Industrial Transformation Research Program
Fostering Research Partnerships

Dr Fiona Cameron
Executive Director, Biological Sciences and Biotechnology, Australian Research Council
Presentation Overview

• Overview of ARC and Linkage Program
• The context of why the Industrial Transformation Research Program (ITRP) came into being
• Comparison of Research Hubs and Training Centres
• Current round priority areas
• Postaward management of Research Hubs and Training Centres
Why was the Industrial Transformation Research Program established?

- Building on the success of ARC schemes and other Government programs
- Investing for Innovation – more research partnerships between universities and industry
- Training researchers for tomorrow - with strong links to industry
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Details of the Industrial Transformation Research Program – the Schemes

Overall objectives:

• foster important partnerships between business and universities;

• support researchers (higher degree by research & 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*
## 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>0/2</td>
<td>0%</td>
</tr>
<tr>
<td>Food processing</td>
<td>2/8</td>
<td>8%</td>
</tr>
<tr>
<td>Manufacturing capabilities</td>
<td>1/3</td>
<td>4%</td>
</tr>
<tr>
<td>Product opportunities</td>
<td>3/8</td>
<td>12%</td>
</tr>
<tr>
<td>Other food related research</td>
<td>2/4</td>
<td>8%</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>1/1</td>
<td>6%</td>
</tr>
<tr>
<td>Food and agriculture</td>
<td>2/5</td>
<td>13%</td>
</tr>
<tr>
<td>Other food related research</td>
<td>1/1</td>
<td>5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Round 2 Priorities (IH13 R1 and IC14)</th>
<th>Number funded/Number Submitted</th>
<th>Proposal success rates*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food storage</td>
<td>0/1</td>
<td>0%</td>
</tr>
<tr>
<td>Food processing</td>
<td>1/3</td>
<td>5%</td>
</tr>
<tr>
<td>Food manufacturing capabilities</td>
<td>2/3</td>
<td>11%</td>
</tr>
<tr>
<td>Product opportunities</td>
<td>1/3</td>
<td>5%</td>
</tr>
<tr>
<td>Product design and development</td>
<td>3/5</td>
<td>16%</td>
</tr>
<tr>
<td>Manufacturing techniques</td>
<td>1/2</td>
<td>5%</td>
</tr>
<tr>
<td>Defence manufacturing</td>
<td>1/1</td>
<td>5%</td>
</tr>
<tr>
<td>Other food related research</td>
<td>1/1</td>
<td>5%</td>
</tr>
</tbody>
</table>

*Please note: Applications were able to select more than one Priority. The data presented here is based on the first-selected Priority.
**Industrial Transformation Research Hubs – Objectives**

- encourage collaborative R&D projects between universities and organisations outside the Australian higher education sector that will solve challenging industry issues through innovative research relevant to the Industrial Transformation Priorities;
- attract investment from the local and international business community by supporting the internationally-recognised excellence of Australian universities and their industry partners; and
- leverage national and international investment in targeted industry sectors.
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.
Hubs – Partner Organisation Contributions

• A Proposal must include at least one Australian Partner Organisation.

• The Proposal must demonstrate that the combined Partner Organisation(s) contributions (i.e. the total of the cash and in-kind contributions of the Partner Organisations) must at least match the total funding requested from the ARC.

• The combined Partner Organisation(s) Cash Contribution where any Partner Organisation(s) has more than 100 employees must be at least 75 per cent of the total funding requested from the ARC.

• Where the Partner Organisation or the largest Partner Organisation in a consortium in the proposal has 100 employees or less, there is no minimum combined Partner Organisation(s) Cash Contribution.
Hubs – Partner Organisation Contributions

- Cash Contributions cannot be sourced from funds awarded or appropriated by the Commonwealth or an Australian State or Territory for the purposes of research nor from funds previously used to leverage government research funding.
- There is no limit on the combined Partner Organisation(s) In-kind Contributions.
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; and

• Strengthen Australia’s Industrial Transformation Priorities to supplement the capabilities of industries and other research end-users.
Industrial Transformation Training Centres (ITTC)

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 five year program the ARC will:

• establish up to 50 Training Centres nationwide

• support Higher Degree by Research candidates and postdoctoral researchers in gaining real-world practical skills through placement in industry

• provide 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 5 years for each Training Centre.
Training Centres – Partner Organisation Contributions

- A Proposal must include at least one Australian Partner Organisation.
- Cash and In-kind contribution must be sufficient to support research projects of 10 Higher Degree by Research candidates and 3 postdoctoral researchers
- The ARC may provide funding for Project costs to match eligible Cash Contributions from Partner Organisation(s) such that the total funds (including Higher Degree by Research stipends and postdoctoral fellow salaries) awarded by the ARC will not exceed $1 million per year.
ITRP Collaborating Organisation links - UNSW

- NSW Department of Primary Industries
- Agitechnology Pty Ltd
- Coca Cola Amatil (Australia)
- Batlow Fruit Cooperative Limited
- The University of Technology, Sydney
- Georgia Institute of Technology
- The Smith's Snackfood Company Limited
- The University of Newcastle
- Food Allergy Research and Resource Program
- BHP Billiton Iron Ore Pty Ltd
- Australian Food and Grocery Council
- Australian Genome Research Facility
- James Cook University
- Griffith Technologies Pty Ltd
- Sydney Children's Health Research Institute
- Sydney Medical School Foundation
- Western Australian Resources Limited
- Wuhan University
- International Rice Research Institute
- UNSW
- UNSW Institute for Applied Systems Analysis
- National ICT Australia Limited (NICTA)
- NSW Department of Trade and Investment
- Chevron Energy Technology Pty Ltd
- The University of Queensland
- Geosciences Australia
- Regional Infrastructure and Services
- Curtin University of Technology
- Intrepid Geophysics
- California Institute of Technology
- Intrepid Geophysics Australia
- National ICT Australia
- The University of Melbourne
- University of Western Sydney
- Commonwealth Steel Company Pty Ltd (t/a Arrium Mining Consumables)
- University of New South Wales
- Norske Skog Papier Mills (Australia) Ltd
- The University of Sydney
- Monash University
- University of Lorraine
- Tersum Energy Pty Ltd
- Jaylor Industries Pty Ltd
- Brickworks Building Products Pty Ltd
- Carter Holt Harvey, Altrata
- Norske Skog Papier Mills (Australia) Ltd
- BHP Billiton Olympic
- University of New South Wales
- BHP Billiton Olympic
### UNSW successful ITRP bids

<table>
<thead>
<tr>
<th>ITRP</th>
<th>Description</th>
<th>Principal Investigator</th>
<th>Collaborating Organisations</th>
</tr>
</thead>
<tbody>
<tr>
<td>IH13</td>
<td>ARC Research Hub for transforming waste directly in cost-effective green manufacturing</td>
<td>Prof Veena Sahajwalla</td>
<td>Commonwealth Steel Company Pty Ltd (t/a Arrium Mining Consumables), Brickworks Building Products Pty Ltd, Tersum Energy Pty Ltd, Jaylon Industries Pty Ltd, The University of Sydney, Monash University, University of Wollongong</td>
</tr>
<tr>
<td>IC13</td>
<td>Training Centre for Advanced Technologies in Food Manufacture</td>
<td>A/Prof Jayashree Arcot</td>
<td>Commonwealth Scientific and Industrial Research Organisation, Food Allergy Research and Resource Program, Allripe Pty Ltd, Simplot Australia Pty Ltd, Peanut Company of Australia, Coorow Seeds, NSW Department of Primary Industries, The Smith's Snackfood Company Limited, The University of Newcastle, University of Western Sydney</td>
</tr>
</tbody>
</table>
Industrial Transformation Priorities

• The Industrial Transformation Priorities for the current round are:
  – manufacturing;
  – food and agriculture;
  – oil and gas, including petroleum;
  – mining and mining services; and
  – medical devices and biotechnology.

• Research priorities are updated from round to round.

• Information on current round priorities are available on the ARC website www.arc.gov.au
## ITRP Timeline

<table>
<thead>
<tr>
<th></th>
<th>Industrial Transformation Research Hubs</th>
<th>Industrial Transformation Training Centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposals open</td>
<td>17 September 2014</td>
<td>17 September 2014</td>
</tr>
<tr>
<td>Proposals close</td>
<td>10 December 2014</td>
<td>10 December 2014</td>
</tr>
<tr>
<td>Rejoinders open</td>
<td>Mid February 2015</td>
<td>Mid February 2015</td>
</tr>
</tbody>
</table>
Postaward management of Research Hubs and Training Centres

Partner Organisations

• Establishing and managing industry expectations with Hubs and Centres
• The economic climate – keeping Partner Organisations on board
• Coping with new players – leveraging new funds without losing research focus
Postaward management of Research Hubs and Training Centres

HDR Students

- ITRP Centres – flexibility in student placements - they must do research activities.
- Managing delays in recruitment of students.
- A complete professional development approach for students – including IP, basics on commercialisation, communicating with stakeholders, project management, OH&S.
Postaward management of Research Hubs and Training Centres

Administration

• The correct use of Centre or Hub titles
• Funding Agreement - Changes to people, program or budget need to be notified to the ARC – ARC-Postaward@arc.gov.au
• Reporting on KPIs and reviewing them