



POSITION DESCRIPTION

Department of Medicine, Royal Melbourne Hospital
Faculty of Medicine, Dentistry and Health Sciences

Research Fellow in Clinical Biostatistics (Large Electronic Medical Record Based Studies)

POSITION NO	xxxxxxx
CLASSIFICATION	Level A
WORK FOCUS CATEGORY	Research Focused
SALARY	\$69,148 - \$93,830 p.a
SUPERANNUATION	Employer contribution of 9.5%
WORKING HOURS	Full-time
BASIS OF EMPLOYMENT	Fixed Term position available for 3 years Fixed term contract type: Research
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 , 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. Sanjoy Paul Tel +61 3 9342 8772 Email: sanjoy.paul@unimelb.edu.au <i>Please do not send your application to this contact</i>

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

Position Summary

The post-doctoral researcher will work in the methodological and clinical research programme in the fields of diabetes and cardiovascular diseases using large patient-level electronic medical records (EMRs) from Europe and USA. This exciting programme of studies include statistical and data mining related methodological research to extract data from large EMRs and development of efficient designs for the conduct of comparative effectiveness and outcome studies, and the conduct of clinical /pharmaco-epidemiological studies, especially in the chronic disease areas. The programme is led by Prof. Sanjoy Paul, Director of Melbourne Epicentre, in collaboration with reputed international academic institutes and bio-pharmaceutical companies. The position reports to the Director, Melbourne Epicentre.

1. Key Responsibilities

1.1 RESEARCH AND RESEARCH TRAINING

- ▶ Participate in research independently and as a member of a research team;
- ▶ Lead and participate in competitive research grant applications;
- ▶ Ownership of defined elements of a research project(s) or coordination of research project(s);
- ▶ The production of conference and seminar papers and publications and presentations at conferences and seminars where appropriate;
- ▶ Supervision or co-supervision of major honours or postgraduate research projects within research area;
- ▶ Lead or work in collaboration on the methodological research, lead the data analysis and reporting;
- ▶ Lead and contribute to publications in peer reviewed journals, apart from conference presentations.
- ▶ Contributions to teaching within research field

1.2 LEADERSHIP AND SERVICE

- ▶ Identification of sources of funding to support individual or collaborative projects, relating to teaching, research and engagement practice in the discipline;
- ▶ Work closely with the Australian and international collaborators to strengthen the industry-academia partnership in real-world clinical data based research;
- ▶ Effective training of research support staff and students where required;
- ▶ Actively participate at School and/or Faculty meetings and with guidance, contribute to planning activities or committee work to support capacity-building in the School/discipline;
- ▶ Participate in community and professional activities related to the relevant disciplinary area;
- ▶ Effective demonstration and promotion of University values including diversity and inclusion and high standards of ethics and integrity;
- ▶ 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

- ▶ PhD degree obtained or thesis submitted for PhD degree in relevant area, with undergraduate qualification in Statistics;
- ▶ At least 3 years of experience in conducting research with large relational databases, especially patient-level EMRs from primary and ambulatory care systems;
- ▶ Evidence of methodological research in data mining aspects with EMRs, with research publication;
- ▶ Evidence of significant knowledge in the epidemiological aspects of diabetes and cardiovascular diseases;
- ▶ Evidence of clinical and pharmaco-epidemiological research in the fields of chronic diseases (especially in diabetes and cardiovascular diseases) using EMRs, with research publication;
- ▶ Evidence of strong methodological and clinical knowledge in the conduct of comparative effectiveness studies with EMRs, especially in chronic disease areas;
- ▶ Expert level knowledge in programming for the extraction and mining of big relational databases, especially with expertise in SAS SQL and R;
- ▶ Demonstrated independent and team based research in the specified field of research;
- ▶ Strong evidence of ability and desire to build an academic career trajectory;
- ▶ Demonstrated ability to articulate research through presentation in a public forum including conferences;
- ▶ Demonstrated excellent verbal and written communication skills for effective research collaboration and engagement.

2.2 DESIRABLE

- ▶ Experience in writing research grant applications;
- ▶ Experience in the supervision or co-supervision and mentoring of honours and postgraduate students and other staff;
- ▶ Biostatistical research consulting experience, especially with clinical researchers;
- ▶ Project management skills.

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 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 MELBOURNE EPICENTRE

The Melbourne EpiCentre is a collaborative research centre of University of Melbourne and Melbourne Health embedded within the Royal Melbourne Hospital. It is an academic centre of excellence with research, education, health care quality and safety, and organisation-improvement agenda. The goal of the centre is to promote and run high quality clinical, non-clinical and biostatistical methodological studies, both locally and internationally.

Melbourne EpiCentre is a National Collaborative Research Infrastructure Strategy (NCRIS) funded facility, with expertise in the planning, design, data management, statistical and clinical reporting of clinical trials, conforming to FDA requirements and industry standard. The Centre is leading several early and late phase clinical trials and clinical epidemiological projects with large primary and ambulatory care databases from US and UK. The EpiCentre also provides study design, data management and biostatistical support for diverse research groups across the University, Melbourne Health, as well as providing analytical support for data relating to health care service, quality and safety.

5.2 DEPARTMENT OF MEDICINE, RMH

www.medicine.unimelb.edu.au/medicine-and-radiology

The Department of Medicine and Radiology is a large and diverse department in the Melbourne Medical School that undertakes research, postgraduate and undergraduate teaching within the University of Melbourne teaching hospitals. The Department of Medicine at The Royal Melbourne Hospital is the largest node of the Department, and includes staff and students working in the Melbourne Brain Centre at RMH.

The objectives of the Department of Medicine at RMH are to provide clinical and research leadership from the interface of basic science and clinical medicine across the medical disciplines within the environment of the Royal Melbourne Hospital, to teach undergraduate and postgraduate students, to perform high quality research, and to provide leadership in national medical and scientific bodies. The Department has students enrolled in Bachelor of Science (Hons), Master of Biomedical Science, Master of Medicine, Doctor of Medicine and Doctor of Philosophy students. The Department also regularly hosts students for research training on exchange from other Australian and International Universities.

5.3 MELBOURNE MEDICAL SCHOOL

www.medicine.unimelb.edu.au

The Melbourne Medical School (MMS) was established in 1862 and has a substantial international reputation for its leadership in teaching and training, health research, policy and practice. The MMS is committed to working with the communities we serve to improve health and advance health care. We will do this through our teaching, learning, research, clinical care and advocacy.

The MMS is composed of nine clinical departments (Clinical Pathology, General Practice, Medical Education, Medicine and Radiology, Obstetrics and Gynaecology, Paediatrics, Psychiatry, Rural Health and Surgery) which are embedded within clinical health services throughout metropolitan Melbourne and rural Victoria.

The MMS delivers a suite of health related graduate programs including the Doctor of Medicine (MD), the first professional entry Masters level medical program in Australia. The Melbourne MD delivers a fresh approach to medical training and creates a new benchmark in 21st century medical education.

The MMS is committed to improving the wellbeing of the community through the discovery and application of new knowledge. The research effort of the school is highly collaborative and spans basic to translational research and involves over 800 graduate researchers and 1000 academic staff.

The MMS also actively participates in the public debate and advocacy around key health issues and policy based on our values of commitment, integrity, compassion, respect and service.

5.4 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.

5.5 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>.

5.6 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

5.7 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>