

**Australian Government** 

**Australian Research Council** 

# Interdisciplinary Research

## ARC Statement of Support for Interdisciplinary Research

Version: Issued: Date for review: Owner:

1.1 February 2018 February 2019 Policy and Strategy Branch

## Contents

Interdisciplinary Research	
The Australian Research Council	3
Overview	3
What is Interdisciplinary Research?	3
Principles	4
Excellence	4
Access	
Evaluation and review	
Initiatives in place	5
National Competitive Grants Program	5
Excellence in Research for Australia	
Engagement and Impact	
Actions 2018-19	7
Contact details	8

## The Australian Research Council

The Australian Research Council (ARC) is a Commonwealth entity within the Australian Government. The ARC's purpose is to grow knowledge and innovation for the benefit of the Australian community by funding the highest quality research, assessing the quality, engagement and impact of research and providing advice on research matters.

The ARC funds research and researchers under the National Competitive Grants Program (NCGP). The NCGP consists of two elements—Discovery and Linkage. Within these elements are a range of schemes structured to provide a pathway of incentives for researchers to build the scope and scale of their work and collaborative partnerships. The majority of funding decisions under the NCGP are made on the basis of peer review.

The ARC administers two evaluation frameworks to assess the quality, engagement and impact of Australian research. Excellence in Research for Australia (ERA) is Australia's national research evaluation framework. It is a comprehensive quality evaluation of all research produced in Australian universities against national and international benchmarks. The ARC is also undertaking an Engagement and Impact (EI) assessment of university research. This assessment will consider the engagement of university researchers with end-users, and the impact of Australia's investment in university research by showing how universities are translating their research into economic, social, environmental and other benefits.

## Overview

The ARC is committed to supporting the highest-quality fundamental and applied research across all disciplines. This includes fostering excellence in research that traverses or transcends disciplinary boundaries and which synthesise or integrate methods and knowledge from multiple disciplinary domains.

This document outlines the processes the ARC has in place to ensure equitable assessment and evaluation of interdisciplinary research under the NCGP, ERA and EI.

Actions that the ARC will implement in 2018–2019 to further support interdisciplinary research are detailed at the end of this document.

## What is Interdisciplinary Research?

Interdisciplinary research is conducted across the research landscape alongside other discipline-specific or single-discipline modes of enquiry. Like all forms of research, interdisciplinary research ranges from applied through to theoretical research. Interdisciplinary research can be a distinct mode of research or a combination of researchers, knowledge and/or approaches from disparate disciplines. Interdisciplinary research is taken as an overarching term that incorporates a multitude of terms used to describe research approaches that do not fit within a traditional single disciplinary structure. Under the NCGP, examples of interdisciplinary research may include researchers from different disciplines working together in a team, researchers collaborating to bring different perspectives to solve a problem, researcher(s) utilising methods normally associated with one or more disciplines to solve problems in another discipline and one or more researchers translating innovative blue sky or applied research outcomes from one discipline into an entirely different applied research discipline.

For the purposes of research output assessments under ERA, interdisciplinary research is that which has been assigned two or more distinct Field of Research (FoR) codes across the two-digit level.

## **Principles**

The ARC undertakes to:

## Excellence

- Identify and support the highest quality research irrespective of the disciplinary grounding, approach or methodology of that research
- Ensure that excellence in interdisciplinary research is appropriately recognised in research assessment measures
- Provide funding opportunities for researchers to collaborate and explore interdisciplinary approaches to research and to engage in emerging fields.

#### Access

- Assess all research on a fair and equal basis, including proposals and outputs involving interdisciplinary and collaborative research
- Ensure that ARC peer review and assessment processes, including expertise of assessors, College of Expert (CoE) members, Research Evaluation Committee (REC) members, and EI Panel members represent the diverse range of proposals and submissions received including those which are interdisciplinary
- Work to remove administrative barriers to collaboration between universities, and between universities and end users to facilitate the conduct of interdisciplinary research.
- In planning new initiatives, consider the effect of requirements on researchers involved in interdisciplinary research.

#### **Evaluation and review**

- Maintain engagement with issues that influence the ARC's operating environment including emerging priorities, the needs of stakeholders, as well as global trends and best practice with regard to interdisciplinary research
- Undertake continuous improvement through analysis and self-assessment to ensure that funding opportunities and research evaluation systems reflect world standards, are achieving their aims and are meeting the needs of ARC stakeholders
- Monitor and periodically review policies and procedures relating to interdisciplinary research to ensure they are commensurate with sector expectations, that they are being implemented as specified, and that the ARC is achieving its aims

## Initiatives in place

## **National Competitive Grants Program**

The ARC identifies and promotes excellence across all research discipline areas (except health and medical) in Australia's higher education institutions. It is well placed to fund interdisciplinary research as it is not limited to funding single discipline areas. The diverse fields of research that the ARC funds easily allows interdisciplinary research to be embedded within the NCGP schemes.

In support of its commitment, the ARC:

Identification	Identifies interdisciplinary research by:		
	<ul> <li>asking researchers submitting a proposal to the ARC to identify whether their research project is interdisciplinary and in what ways the research is interdisciplinary to help with assignment, assessment and to continue to monitor the evolution of how research is conducted, including the growth of interdisciplinary and team-based approaches to research</li> <li>using FoR categorisation to identify whether a research project is interdisciplinary to help with assignment for evaluation</li> </ul>		
Eligibility	<ul> <li>accepts interdisciplinary research proposals under all main funding schemes of the NCGP. In cases where interdisciplinary research is considered to be of particular importance references may be included in either the scheme objectives or selection criteria</li> <li>encourages both individual and team-based research projects under key schemes across Linkage and Discovery Programs</li> </ul>		
Targeted schemes	<ul> <li>from time to time as directed, establishes specific initiatives to support either mechanisms considered to facilitate the conduct of interdisciplinary research, or particular interdisciplinary areas of research</li> </ul>		
Assessment and evaluation	<ul> <li>facilitates consideration of proposals by relevant College of Expert (CoE) members with interdisciplinary expertise or where not feasible allocates to CoE members who have broad disciplinary expertise regardless of discipline grouping</li> <li>appoints CoE members on the basis of broad disciplinary expertise</li> <li>allocates interdisciplinary proposals to external assessors with specific interdisciplinary expertise or from different disciplines</li> <li>as required, convenes selection panels involving members with interdisciplinary expertise</li> </ul>		

Monitoring/reporting	<ul> <li>from time to time will analyse outcomes of selection rounds to identify whether interdisciplinary proposals are achieving different success rates</li> <li>from time to time analyse outcomes of selection rounds to identify patterns and trends in interdisciplinary research to inform policy and schemes</li> </ul>
Engagement	<ul> <li>participates in relevant forums relating to interdisciplinary research</li> </ul>

## **Excellence in Research for Australia**

All eligible institutions submit comprehensive information to the ARC about their research activities, including details relating to staff, publications and other research outputs, grants, income from industry and other research users, income from the commercialisation of research, and other applied measures such as patents. Submitted items can be coded to multiple fields of research, facilitating the capture of interdisciplinary activity. Committees of internationally–recognised researchers evaluate this material by discipline. Their expert judgments are informed by a range of indicators derived from the data submitted.

To facilitate the assessment of interdisciplinary research, institutions may assign up to three four-digit FoR codes to eligible researchers and research items. Items can be apportioned a percentage to reflect their disciplinary content.

#### **Engagement and Impact**

The ARC is responsible for the Engagement and Impact (EI) assessment. The assessment will examine how universities are translating their research into economic, social and other benefits and encourage greater collaboration between universities, industries and other end users of research. The assessment reviews university research at the two-digit FoR level. The two-digit level FoR is the highest level under the Australian and New Zealand Standard Classification and therefore captures a broad range of interdisciplinary research activity.

The EI methodology accommodates interdisciplinary research in a number of ways outlined below.

Research engagement data for EI is collected through both EI and ERA submissions. The development of the engagement indicators was guided by ten principles including that *the indicators will not discourage institutions from pursuing interdisciplinary and multidisciplinary research engagement and impact*<sup>1</sup>. The engagement data derived from ERA submissions is research income data and includes the FoR codes assigned for ERA. The ERA methodology accommodates interdisciplinary research by allowing universities to assign to their submitted research income as many FoR codes as are relevant.

For impact, universities submit impact studies at the two-digit FoR level demonstrating impact that occurred as a result of research undertaken and the approach the university took to enable impact. While a primary two-digit FoR code is

<sup>&</sup>lt;sup>1</sup> The Engagement and Impact Assessment Pilot Report http://www.arc.gov.au/ei-pilot-overview

assigned overall to each impact study, two additional FoR codes may also be assigned if they relate to the overall content of the impact study.

In addition, up to three two-digit FoR codes must also be assigned to the research associated with the impact, and these may be different FoRs assigned to the overall impact study, providing flexibility within the methodology to accommodate interdisciplinary research.

Furthermore, the assessment allows universities to submit one interdisciplinary impact study in cases where impact is so broad it cannot be described by a primary two-digit FoR code. Universities can choose up to three two-digit FoRs that relate to the interdisciplinary impact study.

The assessment creates incentives for greater collaboration between universities and industry, as well as other end users, in all areas of research including interdisciplinary research.

## Actions 2018-19

In 2018–19 the ARC will:

#### **National Competitive Grants Program**

- To better understand the interdisciplinary research profile of ARC-funded researchers, collect data on self-identified interdisciplinary proposals and analyse for patterns in proposals submitted and funded
- Review the definition of Interdisciplinary Research, ensuring classification across funding schemes is adequately meeting needs
- To ensure appropriate assessment of interdisciplinary proposals, review assessment processes for interdisciplinary research proposals, including identifying College of Experts members and assessors with expertise in interdisciplinary research
- To foster a supportive environment for interdisciplinary research:
  - continue to monitor the evolution of how research is conducted, including the growth of interdisciplinary and team-based approaches to research
  - provide data on self-identified interdisciplinary proposals in selection reports
  - continue to engage with ARC stakeholders to convey the value of interdisciplinary research including for innovation, commercialisation and industry partnerships

#### **Excellence in Research for Australia**

 Through the 2018 Excellence in Research for Australia, evaluate research quality in Australian universities using a methodology that accommodates interdisciplinary research

#### **Engagement and Impact assessment**

• Through the 2018 Engagement and Impact assessment, assess research engagement and impact in Australian universities using a methodology which accommodates interdisciplinary research

## **Contact details**

Stakeholder Relations Australian Research Council Phone: 02 6287 6600 communications@arc.gov.au www.arc.gov.au Level 2, 11 Lancaster Place, Canberra Airport ACT 2609 GPO Box 2702, Canberra ACT 2601

Number	Date Approved	Approved By	Brief Description
1.0	4/10/2016	CEO	ARC Statement of Support for Interdisciplinary Research
1.1	09/02/2018	CEO	Minor amendments and addition of further information on Engagement and Impact assessment has been included.