THE UNIVERSITY OF
**MELBOURNE**

**School of Mathematics and Statistics**
Faculty of Science

# LECTURER / SENIOR LECTURER IN STATISTICS (DATA SCIENCE)

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| **POSITION NO** | 0056956 |
| **CLASSIFICATION** | Level B / Level C |
| **SALARY** | Level B: $110,236 - $130,900 p.a.<br>Level C: $135,032- $155,698 p.a.<br><br>Level of appointment is subject to the appointee's research record, qualifications and experience. |
| **SUPERANNUATION** | Employer contribution of 17% |
| **WORKING HOURS** | Full time (1.0 FTE) |
| **BASIS OF EMPLOYMENT** | Continuing |
| **OTHER BENEFITS** | http://about.unimelb.edu.au/careers/working/benefits |
| **HOW TO APPLY** | Online applications are essential.<br>Go to https://www.mathjobs.org/jobs, Login or Create a New Account, then find the position by title. |
| **CONTACT**<br>**FOR ENQUIRIES ONLY** | Professor Howard Bondell<br>Tel +61 3 8344 0169<br>Email: howard.bondell@unimelb.edu.au<br><br>*Please do not send your application to this contact* |

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

## Acknowledgement of Country

The University of Melbourne acknowledges the Traditional Owners of country throughout Australia. The University recognises the unique place held by Aboriginal and Torres Strait Islander Peoples as the original custodians of country and their continued connection to the land, waterways, songlines and culture. The University respects all Aboriginal and Torres Strait Islander People and warmly embrace those students, staff, Elders and collaborators who identify as First Nations.

# *Position Summary*

The School of Mathematics and Statistics is seeking to expand its expertise in contemporary statistics and data science.

The successful applicant is expected to develop and maintain a high-level research program in data science and statistics, methodology and applications. Beyond the Data Science and Statistics groups, the University of Melbourne provides an outstanding environment in which to develop innovative research in data science and statistics, with opportunities for collaborations in the Melbourne Centre for Data Science, with machine learning and bioinformatics researchers in Computing and Information Systems, biostatisticians in Population and Global Health, big data research in genomics in the Melbourne Integrative Genomics research hub as well as applied and theoretical approaches to data science in all areas. The School has excellent computing facilities and access to both local and cloud high performance computing clusters.

The candidate should also have a strong commitment to teaching and the supervision of research students. Teaching will occur within the School of Mathematics and Statistics undergraduate and MSc programs, and the applicant will be expected to teach statistics and its applications to a variety of audiences. They are also expected to supervise research students at undergraduate, MSc and PhD levels in data science and statistics.

The University of Melbourne provides a wide range of opportunities for exciting research collaborations within the School, wider University and externally. There are close ties to industry and government which provides opportunities to undertake external consulting and collaboration. The successful applicant will be expected to undertake administrative tasks for the School.

# *1. Key Responsibilities*

## 1.1  RESEARCH AND RESEARCH TRAINING

You are expected to significantly contribute towards the research effort of the team and to develop your research expertise with an increasing degree of autonomy.

- The conduct of research and contribution to knowledge through scholarship, cross-disciplinary or industry collaboration, refereed publication and presentations. Research may be carried out independently and/or as part of a team.
- Active application to, and success in obtaining external research grant income to support that research.
- Active participation in research seminars and conferences.
- Engage with relevant professional and industry bodies and stakeholders to foster collaborative partnerships
- Active supervision of postgraduate students, both Masters and PhD.

## 1.2   TEACHING AND LEARNING

- Effective preparation and delivery of lectures at undergraduate and postgraduate level and the assessment of that material.

- Proactive development of subject materials and delivery, including the use of web resources as appropriate.

- Supervision of the program of study of postgraduate students engaged in coursework.

- Development of curriculum in data science and statistics in both undergraduate and postgraduate levels.

- Consultation with and academic mentoring of students.

- The conduct of tutorials and practical classes, in addition to marking and assessment.

## 1.3   LEADERSHIP AND SERVICE

- Effective undertaking of a range of administrative functions, including those connected with teaching responsibilities and the conduct of the academic affairs of the School.

- Participation in School and/or Faculty meetings and/or the committees that have responsibility for the academic affairs of the School.

- Contribute to, or present research to the public to elevate public awareness of educational and scientific developments, and promote critical enquiry and public debate within the community where appropriate

- Involvement in professional activity within the discipline.

- Participation in outreach activities.

- Contribution to School activities such as Open day to promote student engagement.

- Effective demonstration and promotion of University values including diversity and inclusion and high standards of ethics and integrity

## 1.4   OTHER DUTIES

- Performance of other tasks as requested by the supervisor or the Head of School.

- Active participation in the University Professional Development Framework.

- Ensure an up-to-date record of University compliance courses, such as, but not limited to, Appropriate Workplace Behaviour, PDF for Staff and Supervisors.

- Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 4.

## *2. Selection Criteria*

### 2.1 ESSENTIAL

- Completion of a PhD or equivalent research higher degree in statistics or related discipline.

- Demonstrated research excellence in relation to career stage including a strong record of publication and the ability to develop research links nationally and/or internationally.

- The ability to develop and teach statistics and data science subjects at the undergraduate and postgraduate level.

- The ability to interact well with other academic staff and to contribute to the administration of a large school.

- Clear potential in graduate student supervision.

- Demonstrated ability to engage with relevant professional and industry bodies and stakeholders to foster collaborative partnerships.

- Excellent interpersonal and both written and oral communication skills in English.

- Demonstrated ability to develop, administer and see through to completion appropriately designed research projects with limited supervision

- Demonstrated excellent organisational skills to meet deadlines and bring projects to a timely completion

### 2.2 DESIRABLE

- The ability to attract external funding through grant applications and/or support in funded joint projects with others internal or external to the university.

- Existing evidence of interdisciplinary collaborations using and developing methodology tailored to a broad range of applications.

- Experience in assisting with supervision of students undertaking undergraduate or higher degree research projects.

## *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 desire to strive for excellence and reach the targets of Advancing Melbourne.

# 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  SCHOOL OF MATHEMATICS AND STATISTICS

http://www.ms.unimelb.edu.au

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.

The School of Mathematics and Statistics has a total of 70 continuing teaching and/or research staff; 34 research only staff and consultants; 16 academic specialists and 16 support staff. The School has over 240 casual and honorary staff. In 2020, there were 90 Research Higher Degree and 278 Coursework Master of Science students. Five members of the School staff and one Emeritus Professor are members of the Academy of Science.

Infrastructure support for research and basic information technology facilities are provided to all members of the department. Special facilities such as high-end workstations and salaries for research fellows are supported through individual competitive external research grants. Members of the School have had considerable success at attracting support from the Australian Research Council. The school currently hosts two ARC Centres of Excellence, and has hosted four ARC Laureate Fellows, ten ARC Future Fellows and fourteen DECRA Fellows.

It is one of the objectives of the University to develop and maintain a strong international profile. In this context, members of the School have strong collaborative links with colleagues in the United States of States of America, most countries in Europe and the Asia-Pacific region.

## 5.2  FACULTY OF SCIENCE

http://www.science.unimelb.edu.au

Science at Melbourne is a global leader across fundamental and impactful scientific research and education. Science begins with curiosity, and we are dedicated to understanding the universe from the level of sub-atomic particles to the solar system. We aim to be leaders who positively impact the community locally and globally, addressing major societal issues from climate change to disease. Our discoveries help build an understanding of the world around us.

Our strength is our breadth of expertise. We are the second largest faculty in the University comprising seven schools: Agriculture, Food, Forest & Ecosystems Sciences, BioSciences, Chemistry, Geography, Earth & Atmospheric Sciences, Mathematics & Statistics, Physics and Veterinary Science.

This depth of knowledge positions the faculty to better understand, explore and impact our world and humanity, within a truly comprehensive Faculty of Science.

We have more than 150 years of experience in pioneering scientific thinking and analysis, leading to outstanding teaching and learning and offer a curriculum based on highly relevant research. We aim to train students with the knowledge and intellectual flexibility to drive the industries of tomorrow and lead across all levels of society.

We offer a range of undergraduate, honours, graduate and research degrees; enrolling more than 11,500 undergraduate and 3,750 graduate students.

We are dedicated to delivering leading transformative educational outcomes, underpinned by research, and an inclusive and inspiring student experience.

Excellence comes in many forms and diversity of thought, perspective and disciplines is essential to deliver globally leading science. At the core of our success is our focus on an inclusive environment for all in our community. Our Faculty's focus on equity, inclusion and belonging is grounded in our endeavour to ensure we are best placed to advance research, teaching and serve diverse national and global communities.

As a Science community we sit across six of the University's seven campuses – Parkville, Dookie, Burnley, Creswick, Shepparton and Werribee. This reach provides us with a unique perspective that is beneficial to our teaching and research. It also means we can offer our students a greater variety of learning experiences and internships to engage with industry partners to solve real-world issues.

We are highly research focused, performing strongly in the ARC competitive grants schemes, often out-performing the national average. The Faculty of Science is also currently growing its competitiveness and standing in the NHMRC space.

The Faculty is custodian of the Bio21 Molecular Science and Biotechnology Institute, Office for Environmental Programs, Australian Mathematical Sciences Institute (AMSI), the Indigenous Knowledge Institute and home to numerous Centres.

## 5.3  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

## 5.4  ADVANCING MELBOURNE

The University's strategic direction is grounded in its purpose. While its expression may change, our purpose is enduring: to benefit society through the transformative impact of education and research. Together, the vision and purpose inform the focus and scale of our aspirations for the coming decade.

Advancing Melbourne reflects the University's commitment to its people, its place, and its partners. Our aspiration for 2030 is to be known as a world-leading and globally connected Australian university, with our students at the heart of everything we do.

We will offer students a distinctive and outstanding education and experience, preparing them for success as leaders, change agents and global citizens.

We will be recognised locally and globally for our leadership on matters of national and global importance, through outstanding research and scholarship and a commitment to collaboration.

We will be empowered by our sense of place and connections with communities. We will take opportunities to advance both the University and the City of Melbourne in close collaboration and synergy.

We will deliver this through building a brilliant, diverse and vibrant University community, with strong connections to those we serve.

The means for achieving these goals include the development of the University of Melbourne's academic and professional staff and the capabilities needed to support a modern, world-class university. Those means require a commitment to ongoing financial sustainability and an ambitious infrastructure program which will reshape the campus and our contribution to the communities we engage with. This strategy, and the priorities proposed, is centred around five intersecting themes; place, community, education, discovery and global.

## 5.5  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