Indigenous expertise knowledge base, the Faculty's RAP will address Indigenous employment, Indigenous student recruitment and retention, Indigenous cultural recognition and building partnerships with the Indigenous community as key areas of development.

### **3.4 THE UNIVERSITY OF MELBOURNE**

The University of Melbourne is a leading international university with a tradition of excellence in teaching and research. With outstanding performance in international rankings, Melbourne is at the forefront of higher education in the Asia-Pacific region and the world. The University of Melbourne is consistently ranked among the world's top universities. Further information about our reputation and global ranking is available at <http://futurestudents.unimelb.edu.au/explore/why-choose-melbourne/reputation-rankings>.

Established in 1853, shortly after the founding of Melbourne, the University is located just a few minutes from the centre of this global city. The main Parkville campus is recognised as the hub of Australia's premier knowledge precinct comprising eight hospitals, many leading research institutes and a wide range of knowledge-based industries.

The University employs people of outstanding calibre and offers a unique environment where staff are valued and rewarded. Further information about working at The University of Melbourne is available at <http://about.unimelb.edu.au/careers>.

### 3.5 GROWING ESTEEM, THE MELBOURNE CURRICULUM AND RESEARCH AT MELBOURNE: ENSURING EXCELLENCE AND IMPACT TO 2025

- ▶ Growing Esteem describes Melbourne's strategy to achieve its aspiration to be a public-spirited and internationally-engaged institution, highly regarded for making distinctive contributions to society in research and research training, learning and teaching, and engagement. <http://about.unimelb.edu.au/strategy-and-leadership>
- ▶ The University is at the forefront of Australia's changing higher education system and offers a distinctive model of education known collectively as the Melbourne Curriculum. The new educational model, designed for an outstanding experience for all students, is based on six broad undergraduate programs followed by a graduate professional degree, research higher degree or entry directly into employment. The emphasis on academic breadth as well as disciplinary depth in the new degrees ensures that graduates will have the capacity to succeed in a world where knowledge boundaries are shifting and reforming to create new frontiers and challenges. In moving to the new model, the University is also aligning itself with the best of emerging European and Asian practice and well-established North American traditions.
- ▶ The University's global aspirations seek to make significant contributions to major social, economic and environmental challenges. Accordingly, the University's research strategy *Research at Melbourne: Ensuring Excellence and Impact to 2025* aspires to a significant advancement in the excellence and impact of its research outputs. <http://research.unimelb.edu.au/index.html#home>

The strategy recognises that as a public-spirited, research-intensive institution of the future, the University must strive to make a tangible impact in Australia and the world, working across disciplinary and sectoral boundaries and building deeper and more substantive engagement with industry, collaborators and partners. While cultivating the fundamental enabling disciplines through investigator-driven research, the University has adopted three grand challenges aspiring to solve some of the most difficult problems facing our world in the next century. These Grand Challenges include:

Understanding our place and purpose – The place and purpose grand challenge centres on understanding all aspects of our national identity, with a focus on Australia's 'place' in the Asia-Pacific region and the world, and on our 'purpose' or mission to improve all dimensions of the human condition through our research.

Fostering health and wellbeing – The health and wellbeing grand challenge focuses on building the scale and breadth of our capabilities in population and global health; on harnessing our contribution to the 'convergence revolution' of biomedical and health research, bringing together the life sciences, engineering and the physical sciences; and on addressing the physical, mental and social aspects of wellbeing by looking beyond the traditional boundaries of biomedicine.

Supporting sustainability and resilience – The sustainability and resilience grand challenge addresses the critical issues of climate change, water and food security,

sustainable energy and designing resilient cities and regions. In addition to the technical aspects, this grand challenge considers the physical and social functioning of cities, connecting physical phenomena with lessons from our past, and the implications of the technical solutions for economies, living patterns and behaviours.

Essential to tackling these challenges, an outstanding faculty, high performing students, wide collaboration including internationally and deep partnerships with external parties form central components of Research at Melbourne: Ensuring Excellence and Impact to 2025.

### 3.6 EQUITY AND DIVERSITY

Another key priority for the University is access and equity. The University of Melbourne is strongly committed to an admissions policy that takes the best students, regardless of financial and other disadvantage. An Access, Equity and Diversity Policy Statement, included in the University Plan, reflects this priority.

The University is committed to equal opportunity in education, employment and welfare for staff and students. Students are selected on merit and staff are selected and promoted on merit.

### 3.7 GOVERNANCE

The Vice Chancellor is the Chief Executive Officer of the University and responsible to Council for the good management of the University.

Comprehensive information about the University of Melbourne and its governance structure is available at <http://www.unimelb.edu.au/unisec/governance.html>.

## 4. *Occupational Health and Safety (OHS)*

All staff are required to take reasonable care for their own health and safety and that of other personnel who may be affected by their conduct.

OHS responsibilities applicable to positions are published at:

<http://safety.unimelb.edu.au/people/community/responsibilities-of-personnel>

These include general staff responsibilities and those additional responsibilities that apply for Managers and Supervisors and other Personnel.