



POSITION DESCRIPTION

Centre for Epidemiology and Biostatistics
Melbourne School of Population and Global Health
Faculty of Medicine, Dentistry and Health Sciences

RESEARCH FELLOW /SENIOR RESEARCH FELLOW – BIOSTATISTICS

POSITION NO	0046243
CLASSIFICATION	Research Fellow Level B Senior Research Fellow Level C Level of appointment will be commensurate with the qualifications and relevant experience of the successful appointee
WORK FOCUS CATEGORY	Research Focused
SALARY	Level B \$98,775 – \$117,290 p.a. or Level C \$120,993 – \$139,510 p.a.
SUPERANNUATION	Employer contribution of 9.5%
WORKING HOURS	Full-time
BASIS OF EMPLOYMENT	Fixed Term position available for 2 years Fixed term contract type: Externally funded contract employment
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers , select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Prof. Julie A Simpson Telephone: +61 3 8344 0732 Email: julieas@unimelb.edu.au

Please do not send your application to this contact

**For information about working for the University of Melbourne, visit our website:
about.unimelb.edu.au/careers**

Position Summary

This research position will be a joint appointment between the Melbourne School of Population and Global Health and the Victorian Cancer Comprehensive Centre. The position will be based in the newly-established Biostatistics Research Hub, which will provide university-wide leadership for biostatistics research, teaching and research training, and at the Victorian Cancer Comprehensive Centre.

At the Biostatistics Research Hub, the successful applicant will undertake methodological research, with opportunities to collaborate with other academic biostatisticians located at the Hub as well as other Statistics and Mathematical and Computational Biology research groups affiliated with the Hub. They will also supervise and/or co-supervise PhD students and early career researchers in biostatistics, and prepare grant applications entailing methodological research.

At the Victorian Cancer Comprehensive Centre, the position will involve: building biostatistics capability in registry-based clinical trials; research methodology for novel designs of molecularly-directed clinical trials and precision-based prevention and tailored screening; and teaching short courses and delivering biostatistics training within the Master of Cancer Sciences. The successful applicant will also contribute to grant applications.

The successful applicant will primarily report to Professor Julie Simpson (Head of Biostatistics Unit, Melbourne School of Population and Global Health) and work closely with Prof. Grant McArthur (Director of Victorian Cancer Comprehensive Centre) and Prof. John Carlin (Director of Clinical Epidemiology and Biostatistics Unit, Murdoch Children's Research Unit).

1. Key Responsibilities

1.1 RESEARCH AND RESEARCH TRAINING

- ▶ Conduct methodological research and disseminate its results through scientific publications and conference/seminar presentations.
- ▶ Develop collaborations within the Biostatistics Research Hub and with other researchers based at the Victorian Cancer Comprehensive Centre.
- ▶ Present research seminars at conferences, workshops and team meetings.
- ▶ Identify sources of funding to support individual or collaborative projects, relating to teaching, research and engagement practice in the discipline.
- ▶ Participate in research independently and as a member of a research team.
- ▶ Provide effective supervision of major honours or postgraduate research projects and supervise or co-supervise Research Higher Degree and Honours students.

1.2 TEACHING & LEARNING

- ▶ Contribute to and participate in teaching and learning activities in the School and Victorian Cancer Comprehensive Centre, including a role in the graduate-level Biostatistics program and Master of Cancer Sciences as well as occasional workshops and other training activities.

1.3 LEADERSHIP & SERVICE

- ▶ Actively participate at School, Victorian Cancer Comprehensive Centre (VCCC), and/or Faculty meetings and contribute to planning or committee work to build capacity in the School / VCCC / discipline.
- ▶ Actively participate in key aspects of engagement within and beyond the University e.g. School's outreach, first year orientation, academic advising and other external bodies
- ▶ Participate in community and professional activities related to the relevant disciplinary area including attendance and presentations at conferences and seminars
- ▶ Positive engagement in learning and career development of self and others
- ▶ Effective demonstration and promotion of University values including diversity and inclusion and high standards of ethics and integrity

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

- ▶ Significantly contribute to research projects including leadership of research teams or management of projects, leading to publications in peer reviewed journals
- ▶ Preparation of research proposal submissions to external funding bodies to obtain external research income.
- ▶ Play a major role in planning or committee work to build capacity in the School / VCCC / Discipline.

2. Selection Criteria

2.1 ESSENTIAL

- ▶ PhD in biostatistics or statistics.
- ▶ A track record of publication of peer-reviewed scientific articles.
- ▶ Excellent written and verbal communication skills.
- ▶ Demonstrated ability to work independently and collaboratively in a team to achieve project goals and meet agreed deadlines.
- ▶ Ability to mentor and guide junior research staff in their academic trajectory
- ▶ A developing research profile at the national level as evidenced by research publications, conference and seminar papers, and/or research funding
- ▶ Experience in performing complex data manipulation and statistical analysis using Stata, R, SAS or a comparable statistical package with a flexible programming language.

2.2 DESIRABLE

- ▶ A demonstrated record of achievement in submitting grants for research funding.
- ▶ Experience of involvement in workshops in biostatistical methods in health research.
- ▶ Experience in the supervision or co-supervision of postgraduate students and more junior research staff.

- ▶ Demonstrated ability to lead research collaborations
- ▶ Previous experience in cancer research and/or novel designs for clinical trials

In addition to the above, the following are essential for a Senior Research Fellow, Level C appointment:

- ▶ A significant research profile at the national level as evidenced by research publications, conference and seminar papers, and/or research funding
- ▶ Demonstrated ability to lead research collaborations
- ▶ Experience in the supervision or co-supervision of postgraduate students and more junior research staff.

3. Equal Opportunity, Diversity and Inclusion

The University is an equal opportunity employer and is committed to providing a workplace free from all forms of unlawful discrimination, harassment, bullying, vilification and victimisation. The University makes decisions on employment, promotion and reward on the basis of merit.

The University is committed to all aspects of equal opportunity, diversity and inclusion in the workplace and to providing all staff, students, contractors, honorary appointees, volunteers and visitors with a safe, respectful and rewarding environment free from all forms of unlawful discrimination, harassment, vilification and victimisation. This commitment is set out in the University's People Strategy 2015-2020 and policies that address diversity and inclusion, equal employment opportunity, discrimination, sexual harassment, bullying and appropriate workplace behaviour. All staff are required to comply with all University policies.

The University values diversity because we recognise that the differences in our people's age, race, ethnicity, culture, gender, nationality, sexual orientation, physical ability and background bring richness to our work environment. Consequently, the People Strategy sets out the strategic aim to drive diversity and inclusion across the University to create an environment where the compounding benefits of a diverse workforce are recognised as vital in our continuous strive to service for excellence and reach the targets of Growing Esteem.

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/topics/responsibilities/>

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

5. Other Information

5.1 BIOSTATISTICS RESEARCH HUB, CENTRE FOR EPIDEMIOLOGY AND BIOSTATISTICS, MELBOURNE SCHOOL OF POPULATION AND GLOBAL HEALTH

The Biostatistics Research Hub is being established in order to expand and strengthen high-level expertise in biostatistics research and training. The primary goal of the Hub is to provide a focal point within the University for the core discipline of biostatistics, with a mission to develop the modern statistical methods that underpin biomedical research, strengthen multi-disciplinary research that relies on expert biostatistical collaboration, and ensure that biostatistics teaching and training are abreast of current advances in statistical methods and computing.

The Hub will include the following five new positions:

- Professor and Director (joint position with School of Mathematics & Statistics),
- Two Level B/C positions (joint with Peter Doherty Institute of Immunity and Infection (now appointed) and the Victorian Comprehensive Cancer Centre),
- Two Level B positions (joint with School of Mathematics & Statistics).

In addition, the Hub will bring together a critical mass of biostatistics teaching and research staff from the Melbourne School of Population and Global Health (presently 3 senior biostatisticians, 10 postdoctoral researchers), statisticians from the School of Mathematics & Statistics including the Centre for Statistical Genomics (led by Prof. David Balding) and Statistical Consulting Centre (led by Prof. Ian Gordon), as well as biostatisticians within the Melbourne Medical School, in particular within the Department of Paediatrics and Murdoch Children's Research Institute, Royal Children's Hospital (led by Prof. John Carlin). Opportunities for collaborative multidisciplinary research are available through the Centres and Institutes named above as well as the Melbourne Clinical and Translational Science Research Platform (Biostatistics node led by Prof. Julie Simpson), which primarily provides research methods support to the Melbourne Medical School.

The Biostatistics Research Hub will lead undergraduate (a new major in biostatistics) and postgraduate training in biostatistics, including upskilling of non-specialists in biomedical and clinical PhD degrees, and integration with new programs in Computational Biology and Data Science via joint positions with Mathematics and Statistics.

5.2 CENTRE FOR EPIDEMIOLOGY AND BIOSTATISTICS

The Centre for Epidemiology and Biostatistics (<http://mspgh.unimelb.edu.au/centres-institutes/centre-for-epidemiology-and-biostatistics>) is one of 4 Centres and an Institute that comprise the Melbourne School of Population and Global Health.

Our Centre's units include:

- i) Allergy and Lung Health
- ii) Australian Twin Registry
- iii) Biostatistics
- iv) Breast Cancer
- v) Colorectal Cancer
- vi) High Dimensional Analytics

- vii) Indigenous Health and Epidemiology
- viii) Male Health
- ix) Modelling and Simulation
- x) Sexual Health
- xi) Neuroepidemiology
- xii) Teaching and Learning

The Centre for Epidemiology and Biostatistics is at the forefront of a preventative health revolution. Big data, changing infectious diseases patterns and multi-disciplinary collaborations are transforming the ways public health disciplines are researched and taught. Our Centre aims to be a leader in this evolving environment.

Epidemiology and biostatistics provide solutions to global public health challenges that demand multi-disciplinary responses. Our Centre's approach to research, teaching, and research training reflects this reality. We combine deep expertise with a broad range and reach – through our nine units, and our active links to other renowned institutions. This ensures our researchers and graduates are ready to contribute to preventing and alleviating the world's common, debilitating and burdensome health issues.

5.3 THE MELBOURNE SCHOOL OF POPULATION AND GLOBAL HEALTH

The Melbourne School of Population Health (<http://mbspgh.unimelb.edu.au/>) 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 300 academic and professional staff work across the School and its 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:

- Centre for Health Equity (CHE)
- Centre for Health Policy (CHE)
- Centre for Epidemiology and Biostatistics (CEB)
- Centre for Mental Health (CMH)
- The Nossal Institute for Global Health (NIGH)
- Vaccine and Immunisation Research Group (VIRGo)
- Global Burden of Disease Group

5.4 VICTORIAN CANCER COMPREHENSIVE CENTRE

The vision for the VCCC is to save lives through the integration of cancer research, education and patient care. Founded in the holistic principles of the internationally-recognised Comprehensive Cancer Centre model, the Victorian Comprehensive Cancer Centre is a powerful alliance of 10 leading research and clinical institutions with a shared commitment to working together to advance and accelerate cancer research, treatments, preventions and cures.

Our Operating Environment:

Integrating cancer research, education and patient care: <https://www.victorianccc.org.au>

Based within the state-of-the-art Victorian Comprehensive Cancer Centre facility in Parkville, Victoria, the VCCC Ltd is an incorporated joint venture, structured through a company limited by guarantee.

The VCCC's multi-site, multi-disciplinary model brings together the complementary strengths of Peter MacCallum Cancer Centre, Melbourne Health (including The Royal Melbourne Hospital), The University of Melbourne, The Walter and Eliza Hall Institute of Medical Research, The Royal Women's Hospital, The Royal Children's Hospital, Western Health, St Vincent's Hospital Melbourne (including St Vincent's Institute), Austin Health (including the Olivia Newton-John Cancer Research Institute and Austin Lifesciences) and Murdoch Children's Research Institute.

5.5 FACULTY OF MEDICINE, DENTISTRY AND HEALTH SCIENCES

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 \$628m 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.

5.6 THE UNIVERSITY OF MELBOURNE

Established in 1853, the University of Melbourne is a leading international university with a tradition of excellence in teaching and research. The main campus in Parkville 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. With outstanding performance in international rankings, the University is at the forefront of higher education in the Asia-Pacific region and the world.

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>.

5.7 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/our-research/research-at-melbourne>

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.

5.8 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/governance>