



POSITION DESCRIPTION

School of BioSciences
Faculty of Science

Research Manager and Academic Convenor - Computational Biology

POSITION NO	0040243
CLASSIFICATION	Level B or Level C
SALARY	\$92,654 - \$110,022 p.a. (Level B) or \$113,496 - \$ 130,866 p.a. (Level C)
SUPERANNUATION	Employer contribution of 17%
EMPLOYMENT TYPE	Full-time, fixed-term position available for 3 years Fixed term contract type: Specific task or project Work Focus Category: Academic Specialist
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	Prof David Balding dbalding@unimelb.edu.au Tel + 61 3 8344 3730 Prof Edmund Crampin edmund.crampin@unimelb.edu.au Tel + 61 3 9035 8989

Please do not send your application to these contacts

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

about.unimelb.edu.au/careers
joining.unimelb.edu.au

Position Summary

About the Position

This position will help to foster the development of two exciting new initiatives at the University of Melbourne, both working to advance the University's research effort in the area of computational biology. The Centre for Systems Genomics is a cross-faculty research hub focused on systems biology and genomics, while the Computational Biology Research Hallmark Initiative (CBRI) is a broader enterprise aimed at promoting and facilitating computational biology research across the wider University. The successful applicant will have a diverse and stimulating portfolio of activities and responsibilities, will work with dynamic researchers at the cutting edge of one of the most exciting areas of science and will have opportunities to contribute to the success of many research projects. This is an Academic Specialist position.

The appointee will be based in the Centre for Systems Genomics and report to its Director, Prof David Balding. The appointee will be a member of the School of BioSciences within the Faculty of Science, but the work will also involve close liaison with other Faculties, Schools and Centres. 40% of the workload will be in the role of Academic Convenor for the CBRI, working closely with its Steering Group and Chair, Prof Edmund Crampin.

Centre for Systems Genomics (sysgenmelb.org)

The Centre for Systems Genomics is a cross-faculty initiative of the University of Melbourne, including over 60 researchers who are, since October 2015, co-located in refurbished premises on Royal Parade, Parkville. In addition to outstanding researchers, the Centre's resources include a high-throughput molecular biology laboratory and high-performance compute cluster, managed in partnership with the Victorian Life Sciences Computing Initiative (VLSCI).

Systems genomics is an approach to studying complex biological systems that prioritises the genome as the blueprint for the system, and involves the investigation and interpretation of natural genetic, molecular and phenotypic variation in populations. Systems genomics studies the processes that lead from the genome of an organism to the observed characteristics of interest, such as states of health or aspects of normal variation. When studying an organism it is important to also study its environment, and this includes the genomes of the microorganisms within and surrounding it, for example bacterial pathogens. Techniques for systems genomics research require the integration of biological domain knowledge with analytical methodologies from statistics, mathematical and evolutionary modelling, and computer science.

The Research Manager will work with the Director, co-Directors A/Profs Kathryn Holt and Mike Inouye and the Management Committee to develop and implement the Centre's research strategy, assist with research grant and ethics applications, and to organize research events such as seminars and workshops, and training activities. S/he will also help identify and develop partnerships between the Centre and other research institutes and industry.

Computational Biology Research Hallmark Initiative (compbioresearch.unimelb.edu.au)

The CBRI is a University-wide initiative aimed at promoting and facilitating computational biology research throughout the University of Melbourne. Leadership of the CBRI resides with a Steering Group, chaired by Prof Edmund Crampin. He is also a member of the Centre for Systems Genomics Management Committee, and several other members of that committee are also members of the CBRI Steering Group.

The broad themes of the CBRI are to support and facilitate collaborative and interdisciplinary research by involving research staff from across the University, and by facilitating connections with partner organisations and with external (including international) researchers. Core activities of the CBRI will be the planning and delivery of capacity building events and initiatives, including seminars, workshops and symposia.

The Academic Convenor will work with the CBRI Chair and Steering Group and the University's computational biology research community, to facilitate and support research-enabling activities in selected theme areas, oversee the Initiative budget, assist in annual reporting, identify and engage with potential research collaborators to attract research funding from industry and government, and oversee planning, communication and administration of seminars, workshops

and like events. The appointee will also identify and develop activities where CBRI support can lead to beneficial outcomes beyond what can be achieved by individual research programs.

1. Selection Criteria

1.1 ESSENTIAL

- 1.1.1. A PhD in life sciences or relevant quantitative science
- 1.1.2. An established track record in research, with a good publication record relative to career stage
- 1.1.3. A high level of independence and initiative and outstanding interpersonal and communication skills, both oral and written
- 1.1.4. Ability to engage with researchers from diverse disciplines and levels of research experience and to identify and engage with potential industry partners
- 1.1.5. Demonstrated experience of management including organisation of training activities and other events
- 1.1.6. Knowledge of the Australian research funding environment and a track record of securing research grants
- 1.1.7. Ability to manage research ethics applications including preparation, compliance and reporting
- 1.1.8. Ability to manage competing priorities and excellent time management skills

In addition to the above, essential criteria for a Level C appointment are:

- 1.1.9. Experience of research management
- 1.1.10. Substantial experience of research grant application and success
- 1.1.11. Experience of postgraduate student supervision
- 1.1.12. A successful record of engagement with industry, government, media and/or the wider community in science-related activities

1.2 DESIRABLE

- 1.2.1 A track record of interdisciplinary research, preferably in quantitative or computational biology, genomics or genetic epidemiology
- 1.2.2 International research experience
- 1.2.3 Experience of research skills training such as workshops and short courses

2. Special Requirements

Some occasional out-of-hours work will be required to assist with the management of events.

3. Key Responsibilities

Centre for Systems Genomics:

- 3.1** Work with the Centre Management Committee to develop and implement the Centre's research strategy
- 3.2** Build the academic profile of the Centre and its research program internally and externally, and provide support to the Management Committee in identifying and managing collaborative relationships with associate members and partner institutions.
- 3.3** Support the Centre's research activities by liaising with the DVCR and relevant School and Faculty administrative units including HR, Infrastructure & Facilities, Finance, OHS, Human and Animal Ethics, and IT
- 3.4** Assist with preparation of grant applications with Centre researchers
- 3.5** Assist with research ethics management for Centre projects, including application preparation, compliance and reporting
- 3.6** Contribute to Centre research projects, including internal and external reporting

Computational Biology Research Initiative (CBRI):

- 3.7** Provide support to a Steering Group that includes senior and mid-career academic members and representatives of external collaborating organisations
- 3.8** Work with the Chair and the Steering Group to help implement the strategy of the CBRI and to disseminate its work and achievements to the relevant community, through promotional materials, including website updates and use of social media
- 3.9** Under the guidance of the Steering Group, and working with the Hallmark Initiatives Project Officer based in the Research Innovation and Commercialisation portfolio of University Services as appropriate, facilitate and support interdisciplinary research-enabling activities in selected theme areas
- 3.10** Work closely with the wider University community, the University's Research Innovation and Commercialisation (RIC) and the Engagement and Partnerships offices to identify and engage with potential research collaborators and to attract funding for interdisciplinary research

Both CBRI and Centre:

- 3.11** Organise research symposia, seminars and networking functions
- 3.12** Oversee budgets, and prepare annual activity and financial reports.

In addition to the above, appointees at Level C are expected to provide a greater level of leadership and initiative in all areas of responsibility, but particularly for 3.2 and 3.9 above.

4. Other Information

4.1 ORGANISATION UNIT

The School of BioSciences was formed in 2015 through the amalgamation of the School of Botany and the Departments of Genetics and Zoology thus bringing together a critical mass of 160 Academic staff and 240 Research Higher Degree students undertaking world class teaching and research in the biological sciences. Academics within the School are aligned to three research clusters: Ecology, Evolution and Environmental Science; Genetics, Genomics and Development and Plant Science. Computational Biology is an emerging fourth area in which critical mass is being built within the school. Through cross-disciplinary collaborations within the School and with external partners, the School is a major recipient of grant and contract funding totaling about \$100m per annum.

The School is a major contributor to the Bachelor of Science, Bachelor of Biomedical Science and the Environmental Science programs, its teaching program reflecting the research interests within the School.

4.2 FACULTY OF SCIENCE

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

Science at the University of Melbourne is the most highly ranked Faculty of Science in Australia.* Science is defined by its research excellence in the physical and life sciences and is at the forefront of research addressing major societal issues from climate change to disease. Our discoveries help build an understanding of the world around us.

We have over 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, which empowers our STEM students and graduates to understand and address complexities that impact real world issues and the challenges of tomorrow.

We aspire to engage the broader community with the impact that Science has on our everyday lives. Through the strength of our internships and research project offerings, our students are provided opportunities to engage with industry partners to solve real-world issues.

The Faculty of Science has over 40,000 alumni and is one of the largest faculties in the University comprising seven schools: BioSciences, Chemistry, Earth Sciences, Ecosystem and Forest Sciences, Geography, Mathematics and Statistics, and Physics.

The Faculty is custodian of the Bio21 Molecular Science and Biotechnology Institute, Office for Environmental Programs and home to numerous Centres.

Science manages more than \$280 million of income per annum, with a staff base in the order of 220 professional staff, and more than 540 academic staff.

We offer a range of undergraduate, honours, graduate and research degrees; enrolling over 7,500 undergraduate and graduate students. The Faculty of Science is the custodial Faculty for the BSc (Bachelor of Science) with enrolments of approximately 6,200 students.

The Faculty of Science is a leader in research, contributing approximately \$50 million in HERDC income per annum. The Faculty of Science is highly research focused, performing strongly in the ARC competitive grants schemes, often out-performing the

national average. The Faculty of Science is currently growing its competitiveness and standing in the NHMRC space.

The Faculty of Science provides community services and industry partnerships based on a solid foundation of research in the pure and applied sciences. The Faculty has an endowment of approximately \$50 million. The annual income from the endowment supports more than 120 prizes, scholarships and research awards.

*Figures from the latest available data for 2015, including published international rankings data.

4.3 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>.

4.4 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.

4.5 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.

4.6 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.