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

Position Title:	Associate Research Fellow / Research Fellow	Level:	A/B
Faculty/Division:	Australian Institute for Innovative Materials (AIIM)		
Department/Location:	ARC Centre of Excellence for Electromaterials Science (ACES)		

Primary Purpose of the Position:

You must be a highly motivated individual dedicated to supporting multidisciplinary research and student training within the Synthetic Biosystems Program of the ARC Centre of Excellence in Electromaterials Science (ACES). You will work on interfacing human stem cells and neural tissue derivatives with 3D cell instructive biomaterials (including electromaterials) for the production of novel 3D synthetic biosystems for research and translational application including drug/toxicity screening, stem cell-based therapies, disease diagnostics and medical device development.

Importantly, you will contribute to the development of R&D, publication of research findings, preparation of grant applications for government and non-government research funding, have a hands-on-role for laboratory-based activities, and support general laboratory management including the maintenance of quality stem and derivative cell stocks (including but not limited to wild-type and transgenic human pluripotent stem cells and neural stem cells, human fibroblast and neuronal cells).

Position Environment:

You will be a member of the Synthetic Biosystems Laboratory of ACES located within the lead node the Intelligent Polymer Research Institute (IPRI) at the University of Wollongong (UOW). ACES is composed of 6 Australian nodes: UOW, Deakin University, Monash University, University of Tasmania, Melbourne University and Australian National University and 5 international partner organisations: Dublin City University; University of Warwick; Friedrich Alexander University; Hanyang University and Yokohama National University.

The vision is to create the next generation of electrochemical devices via the precision assembly of nano-/micro-dimensional components into macroscopic structures to deliver unprecedented device performance. In doing so we will create the preeminent world centre for electromaterials science.

ACES is steered by Australian Laureate Fellows Wallace as Centre Director and Forsyth as Associate Director, and with the assistance of a group of inspirational researchers and expert guidance by eminent persons drawn from the science, business, academic and government communities. A Research Strategy Group (comprising the Centre Director, Associate Director and 6 Theme Leaders) will review strategic directions for each of the Theme areas on a quarterly basis.

Major Accountabilities/Responsibilities:

Responsibilities		Outcome
1.	Designing and implementing an experimental research program related to ACES objectives under limited supervision either as a member of a team or, where appropriate, independently, in the Synthetic Biosystems IPRI Laboratory.	Reproducible, accurate and appropriate experimental data achieving targets or milestone outcomes in a timely manner.
2.	Preparation of scientific papers, conference presentations and other reports describing the results of the research program.	Original research papers published in ISI journals and conference presentations at national and international events.
3.	Assistance with project management and administration, including preparation of reports, assisting with workshops, preparation of newsletter items and maintenance of publications records.	Proper functioning of the project and ACES objectives.
4.	Assistance with training undergraduate and graduate students and supervision of student projects.	Students working in the area of Synthetic Biosystems for ACES are properly supported.
5.	Contribute towards developing and submitting grant applications for government and non-government research funding	Grants submitted towards funding awards
6.	Assist with management of PC2 laboratories used for R&D	Ensure efficient and safe laboratory operations in accordance with OH&S
7.	Assist to ensure all R&D conforms to GTRC , HREC and AEC approvals	No infringement of approvals
8.	Supervisory roles: Communicate and consult with staff on workplace and staffing matters.	To foster direct relationships with staff and enhance engagement with the organisation.
9.	Observe principles and practices of Equal Employment Opportunity	To ensure fair treatment in the workplace
10.	Have WH&S responsibilities, accountabilities and authorities as outlined in the http://staff.uow.edu.au/ohs/commitment/responsibilities/ document	To ensure a safe working environment for self & 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
The position supervises the following positions:	Undergraduate and graduate students as required
Other Key Contacts:	A/Prof Jeremy Crook, A/Prof Robert Kapsa, SRF 1 (yet to be appointed)

Key Relationships:

Contact/Organisation:	Purpose & Frequency of contact
A/Prof Jeremy Crook ACES CI	Weekly or as required - progress technical reporting
Prof Gordon Wallace Director ACES	Monthly - progress technical reporting
A/Prof Robert Kapsa ACES CI	As required - progress technical reporting
Prof Mark Cook ACES Synthetic Biosystems (SB) theme leader	ACES group meetings
Dr Toni Campbell COO	Monthly for ACES reporting matters

Key Challenges:

1. Assist to develop and implement R&D plans pertaining to advanced stem cell R&D with biomaterials engineering at IPRI.
2. Ensuring that research outcomes are in line with the expected outcomes.
3. To achieve the unit's strategic work objectives through direct communication and consultation with staff and colleagues.
4. Collaborating within a large team on multidisciplinary research to progress results fast.
5. Preparation of high quality journal papers.

SELECTION CRITERIA - Knowledge & Skills:

Essential:

- Ability to work both independently and in a team environment.
- Highly developed written and verbal communication skills in English, as evidenced by peer-reviewed research publications and presentations at conferences.
- Demonstrated knowledge of OH&S regulations and procedures.
- Exceptional knowledge and experience in cell biology, cell and tissue culture, techniques relating to molecular biology, biochemistry, advanced imaging (including specialist expertise in wide-field fluorescence and confocal microscopy).

Desirable:

- Undergraduate and post-graduate student training/supervision.
- R&D project development and management.
- Understanding of Good Laboratory Practice (GLP).
- Knowledge in somatic cell reprogramming, human ES and iPS cell culture, differentiation (ideally in the area of neural induction), and characterisation.
- Experience in interfacing mammalian cells with biomaterials.
- Experience in systems biology including next generation sequencing techniques and bioinformatics.
- *In vitro* testing of biomaterials including:
  - Protein adsorption and identification
  - Cytotoxic potential
  - Cell adhesion, migration and proliferation
  - Tissue structure
- *In vivo* testing of biomaterials – using small animal models such as mouse, rat and rabbit.

SELECTION CRITERIA - Education & Experience:

Essential:

- PhD in cell biology, biochemistry, molecular biology or an equivalent field (working with DNA and protein chemistry).
- Experience in multi-disciplinary research.
- Experience in report writing/manuscript preparation.
- Strong publication track record relative to opportunity.

Desirable:

- Demonstrated capacity to undertake collaborative research.
- Experience training students and co-supervising student projects.

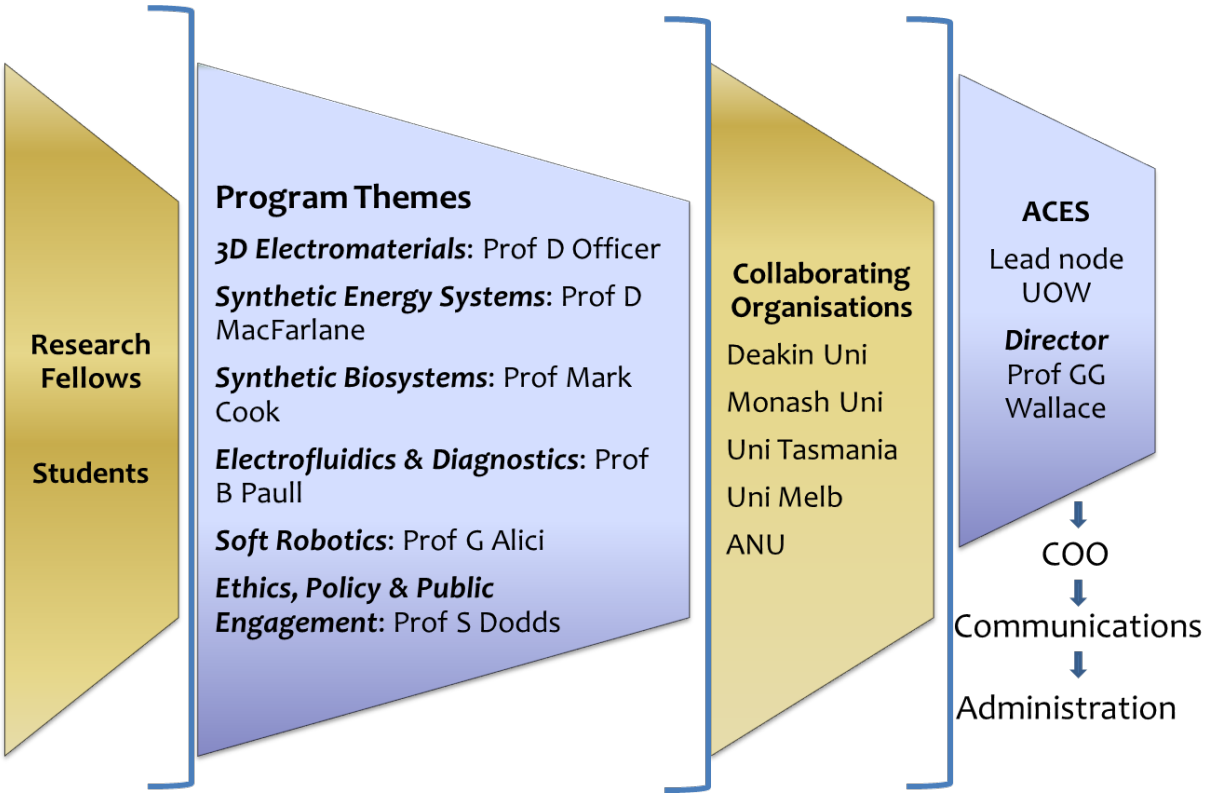
Personal Attributes:

- Work independently without constant supervision.
- Enthusiasm for research and team work.
- Willingness receive positive feedback and constructive criticism.
- Look for solutions, rather than merely presenting problems.
- Flexible approach to work assignments.
- Responsive to change.
- Highly motivated individual.
- Ability to innovate and think laterally.
- Adhere to specific work schedules.

Special Job Requirements:

- OH&S inductions to workplace and laboratory procedures. This person must adhere to safe laboratory practices of AIIM /IPRI.
- If required they may need to attend work on weekends for the upkeep of cell cultures.

Organisational Chart:



Approval:

Approved by Head of Unit: _____

Date: _____

Approved by Human Resources: _____

Date: _____

UNIVERSITY OF WOLLONGONG

POSITION CLASSIFICATION STANDARD - Research Only
Level: A
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.

POSITION CLASSIFICATION STANDARD - Research Only
Level: B
Title: 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 B research-only academic is expected to carry out independent and/or team research within the field in which he/she is appointed and to carry out activities to develop his/her research expertise relevant to the particular field of research

Specific Duties

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

- The conduct of research either as a member of a team or independently, and the production of conference and seminar papers and publications from that research.
- Supervision of research-support staff involved in the staff members' research.
- Guidance in the research effort of junior members of research-only academic staff in his/her research area.
- Contribution to the preparation, or where appropriate individual preparation, of research proposal submissions to external funding bodies.
- Involvement in professional activities including, subject to availability of funds, attendance at conferences and seminars in the field of expertise.
- Administrative functions primarily connected with his/her area of research.
- Occasional contributions in the teaching program within the field of the staff member's research.
- Co-supervision, or where appropriate supervision, of major honours or postgraduate research projects within the field of the staff member's area of research.
- 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.

Skill Base

A Level B research-only academic will normally have completed a doctoral qualification or have equivalent qualifications or research experience. In addition he/she may be expected to have had post-doctoral research experience which has resulted in publications, conference papers, reports or professional or technical contributions which give evidence of research ability.