



Australia's
Global
University

Position Description

Biostatistician

Position Number: 00076911
Position Title: Biostatistician
Date Written: July 2019

Faculty / Division: UNSW Medicine
School / Unit: NDARC
Position Level: Level 7/8

ORGANISATIONAL ENVIRONMENT

UNSW is currently implementing a ten year strategy to 2025 and our ambition for the next decade is nothing less than to establish UNSW as Australia's global university. We aspire to this in the belief that a great university, which is a global leader in discovery, innovation, impact, education and thought leadership, can make an enormous difference to the lives of people in Australia and around the world.

Following extensive consultation in 2015, we identified three strategic priority areas. Firstly, a drive for academic excellence in research and education. Universities are often classified as 'research intensive' or 'teaching intensive'. UNSW is proud to be an exemplar of both. We are amongst a limited group of universities worldwide capable of delivering research excellence alongside the highest quality education on a large scale. Secondly, a passion for social engagement, which improves lives through advancing equality, diversity, open debate and economic progress. Thirdly, a commitment to achieving global impact through sharing our capability in research and education in the highest quality partnerships with institutions in both developed and emerging societies. We regard the interplay of academic excellence, social engagement and global impact as the hallmarks of a great forward-looking 21st century university.

To achieve this ambition we are attracting the very best academic and professional staff to play leadership roles in our organisation.

VALUES IN ACTION: OUR UNSW BEHAVIOURS

UNSW recognises the role of employees in driving a high-performance culture. The behavioural expectations for UNSW are below.



Demonstrates
Excellence

Delivers high performance and demonstrates service excellence.



Drives
Innovation

Thinks creatively and develops new ways of working. Initiates and embraces change.



Builds
Collaboration

Works effectively within and across teams. Builds relationships with internal and external stakeholders to deliver on outcomes.



Values individual differences and contributions of all people and promotes inclusion.



Treats others with dignity and empathy. Communicates with integrity and openness.

OVERVIEW OF RELEVANT AREA AND POSITION SUMMARY

UNSW Medicine is a national leader in learning, teaching and research, with close affiliations to a number of Australia's finest hospitals, research institutes and health care organisations. With a strong presence at UNSW Kensington campus, the faculty have staff and students in teaching hospitals in Sydney as well as regional and rural areas of NSW including Albury/Wodonga, Wagga Wagga, Coffs Harbour and Port Macquarie.

The National Drug and Alcohol Research Centre (NDARC) was established at the University of New South Wales by the Commonwealth Government in 1986 to extend the knowledge base required for effective treatment of individuals with alcohol and other drug related problems and to enhance the overall research capacity in the drug and alcohol field. The Centre is highly regarded, both nationally and internationally, for its contribution to drug and alcohol research.

POPPY II is an NHMRC-funded research study that will have significant policy and clinical practice implications for the treatment of pain. This is a retrospective population-based cohort study of approximately 2 million people prescribed opioids in NSW between 2002 and 2018. This world-first study involves a cross-jurisdictional linkage of ten datasets, including data on pharmaceutical claims, health service utilisation (including primary care access, hospitalisations and emergency department presentations) and mortality. The project is being conducted by a leading team of academics in this field from UNSW Sydney, The University of Sydney and University of Technology, Sydney. Findings will help inform our response to Australia's rising opioid problem and be of direct relevance to regulatory authorities and agencies responsible for medicines worldwide.

The Biostatistician is responsible for supporting the project team in achieving the aims of the study. This will involve designing, planning and analyzing a range of pharmaco/epidemiological studies using linked health data, including descriptive studies relating to different opioid exposures and outcomes, as well as more complex study designs to establish the potential association between differing levels of opioid exposure and a range of health-related outcomes.

The role of the Biostatistician reports to the POPPY II Chief Investigators and has no direct reports.

RESPONSIBILITIES

Specific responsibilities for this role include:

Level 7

- Undertake data management and data analysis, including the application of advanced statistical techniques to large, complex linked datasets.
- Contribute to the design of pharmaco/epidemiological studies using appropriate statistical methods (e.g. survival analysis, conditional logistic regression, propensity scores).
- Accurately interpret the results of analyses and communicate the findings verbally and in written summaries.
- Manage data according to best practices, including liaison and correspondence with ethics committees and data custodians, data checking and quality control, development of analytical protocols, management of electronic files and records (including data dictionaries), and archiving.

- Contribute to ethics applications, progress reports and data governance for the study.
- Attend regular project meetings and provide updates on progress against study aims, including written updates for investigators.
- Independently plan workload and manage timelines to meet project outcomes within specified timeframes and budget schedules.
- Conduct and coordinate tasks relating to the research project to the highest scientific and ethical standards.
- Contribute to the preparation of scientific papers, protocols and conference abstracts.
- Perform other relevant duties as requested by supervisor.
- Cooperate with all health and safety policies and procedures of the university and take all reasonable care to ensure that your actions or omissions do not impact on the health and safety of yourself or others.

Level 8 (in addition to the above):

- Independently design, plan and execute complex analyses in accordance with study aims.
- Assist and contribute to the preparation of research grant proposals and tenders for commissioned research.
- Provide substantial contribution to the development of peer-reviewed papers and presentation of study findings.

SELECTION CRITERIA

Level 7

- Undergraduate degree specialising in statistics, biostatistics, epidemiology, pharmacoepidemiology or a related discipline, with relevant research experience.
- Demonstrated experience in the management and analysis of large complex health datasets, and preferably the analysis of linked, longitudinal data.
- Highly developed data analysis skills and experience in use of one or more statistical packages including SAS, Stata or R, with evidence of applying a methodical and detailed approach to data exploration and cleaning.
- Demonstrated ability to independently and accurately perform complex statistical analyses and provide direction in research design and statistical analysis.
- Demonstrated understanding of ethical principles relating to privacy and confidentiality with ability to maintain the strictest confidentiality when dealing with sensitive data.
- Excellent interpersonal and communication skills, with proven ability to build successful working relationships with a variety of people, both internal and external.
- Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training.

Level 8 (in addition to the above):

- Postgraduate degree in statistics, biostatistics, epidemiology, pharmacoepidemiology or a related discipline, with relevant research experience.
- Demonstrated ability to conceptualise novel research questions in areas relevant to public health or health services research, and to develop these into research outputs.

- Demonstrated capacity to carry out or contribute to independent research as indicated by a proven track record of writing reports or manuscripts for publication in peer-reviewed journals.

It is not the intention of the position description to limit the scope or accountabilities of the position but to highlight the most important aspects of the position. The aspects mentioned above may be altered in accordance with the changing requirements of the role.