THE UNIVERSITY OF
MELBOURNE

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

Lecturer, Level B (Biostatistics)

POSITION NO	0045952
CLASSIFICATION	Lecturer, Level B
SALARY	$95,434 - $113,323 p.a.
SUPERANNUATION	Employer contribution of 9.5%
EMPLOYMENT TYPE	Full-time fixed term position available for 3 years
OTHER BENEFITS	http://about.unimelb.edu.au/careers/working/benefits
CURRENT OCCUPANT	New
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers, under 'Job Search and Job Alerts', select the relevant option ('Current Staff' or 'Prospective Staff'), then find the position by title or number.
CONTACT **FOR ENQUIRIES ONLY**	Associate Professor Lyle Gurrin Tel +61 8344 0731 Email lgurrin@unimelb.edu.au *Please do not send your application to this contact*

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Position Summary

This teaching and research position will be a joint appointment between the Melbourne School of Population and Global Health (Faculty of Medicine, Dentistry, and Health Sciences) and the School of Mathematics and Statistics (Faculty of Science). The position will be based in the newly-established Biostatistics Research Hub, which will provide leadership for biostatistics research, teaching and research training throughout the two faculties. Candidates should have a commitment to teaching. There will also be dedicated time to undertake methodological research, with opportunities to collaborate with the critical mass of biostatisticians located at the Biostatistics Research Hub as well as other Statistics, Mathematics and Computational Biology research groups affiliated with the Hub and the numerous biomedical researchers based at the University and University-affiliated hospitals and institutes.

The successful applicant will primarily report to Associate Professor Lyle Gurrin and work closely with Professor Howard Bondell (School of Mathematics and Statistics).

1. Selection Criteria

1.1 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.
- Previous experience in teaching undergraduate and/or postgraduate statistics.
- Aptitude and enthusiasm for supervision of research students.

1.2 DESIRABLE

- A strong research profile, as evidenced by publication record, active collaborations, invitations to speak and/or service to relevant professional bodies.
- A record of success in gaining external competitive research grants, commensurate with experience and opportunities.
- A track record of success in teaching at university level, demonstrated ability to teach large undergraduate classes, and the ability to develop and teach relevant discipline subjects at a graduate level.
- Evidence of success in graduate student supervision.
- Ability to simplify and convey statistical concepts to people with limited statistical or mathematical background.

2. Special Requirements

- N/A

3. Key Responsibilities

3.1 RESEARCH

- Conduct methodological research and disseminate its results through scientific publications and conference/seminar presentations.
- Develop collaborations within the Biostatistics Research Hub and/or with other researchers based at the Melbourne School of Population and Global Health and the School of Mathematics and Statistics, as well as the wider biomedical research community.
- Supervision of undergraduate and masters-level research projects.

3.2 TEACHING AND LEARNING

- Coordinate an undergraduate and/or postgraduate biostatistics subject. This involves effective preparation and delivery of subject materials (including the use of web resources as appropriate), drafting and marking of assessments, monitoring of subject discussion board, and coordination of tutorials and practical classes.
- Participate in peer-review activities of existing subjects.

3.3 SERVICE AND LEADERSHIP

- Provide service to the University and actively participate in meetings and committees as agreed with the supervisor and/or Head of School.
- Actively participate in school committee and research team meetings
- Other duties commensurate with the position as directed by the supervisor and/or the Head of School.

3.4 ENGAGEMENT

- Liaise with members of the research team and stakeholders as required.
- Communicate research findings to stakeholders via reports and presentations as required.
- Actively contribute to the discipline by participating in professional bodies and in scholarly meetings and conferences, and by undertaking professional activity in the field.
- Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 5.

4. Other Information

4.1 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 C positions (joint with Peter Doherty Institute of Immunity and Infection 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, 9 postdoctoral researchers), statisticians from the School of Mathematics & Statistics including Melbourne Integrative 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 teaching, working with the two level B positions joint with Mathematics and Statistics to develop a new major in biostatistics within the BSc degree, integrated with new programs in Computational Biology and Data Science. S/he will also oversee postgraduate training in biostatistics, including training of non-specialists in biomedical and clinical PhD degrees.

4.2   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.

4.4 THE MELBOURNE SCHOOL OF POPULATION AND GLOBAL HEALTH

The Melbourne School of Population Health (http://mspgh.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 (CHP)
- 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

4.5 FACULTY OF MEDICINE, DENTISTRY AND HEALTH SCIENCES

www.mdhs.unimelb.edu.au

The Faculty of Medicine, Dentistry and Health Sciences (MDHS) plays a vital role in the delivery of the University of Melbourne's Strategic Plan 2015-2020: Growing Esteem by providing current and future generations with education and research equal to the best in the world. It is Australia's largest and leading biomedical research faculty. It employs more than 1,700 members of staff, has more than 8,000 students, and total revenue of $607 million for 2015. Reflecting the complexity of today's global health landscape, the Faculty is made up of six different Schools and four Strategic Research Initiatives, and draws together all areas of human health, ranging from the most basic to the most applied

areas of research. The Faculty contributes close to 50 per cent of research conducted at the University.

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.

4.6 SCHOOL OF MATHEMATICS AND STATISTICS

The University of Melbourne's School of Mathematics and Statistics is one of Australia's leading mathematics and statistics schools. It has achieved this status through the high quality of its research and teaching programs. The School offers a wide range of subjects to undergraduate and postgraduate students and is involved in aspects of community life that impact on the interests of the School and the discipline. Infrastructure support for research and basic information technology facilities are provided to all members of the school.

The School of Mathematics and Statistics (http://www.ms.unimelb.edu.au) has a total of 42 continuing teaching and/or research staff; 26 research only staff and consultants; 6 Mathematics and Statistics Learning Centre teaching specialists; and 20 support staff. The School has over 100 casual and honorary staff. In 2014, there are 88 Research Higher Degree and 78 Coursework Master of Science students. Four members of the School staff and one Emeritus Professor are members of the Academy of Science. Members of the School have strong collaborative links in many of the world's leading research institutions.

4.7 FACULTY OF SCIENCE

www.science.unimelb.edu.au

The Faculty of Science was formally constituted in 1903, although science has been taught since 1854 when the first Professors of mathematics and natural science joined the University. It is one of the University's largest faculties with some 7,000 undergraduate and postgraduate students, and has an annual budget in the order of $200M.

The Faculty of Science has a deserved reputation for the delivery of high quality teaching and research programs across a breadth of disciplines. The subjects and courses offered are integral to the quality of a significant number of the educational programs in other faculties. The Faculty has a long-standing and distinguished record of providing postgraduate education at the Masters and Doctoral levels and it has established strong international research and research education linkages within the USA, Europe and throughout the Asian region.

The Faculty is made up of seven Schools as follows: Schools of Biosciences, Chemistry, Earth Sciences, Ecosystem and Forest Sciences, Geography, Mathematics and Statistics and Physics. The Faculty also has custodial responsibility for the Bio21 Molecular Science & Biotechnology Research Institute and Office for Environmental Programs.

The Faculty, through its Schools and Research Centres, is active in professional development, continuing education nationally and internationally, and in links to schools and the community.

4.8   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.

4.9   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.

4.10 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.

4.11 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.

5. 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.