POSITION DESCRIPTION

THE UNIVERSITY OF MELBOURNE

Melbourne Bioinformatics
Faculty of Medicine, Dentistry and Health Sciences

Academic Specialist – Bioinformatician – Melbourne Bioinformatics

POSITION NO	0046069
CLASSIFICATION	Academic Specialist Level A Academic Specialist Level B (depending on qualifications & experience)
SALARY	Academic Specialist Level A $73,669 - $93,130 Academic Specialist Level B $105,232 -124,958
SUPERANNUATION	Employer contribution of 17%
WORKING HOURS	Full-time (1.0 FTE)
BASIS OF EMPLOYMENT	Continuing – Research Contingent
OTHER BENEFITS	https://about.unimelb.edu.au/careers/staff-benefits
HOW TO APPLY	Online applications are preferred. Go to http://about.unimelb.edu.au/careers, select the relevant option ('Current Opportunities' or 'Jobs available to current staff'), then find the position by title or number.
CONTACT FOR ENQUIRIES ONLY	Fiona Kerr Tel +61 3 9035 3445 Email fiona.kerr@unimelb.edu.au *Please 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

Life science research is increasingly dependent on data science as more experimental methods are digitised and large and complex data sets are accumulated. Melbourne Bioinformatics at The University of Melbourne is at the forefront of this revolutionary change, supporting a wide array of life science data analytics research and teaching activities with University researchers and partners. Our experts assist with research design and grant applications, advise on computing options, engage in deep research collaborations, develop bioinformatics algorithms and software, create and deliver both online and hands-on bioinformatics training, and deliver the Master of Science (Bioinformatics) course, as well as supervise PhD students.

Melbourne Bioinformatics collaborates on a range of national and international platform development and digital research infrastructure projects and hosts the Australian BioCommons (BioCommons), a $20M NCRIS-funded digital research infrastructure program for life science research (2019-2023).

This position has been created to meet the growing requirement for a dedicated bioinformatician who could work across several externally funded projects to ensure their timely delivery and adoption and to demonstrate ongoing value to the University.

The role of Academic Specialist – Bioinformatics is responsible for delivering expertise to major national projects such as Galaxy Australia and the Portable Pipelines Project. In meeting these objectives, the incumbent will work in close consultation with the Academic Lead, Melbourne Bioinformatics, and liaise with expert bioinformaticians within both Melbourne Bioinformatics and across local, national and international networks. This role combines technical understanding with an ability to bring together software engineers and different research groups to optimise workflows and usage on a range of platforms, starting with Galaxy Australia and the Portable Pipelines. Key requirements of the role are to engage with key users, support the production and availability of tools and workflows, develop and improve user documentation, deliver training workshops, and liaise with the software development team to design new features for a range of research communities.

As a member of the Melbourne Bioinformatics expert team, it is also expected that the role will involve contributing to our training program and community skills development activities, as we work to empower life scientists from within The University of Melbourne and across the Parkville Precinct.

Ideally, the preferred candidate will have familiarity with the data analysis, tools and infrastructure needs of life science researchers and possess demonstrable personal qualities of communication, collaboration and organisation.

1. Key Responsibilities

- Engagement with research teams across the Parkville Precinct to determine their needs and to broker solutions to their data analysis needs.
- Wrapping tools and generating analytical workflows along with associated outreach activities which lead to greater adoption by users of key bioinformatics platforms (including Galaxy Australia and the Portable Pipeline Project) across a range of life science disciplines.
- Contributing discipline-specific insights to inform selected software development projects across life science computing research infrastructure.
- Facilitate user feedback to platform developers to improve functionality and features.

- Development of training materials and contribution to training, teaching and community development activities of Melbourne Bioinformatics.
- Observance of the Occupational Health and Safety (OH&S) and Environmental Health and Safety (EH&S) responsibilities as outlined in section 5.

2. Selection Criteria

2.1 ESSENTIAL

- Degree in a relevant discipline, particularly Bioinformatics, or equivalent industry experience.
- Excellent communication and interpersonal skills.
- Demonstrated understanding of bioinformatics tools, methods, data analyses, data management and analysis platforms across several specialist areas.
- Proven ability in scripting and tool wrapping in Python and/or R.
- Experience with high performance computing (both hardware and cloud environments) including an understanding of the hardware requirements associated with a variety of life sciences analyses.
- Experience developing and delivering training materials.
- Ability to deliver practical solutions in complex technical and social environments.
- Proven ability to engage with diverse stakeholders.

2.2 DESIRABLE

- A practical understanding of computational solutions that are suitable for collaborative access and use from a wide range of stakeholder organisations.
- An appreciation of software development activities in a complex informatics environment such as a research institute, clinical setting or a research support facility, working on major research and/or clinical projects.
- Active engagement in bioinformatics community activities.

3. Job Complexity, Skills, Knowledge

3.1 LEVEL OF SUPERVISION / INDEPENDENCE

The successful applicant will report to the Academic Lead, Melbourne Bioinformatics. They will also be required to work with partners at the Australian BioCommons team, and leading research teams across the Parkville precinct. They will be expected to work towards specified tasks with set deadlines, in a collaborative manner, demonstrating a high level of initiative and motivation. They will actively engage with other members of the Melbourne Bioinformatics team and will seek guidance from senior team members where necessary.

3.2 PROBLEM SOLVING AND JUDGEMENT

Academic Specialists are expected to apply considerable technical skills to projects in new domains and to grow their capacity to work on larger projects with increasing levels of autonomy where required. This role requires the incumbent to extend their skills into the bioinformatics domain and positively interact and work with experts in this field. As the position also involves work on nationally funded research infrastructure projects, an interest and ability to engage with experts in e-Research is also required.

Given the breadth and scale of the activities upon which this role will be engaged, the ideal candidate will be someone who wishes to develop their bioinformatics career by extending themselves into tool development and infrastructure projects that are catering to and supporting the needs of researchers in the life sciences.

Some interstate and international travel may be required.

4. 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 Growing Esteem.

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:

https://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.

6. Other Information

6.1 ORGANISATION UNIT

http://www.melbournebioinformatics.org.au

Melbourne Bioinformatics is hosted at the University of Melbourne within the Faculty of Medicine, Dentistry & Health Sciences.

Melbourne Bioinformatics' experts in software development and bioinformatics help researchers with their research involving life sciences computation. The significant training program supports students and researchers and a growing number of subscribers to Melbourne Bioinformatics' services who see the value in getting direct access to the computers and the expertise to advance their research quickly.

Melbourne Bioinformatics is host to the Australian BioCommons, a $20M NCRIS-funded research infrastructure program for life science research (2020-2023).

This world-class institution in the heart of Australia's biomedical and biotechnology precinct offers to:

- solve academic and industrial bioinformatics, computational biology and bio-engineering problems
- accelerate research through direct access to high-end computing systems, software and computational biology experts in one centre
- skill up teams in new computational biology techniques and tools through a comprehensive training program
- give further advice regarding data handling and management and system administration
- collaborate on any outreach programs aimed at building the life sciences computation community in Australia.

Since its establishment in 2009, Melbourne Bioinformatics (ex-VLSCI) has enhanced Victoria's international standing in life sciences by positioning researchers at the cutting edge of this growing discipline, nurturing future leaders in these fields and creating a magnet to attract industry to Victoria. The benefits for the broader Victorian community are coming from the generation of new knowledge which is leading to improved medical and health outcomes, better food and agriculture and novel developments in engineering.

6.2 BUDGET DIVISION

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.

6.3 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

6.4 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.

6.5 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 https://about.unimelb.edu.au/strategy/governance