THE UNIVERSITY OF WESTERN AUSTRALIA

POSITION DESCRIPTION

Position Title	Research Fellow / Senior Research Fellow
Classification	Level B / Level C
School/Division	School of Human Sciences
Supervisor Title	Senior Principal Research Fellow
Supervisor Position Number	319486
Position Number	New

Your work area

This position is based within the Preclinical Intensive Care Research Unit (PICRU) and UWA School of Human Sciences at The University of Western Australia, situated on the banks of the Swan River, in Perth. The School of Human Sciences is a large, multidisciplinary school currently ranked 24th in the QS World University Rankings for Anatomy and Physiology.

The PICRU is a state-of-the-art preclinical translational unit located in the Large Animal Facility at UWA, currently led by Professor Jane Pillow. Studies in the PICRU focus on innovative preclinical translational research that will improve outcomes of newborns infants. In addition to the PICRU, the Large Animal Facility includes access to dedicated surgical facilities for recovery surgery. The School of Human Sciences is home to the Cell and Molecular Life Facility for access to molecular, histological and imaging capability. You will also be able to access the UWA Centre for Microscopy, Characterisation and Analysis (CMCA).

As an outstanding emerging leader in fetal and neonatal physiology and biology, you will additionally be welcomed as an Honorary Researcher at the Telethon Kids Institute. The Telethon Kids Institute offers access to state-of-the-art facilities for clinical trials, biometrics, and data linkage expertise, as well as specialised laboratory technologies for your tissue analyses. You will develop diverse networks across the School of Human Sciences and the University of Western Australia as well as at the Telethon Kids Institute and with Industry partners that will provide you will the essential connections and strategic support for long-term funding and success as an internationally renowned research leader and innovator in the field.

Reporting structure

Reports to: Senior Principal Research Fellow

Your role

As the appointee, you will work in a multidisciplinary team of physiologists, biomedical scientists, clinicians, engineers and industry partners working on innovative studies to advance the care of newborn infants.

You will assist day-to-day management of current studies and actively develop your own research program. You will be actively mentored and supported by Professor Pillow and research development teams to support your growth as a successful and internationally renowned researcher. You will work to develop methods, interpret results and write manuscripts, and successfully obtain funding to support your future innovative research program.

Your key responsibilities

Level B

Co-design and perform a wide variety of research laboratory tasks and experiments, making detailed observations, analysing data, and interpreting results

Draft manuscripts for publication in scientific journals including generating the text and publication-quality figures

Present project outcomes at lab and institutional meetings, at national and international conferences and to external scientific, government and community audiences

Document standard operating procedures for each method

Co-supervise students and research assistants including troubleshooting experiments performed by team members

Prepare human ethics, GMO, grant reports and other regulatory documents

Actively source independent research funding to support further innovative research

Other duties as directed

Level C

Design and perform a wide variety of research laboratory tasks and experiments, making detailed observations, analysing data, and interpreting results

Write and submit manuscripts for publication in scientific journals including generating the text and publication-quality figures

Present project outcomes at lab and institutional meetings, at national and international conferences and to external scientific, government and community audiences

Document and regularly review standard operating procedures for each method

Supervise students and research assistants including troubleshooting experiments performed by team members

Prepare human ethics, GMO, grant reports and other regulatory documents

Seek independent research funding to support further innovative research

Other duties as directed

Your specific work capabilities (selection criteria)

Level B

PhD or equivalent in fetal neonatal physiology, respiratory physiology, circadian biology, or neurosciences, with laboratory expertise in molecular biology, immunohistochemistry and cell-biology

Demonstrated ability to perform large animal surgery including recovery surgery, caesarean section and complex fetal instrumentation for physiological recording

Demonstrated capacity to obtain nationally competitive research funding to support your research program and to direct and manage associated grants and projects

Demonstrated capacity to form hypotheses, test them using appropriate advanced statistical and modelling tools and a track record of publications of research findings in competitive journals

Demonstrated ability to work independently, show initiative, and to develop innovative projects and solutions, and to work productively and highly collaboratively as an exemplary member of a multi-disciplinary team

Demonstrated strong attention to detail, organisational skills, and maintenance of highly accurate and comprehensive records including data management

Demonstrated capacity to provide co-supervision and teaching for research assistants and research students

Level C

PhD or equivalent in fetal neonatal physiology, circadian biology, or neurosciences, with laboratory expertise in molecular biology, immunohistochemistry and cell-biology

Demonstrated highly developed experience in independently performing large animal surgery including recovery surgery, caesarean section and complex fetal instrumentation for physiological recording

Demonstrated capacity and experience in obtaining nationally and/or internationally competitive research funding to support your research program and to direct and manage associated grants and projects

Demonstrated experience in forming hypotheses, testing them using appropriate advance statistical and modelling tools and a track record of leading publications of research findings in leading international journals

Demonstrated ability to work independently, show initiative, and to develop innovative projects and solutions, and to work productively and highly collaboratively as an exemplary member of a multi-disciplinary team

Demonstrated strong attention to detail, organisational skills, and maintenance of highly accurate and comprehensive records including data management

Highly developed and recognised capacity to provide exemplary supervision and teaching for research assistants and research students

Desirable

Experience in working with consumer organisations on co-design of research projects

Understanding of and experience with mechanical ventilation of newborn animals

Experience with tissue mounting, sectioning, staining for immunohistochemistry and/or in situ hybridization, imaging and interpretation of stained sections

Experience with flow cytometry and immunological assays

Experience with single cell, single nuclei or spatial transcriptomic methods (and other NGS datasets)

Experience in developing and troubleshooting new assays

Special requirements (selection criteria)

Comply with Human and Animal Ethics requirements

Some afterhours work may be required including occasional weekend work

Occasional interstate and international travel may be required

Compliance

Ensure you are aware of and comply with legislation and University policy relevant to the duties undertaken, including:

The University's Code of Conduct hr.uwa.edu.au/policies/policies/conduct/code/conduct

Inclusion and Diversity web.uwa.edu.au/inclusion-diversity

Safety, health and wellbeing safety.uwa.edu.au/