

#### POSITION DESCRIPTION Academic Positions (In addition to the Position Classification Standards)

Position Title:	NHMRC Associate Research Fellow	Level:	А
Faculty/Division:	Science, Medicine and Health	Department/Location:	IHMRI / IPRI
Position Type:	Fixed Term (2 years), full-time		

#### Primary Purpose of the Position:

This position will be responsible for nanomaterials preparation, primary cell culture and human stem cell culture to develop the multifunctional device to be implanted into the brain to treat schizophrenia (NHMRC Project Grant 1065463).

This full-time fixed-term position provides research assistance for the nanomaterials preparation, primary cell culture and human stem cell culture elements of the National Health and Medical Research Council (NHMRC) funded project "Application of intelligent conducting polymers for treating schizophrenia and allied disorders focusing on neuronal outgrowth, myelination and synaptogenesis" being undertaken by Prof Xu-Feng Huang, A/Prof Jeremy Crook, A/Prof Robert Kapsa and Prof Gordon Wallace. These researchers are recognised internationally as world leaders in basic schizophrenia research and the development of "intelligent" polymer materials and nanotechnology.

#### **Position Environment:**

The Illawarra Health and Medical Research Institute (IHMRI) is a collaborative venture of the University of Wollongong (UOW) and the Illawarra Shoalhaven Local Health District (ISLHD). Its goal is to further develop health and medical research undertaken in the Illawarra, with a focus on collaboration across the academic and clinical research contexts. The Intelligent Polymer Research Institute (IPRI) is a multidisciplinary research-intensive unit with state-of-the-art biofabrication facilities, within the ARC Centre of Excellence for Electromaterials Science (ACES).

This position requires nanomaterials preparation in IPRI, primary cell culture in IHMRI, and human stem cell culture in both laboratories. Thus this position will be jointly located within IPRI and IHMRI in the Faculty of Science, Medicine and Health, and thus connected with two of the university's research strengths, IHMRI and IPRI.

## Major Accountabilities/Responsibilities:

Responsibilities		Outcome	Office Use Only
1.	Work towards research objectives, ensuring close liaison with chief investigators	Maintain correct project direction and incorporate all research ideas and feedback from the research team	
2.	Critical review of the available literature	Understanding the current state-of-the- art in relation to the research project	
3.	Design and execute advanced experimental work, imaging and data analyses	Quality laboratory test results obtained Relevant images and data recorded and results interpreted using appropriate statistics	
4.	Contribute to high quality technical publications including peer- reviewed journal papers	Dissemination of research outcomes to national and international communities	
5.	Prepare technical reports, including NHMRC reports	Fulfilment of NHMRC requirements	
6.	Nanomaterials preparation for multifunctional (MF) device	Device developed and successfully tested	
7.	Primary cell culture, human stem cell culture	Cultures developed and applied to device	
8.	Molecular biological assays	Biomarkers identified and measured	
9.	Supervise PhD, Masters and Honours students as required	Good communication	
10.	Observe principles and practices of Equal Employment Opportunity	To ensure fair treatment in the workplace	
11.	Have WHS responsibilities, accountabilities and authorities as outlined in the <a href="http://staff.uow.edu.au/ohs/commitment/responsibilities/document">http://staff.uow.edu.au/ohs/commitment/responsibilities/</a> document	To ensure a safe working environment for self and others	

## Inherent Requirements:

This position description outlines the major accountabilities/responsibilities and the selection criteria against which you will be assessed as suitable for the position. As such there will be specific job requirements that we refer to as Inherent Requirements.

Inherent Requirements refer to your ability to:

- Perform the essential duties and functional requirements of the job;
- Meet the productivity and quality requirements of the position;
- Work effectively in the team or other type of work organisation concerned; and
- Do the job without undue risk to your own or others health, safety and welfare at work.

If you have any injuries, illness, disorder, impairment, condition or incapacity that may affect your ability to perform the inherent requirements of the position, we encourage you to discuss this with the University to assist in the process of identifying reasonable adjustments to enable you to perform the duties of the position. The University wants to place you in the best situation to use your skills effectively in the position you are applying for at the University.

# Reporting Relationships:

Position Reports to:	Prof Gordon Wallace (IPRI)
The position supervises the following positions:	n/a
Other Key Contacts:	Prof Xu-Feng Huang (IHMRI)

The work related to materials will report to Prof Gordon Wallace in IPRI. Subsequent work related to cell culture will work closely with Prof Xu-Feng Huang in IHMRI.

#### Key Relationships:

#### Contact/Organisation:

Purpose & Frequency of contact

Ms Linda Deitch, Technical Services Manager IHMRI Dr Tracy Maddocks, Manager Animal House Technical Officers, IHMRI A/Prof Jeremy Crook A/Prof Robert Kapsa

# Key Challenges:

- 1. Working effectively in a multidisciplinary research environment: IPRI (nanomaterials and human stem cell culture) and IHMRI (primary cell culture and human stem cell culture).
- 2. Research innovation and high-calibre publications.
- 3. Transferring techniques to new researchers and postgraduate students.

## SELECTION CRITERA - Knowledge & Skills:

Essential:

- Nanomaterials preparation
- Primary cell culture
- Human stem cell culture
- Laboratory practice and complying with WHS legislation in a laboratory environment
- Excellent written and verbal communication skills
- Strong organisational and project management skills, including the ability to set goals and meet deadlines in a
  pressured environment

## SELECTION CRITERA - Education & Experience:

Essential:

- PhD in science or a combination of education / exerience / training deemed to be equivalent
- Developing and testing conducting polymer biomaterials devices
- Applying conducting polymer biomaterials devices to primary cell culture
- Conducting molecular biological assays
- Data collection, imaging and analysis

## Personal Attributes:

- Thorough with great attention to detail
- Organised and prioritises work
- Enthusiastic, flexible, displays initiative and able to work independently
- Demonstrated ability to take responsibility for tasks and outcomes
- Ability to work in a team environment and to contribute to collaborative research and information sharing
- Excellent track record in laboratory-based research

#### Special Job Requirements:

May need to work outside usual business hours.

#### Organisational Chart:

# Approval:

Approved by Head of Unit:			
Date:			
Approved by Human Resources:			

Date:



## POSITION CLASSIFICATION STANDARD - Research Only

Level:

Title: Associate Fellow

#### Description

A position classification standard describes the broad categories of responsibility attached to research-only academic staff at different levels. The standards are not exhaustive of all tasks in research-only academic employment, which is by its nature multi-skilled and involves an overlap of duties between levels. The standards provide an adequate basis to differentiate between the various levels of employment and define the broad relationships between classifications.

Progression through an academic career will normally be based on research, teaching, administrative functions and contribution to the profession. The balance of functions will vary according to level and position over time. It is only in exceptional circumstances that promotion would be solely on the research only position classification standards.

- General Standard
- Specific Duties
- Skill Base

## General Standard

A Level A research-only academic is expected to contribute towards the research effort of the institution, and to develop her/his research expertise through the pursuit of defined properties relevant to the particular field of research.

## Specific Duties

Specific duties required of a Level A research-only academic may include

- The conduct of research under limited supervision either as a member of a team or, where appropriate, independently, and the production or contribution to the production of conference and seminar papers and publications from that research.
- Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise.
- Limited administrative functions primarily connected with the area of research of the academic.
- Development of a limited amount of research-related material for teaching or other purposes with appropriate guidance from other staff.
- Occasional contributions to teaching in relation to his/her research project(s).
- Experimental design and operation of advanced laboratory and technical equipment or conduct of advanced research procedures.
- Attendance at meetings associated with research or the work of the organisational unit to which the research is connected and/or at departmental and/pr faculty meetings and/or membership of a limited number of committees.
- Advice within the field of the staff member's research to postgraduate students.
- A Level A research-only academic shall work with support, guidance and/or direction from staff classified at Level B and above and with an increasing degree of autonomy as the research academic gains in skill and experience.

#### Skill Base

A Level A research-only academic will normally have completed four years of tertiary study in the relevant discipline or have equivalent qualifications or research experience. In many cases a position at this level will require an honours degree or higher qualifications or equivalent research experience. Research experience may have contributed to or resulted in publications, conference papers, reports or professional or technical contributions which give evidence of research potential.