Industrial Transformation Research Program, Centres of Excellence

26 November 2014
The University of Queensland

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Executive Director, Biological Sciences and Biotechnology
Topics for Today

• Overview of the ARC
• Grants lifecycle and stats
• Insights into the grants process
• Funding schemes:
  – ITRP
  – Centres of Excellence
ARC NCGP Programs and Schemes

Discovery Program
- Discovery Projects
- Discovery Indigenous
- Discovery Early Career Researcher Award (DECRA)
- Future Fellowships
- Australian Laureate Fellowships

Linkage Program
- Linkage Projects
- Linkage Infrastructure, Equipment and Facilities
- Linkage Learned Academies Special Projects
Types of ARC Centres

- ARC Centres of Excellence
- Industrial Transformation Research Program
- Special Research Initiatives
- Co-funded Centres
ARC funding by institute 2010–2014
Details of the Industrial Transformation Research Program—the schemes

• Overall objectives:
  – foster important partnerships between business and universities
  – support researchers (higher degree by research and post doctoral fellows) to gain ‘hands-on’, practical skills and experience in important priority areas.

• Consists of two schemes:
  – Industrial Transformation Research Hubs
  – Industrial Transformation Training Centres
Industrial Transformation Research Hubs—objectives

• Encourage collaborative R&D projects to address challenging industry issues solved through innovative research relevant to Industrial Transformation Priorities

• Leverage local and international investment in targeted industry sectors
IH14 changes to Funding Rules

• The Funding Rules do not support Medical Research.*

• Travel costs essential to the Project are permitted up to a maximum average of $20,000 per year of the Project

• *Exception: ITRP Priority ‘medical devices and biotechnology’ (See FAQs)
Industrial Transformation Research Hubs

- Opportunities for universities and industrial partners to focus on significant collaborative R&D projects with outcomes beyond their independent endeavours

- The ARC will invest up to $1 million per year in each Research Hub with matching investment by industry partners up to a maximum of five years
Industrial Transformation Training Centres—objectives

- foster opportunities for Higher Degree by Research candidates and postdoctoral fellows to pursue industrial training and to enhance competitive research in collaboration between universities and organisations outside the Australian higher education sector.

- strengthen Australia’s Industrial Transformation Priorities to supplement the capabilities of industries and other research end-users.
Industrial Transformation Training Centres

To foster close partnerships between university-based researchers and industry to provide innovative training for early career researchers vital to Australia’s future industry.

- Over the life of the program the ARC will enable:
  - establishment of Training Centres nationwide
  - support for Higher Degree by Research candidates and postdoctoral researchers in gaining real-world practical skills through placement in industry
  - Provision of a minimum of $650 000 for the first three years, a minimum of $150 000 in the fourth year and no minimum in the fifth year, and a maximum of $1 million per year for up to five (5) years for each Training Centre
IC15 changes to funding rules

• The Funding Rules do not support Medical Research. (Exception Medical Devices)
• A Project may be applied for and awarded funding for four (4) or five (5) consecutive years
• Applicants may now request:
  – a minimum of $650 000 funding from the ARC per year for the first three years, and
  – a minimum of $150 000 funding from the ARC in the fourth year.
  – there is no minimum level of ARC funding for the fifth year.
• provision for salary support for a Training Centre Manager.
• Others: see ARC website
Details of funded Industrial Transformation Training Centres for funding in 2013

<table>
<thead>
<tr>
<th>Training Centre Title</th>
<th>Administering Organisation</th>
<th>Training Centre Director</th>
<th>Approved funds over project life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agents of change: transforming the food industry for Australia, Asia and beyond</td>
<td>The University of Queensland</td>
<td>Prof Melissa A Fitzgerald</td>
<td>$2,695,000</td>
</tr>
<tr>
<td>A molecular technology platform for enabling the next revolution in the food industry</td>
<td>Macquarie University</td>
<td>Prof Paul A Haynes</td>
<td>$2,100,000</td>
</tr>
<tr>
<td>Innovative Wine Production: responding to climate, water, market and economic challenges</td>
<td>The University of Adelaide</td>
<td>Prof Vladimir Jiranek</td>
<td>$2,405,204</td>
</tr>
<tr>
<td>Training Centre for Advanced Technologies in Food Manufacture</td>
<td>The University of New South Wales</td>
<td>A/Prof Jayashree Arcot</td>
<td>$2,100,000</td>
</tr>
</tbody>
</table>
## Previous Rounds and success rates

<table>
<thead>
<tr>
<th>Round</th>
<th>Submitted Proposals</th>
<th>Funded Proposals</th>
<th>Success rate</th>
<th>Total funding</th>
<th>Allocation as a percentage of request</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH12</td>
<td>12</td>
<td>4</td>
<td>33.33%</td>
<td>$16,695,193</td>
<td>86.85%</td>
</tr>
<tr>
<td>IC13</td>
<td>13</td>
<td>4</td>
<td>30.76%</td>
<td>$10,437,604</td>
<td>89.10%</td>
</tr>
<tr>
<td>IH13 Round 1</td>
<td>6</td>
<td>3</td>
<td>50.00%</td>
<td>$10,966,884</td>
<td>97.00%</td>
</tr>
<tr>
<td>IC14</td>
<td>13</td>
<td>7</td>
<td>53.84%</td>
<td>$16,141,217</td>
<td>97.00%</td>
</tr>
<tr>
<td>IH13 Round 2</td>
<td>15</td>
<td>7</td>
<td>46.66%</td>
<td>$24,741,067</td>
<td>96.95%</td>
</tr>
</tbody>
</table>
## Success rates for Industrial Transformation Priorities

<table>
<thead>
<tr>
<th>Round 1 Priorities (IH12 and IC13)</th>
<th>Number funded/Number Submitted</th>
<th>Proposal success rates*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future food storage</td>
<td>1/4</td>
<td>4%</td>
</tr>
<tr>
<td>Food processing</td>
<td>4/16</td>
<td>16%</td>
</tr>
<tr>
<td>Manufacturing capabilities</td>
<td>5/13</td>
<td>20%</td>
</tr>
<tr>
<td>Product opportunities</td>
<td>6/16</td>
<td>24%</td>
</tr>
<tr>
<td>Other food related research</td>
<td>5/13</td>
<td>20%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Round 2 Priorities (IH13 R2)</th>
<th>Number funded/Number Submitted</th>
<th>Proposal success rates*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>1/3</td>
<td>6%</td>
</tr>
<tr>
<td>Food and agriculture</td>
<td>2/5</td>
<td>13%</td>
</tr>
<tr>
<td>Oil and gas, including petroleum</td>
<td>1/3</td>
<td>6%</td>
</tr>
<tr>
<td>Mining and mining services</td>
<td>3/4</td>
<td>19%</td>
</tr>
<tr>
<td>Medical devices and biotechnology</td>
<td>0/3</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Please note: Applications were able to select more than one Priority*
### Funded Industrial Transformation Research Hubs in 2013 (Round 2)

<table>
<thead>
<tr>
<th>Research Hub</th>
<th>Administering Organisation</th>
<th>Hub Director</th>
<th>Approved funds over project life</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC Research Hub for transforming the mining value chain</td>
<td>University of Tasmania</td>
<td>Prof David Cooke</td>
<td>$3,966,350.00</td>
</tr>
<tr>
<td>ARC Research Hub for Basin GEodyNamics and Evolution of Sedimentary Systems (GENESIS)</td>
<td>The University of Sydney</td>
<td>Prof Dietmar Muller</td>
<td>$2,748,358.00</td>
</tr>
<tr>
<td>ARC Research Hub for advanced breeding to transform prawn aquaculture</td>
<td>James Cook University</td>
<td>Prof Dean Jerry</td>
<td>$4,979,922.00</td>
</tr>
<tr>
<td>ARC Research Hub for transforming waste directly in cost-effective green manufacturing</td>
<td>The University of New South Wales</td>
<td>Prof Veena Sahajwalla</td>
<td>$2,181,756.00</td>
</tr>
<tr>
<td>ARC Research Hub for genetic diversity and molecular breeding for wheat in a hot and dry climate</td>
<td>The University of Adelaide</td>
<td>A/Prof Sigrid Heuer</td>
<td>$4,308,668.00</td>
</tr>
<tr>
<td>ARC Research Hub for Advanced Technologies for Australian Iron Ore</td>
<td>The University of Newcastle</td>
<td>Prof Kevin Galvin</td>
<td>$3,273,780.00</td>
</tr>
<tr>
<td>ARC Research Hub for Australian Copper-Uranium</td>
<td>The University of Adelaide</td>
<td>Prof Stephen Grano</td>
<td>$2,526,617.00</td>
</tr>
</tbody>
</table>
Large Investments in excellence for the longer term

- Industrial Transformation Research Program
  - Hubs $500K to $1m a year for up to five years
  - Centres $650K to $1m a year for up to five years
- Co-funded and Special Research Initiatives—various funding and duration
- ARC Centres of Excellence $1–4m a year for up to seven years
The ARC Centres of Excellence—overview

- ARC Centres of Excellence involve significant collaboration with:
  - universities
  - publicly funded research organisations
  - other research bodies
  - government
  - business

in all fields of research except medical and dental research
The ARC Centres of Excellence—
objectives

a. highly innovative and potentially transformational research
b. interdisciplinary, collaborative approaches
c. develop relationships and build new networks
d. build Australia’s human capacity
e. postgraduate and postdoctoral training
f. large-scale problems over longer periods
g. points of interaction between unis, business, government, private sector
What the Centres need to look like

• The Centres are the largest investments of the ARC Grants Program

• Centres foster frontier interdisciplinary research—with innovative and highly integrated Research Programs

• Centres are critical for the next generation of researchers—capacity building

• Leading the way—international reputation

• Building on important collaborations

• Public benefits and research impact
Key features of a Centre Director

• Have a big vision
• Be outward looking
• Have a compelling research question
• Be able to explain this to a broad audience (get mock panels from broad disciplines to evaluate the proposal)
• Propose topical and practical research, but also blue sky with unexpected outcomes
• Be a mentor and a leader at the cutting edge of your field, able to take the research to an internationally outstanding level
• It is not about what you have done, but what you are going to do
• Teamwork is important: have the ability to pull together all the right people, in an effective manner
• Be a centre builder
• Not be at the end of your career; what is the legacy this proposal will leave to the next generation in terms of project outcomes and resources?
• If at regional university, demonstrate strong research commitment
Next Round, CE17 Consultation

- Process
- EOI requirements
- Feedback

*BSB = Biological Sciences and Biotechnology; EMI = Engineering, Mathematics and Informatics; HCA = Humanities and Creative Arts; PCE = Physics, Chemistry and Earth Sciences; SBE = Social, Behavioural and Economics Sciences

Source: 2014 Selection Report Table 1
## Centres of Excellence—timelines

<table>
<thead>
<tr>
<th>Task</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation</td>
<td>November 2014</td>
</tr>
<tr>
<td>Funding round opens</td>
<td>First quarter 2015</td>
</tr>
<tr>
<td>Expression of interest</td>
<td>Second quarter 2015</td>
</tr>
<tr>
<td>First stage assessment and shortlisting</td>
<td>Mid - 2015</td>
</tr>
<tr>
<td>Call for full proposals</td>
<td>Third quarter 2015</td>
</tr>
<tr>
<td>Assessment of full proposals</td>
<td>First quarter 2016</td>
</tr>
<tr>
<td>Interviews</td>
<td>Second quarter 2016</td>
</tr>
<tr>
<td>Announcement of successful projects</td>
<td>Mid-2016</td>
</tr>
<tr>
<td>Commencement of new projects</td>
<td>January 2017</td>
</tr>
</tbody>
</table>
RMS 2.0

• ARC successfully launched Release 1 of RMS 2.0 on Thursday 21 August 2014

• RMS 2.0 is a more intuitive system that offers:
  – improved workflow
  – enhanced navigation
  – faster PDF generation
  – other technical improvements

• To assist the use of RMS 2.0, information is available on the ARC internet, & through Research Offices

• As new functionality is added to RMS 2.0 more information will be provided to users
Since the release the ARC RMS Help Desk has received queries in relation to:

- Password resets
- Updating org and user details

Questions received will be thematically represented as FAQs and published on the internet to assist all users

Feedback

- RMS helpdesk rms@arc.gov.au or 02 6287 6789
Discussion/questions