

Position Description

Research Associate (Liver Microbiome and Nutrition)

Position Number: 00078725
Position Title: Research Associate (Liver Microbiome and Nutrition)
Date Written: October 2019

Faculty / Division: UNSW Medicine
School / Unit: UNSW Medicine
Position Level: Level A

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.



Delivers high performance and demonstrates service excellence.



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



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 St George and Sutherland Clinical School was established in 1969 and is situated on the grounds of St George and Sutherland Hospitals, Sydney. The School has a long record of excellence in undergraduate teaching and clinical training as well as in biomedical and clinical trials research, with particular strengths in intensive care, thrombosis and haemostasis, surgical oncology and immunology/inflammation fields.

The recently established Microbiome Research Centre (MRC) is located at St George Hospital. The MRC has five research themes including liver disease and liver cancer. The Research Associate will work with a team of clinician scientists and basic scientists working at the forefront of research into the role of the microbiome in health and liver disease. Specifically, this position will engage in human and animal research aimed at investigating the diet intervention influence in the microbiome, as well as the role of microbiome modulation in the immune and inflammatory responses in liver disease. The team also investigates the role of the gut microbiota in obesity, metabolic syndrome and chronic liver diseases including non-alcoholic steatohepatitis, cirrhosis and hepatocellular cancer.

The role of Research Associate reports to the Chief Investigator and has no direct reports.

RESPONSIBILITIES

Specific responsibilities for this role include:

- Design and conduct human and animal-based research experiments on the role of microbially-induced inflammation in liver disease
- Provide complete nutritional assessment of patients/participants of the studies and directions for the diet interventional study
- Prepare animal/human ethics applications, institutional biosafety committee submissions and patent applications
- Critically appraise current methods and conduct systematic literature reviews
- Independently design and undertake research projects using population and linked datasets, including interpretation and communication of results
- Identify funding opportunities and contribute to the development and preparation of funding proposals
- Supervise research and/or data analysis performed by other team members
- Assist in the supervision and mentorship of staff and students
- Independently develop strategies to ensure effective and efficient research management
- Prepare research grant proposals, tenders for commissioned research, scientific papers, protocols and conference abstracts
- Convene and attend meetings associated with research projects or work of the organisational unit at departmental and/or faculty meetings and/or relevant committees, including attending presentations at national and international scientific conferences
- Effectively communicate and foster strong working relationships with technical, administrative and research staff

- Perform other duties as requested by the 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

SELECTION CRITERIA

- A PhD qualification in medical science / nutrition with research experience in obesity, liver disease and microbiome and relevant science degree that provides eligibility for full membership of the Dietitians Association of Australia
- Excellent track record of research in a related discipline, which has resulted in peer-reviewed publications
- Highly developed data analysis skills and experience in use of several statistical packages including skills necessary for bio-informatics analysis of sequence and gene expression data
- Demonstrated ability to conceptualise novel research questions in areas relevant to microbiome and liver disease design and conduct complex studies/experiments independently and to develop these into research outputs
- Evidence of an increasing trajectory of research excellence and productivity
- Excellent interpersonal and communication skills, with proven ability to build successful working relationships with a variety of people, both internal and external, with ability to present results and manuscripts at conferences
- Proven clinical leadership skills and an ability to work collaboratively within a multidisciplinary framework
- Proven ability to collaborate on dietary studies using rodent models and analysis of samples of faeces or gut contents
- Clinical experience with diet intervention, proven clinical assessment skills, including full body composition, anthropometric measurements and food consumption and diet records
- Demonstrated experience in molecular biology, nucleic acid extraction, PCR amplification and sequencing techniques
- Demonstrated experience in flow cytometry, cell sorting and cell culture
- Demonstrated organisational skills with the ability to design and conduct complex studies/experiments independently as well as in a multi-disciplinary team environment
- Knowledge of health and safety responsibilities and commitment to attending relevant health and safety training.

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.