Association of Architecture
Schools of Australasia

DR TIM CAHILL
DIRECTOR, RESEARCH EVALUATION
What is ERA?

• ERA evaluates the quality of the research undertaken in Australian universities against national and international benchmarks.

• The outcomes (ratings) are determined and moderated by committees of distinguished researchers, drawn from Australia and overseas.

• The unit of evaluation is broadly defined as the Field of Research (FoR) within an institution based on the Australia and New Zealand Standard Research Classification (ANZSRC).

• The indicators used in ERA include a range of metrics such as citation profiles which are common to disciplines in the natural sciences, and peer review of a sample of research outputs which is more broadly common in the humanities and social sciences.

• ERA is a comprehensive collection. The data submitted by universities covers all eligible researchers and their research outputs.
# ERA 2015

## Explanatory Statement

### Volume and Activity
- **Staffing Profile**
- **Research Outputs**
- FoR codes are apportioned to Journal articles from ERA Journal List or FoR of institution’s choice where content >66%.
- All other outputs and eligible researchers can be assigned and apportioned to up to 3 four-digit FoR codes of the institution’s choice.
- Eligible researchers must be employed on the census date to count towards ‘FTE’.

### Publishing Profile
- **Journal articles**
- Conference publications
- Books
- Book Chapters
- Journal articles are apportioned against the FoR codes of the ERA Journal List, or institutions may assign to a journal article an FoR code outside of the ERA Journal List FoR code, if 66% or more of the journal article belongs to another FoR code.
- The citation supplier for 2012 is Scopus.
- The citation census date is 1 March 2012.

### Citation Analysis
- **Centile Profile**
- Relative Citation Impact (RCI) Classes
- RCI against world and Australian benchmarks
- Only applies to journal articles.
- Low volume threshold is 50 apportioned indexed journal articles.
- The citation supplier for 2012 is Scopus.
- The citation census date is 1 March 2012.

### Peer Review
- **Peer review**
- Applies to a range of outputs including journal articles, books, book chapters, non-traditional research outputs.
- Low volume threshold is 50 apportioned outputs (any type).
- Institutions nominate 30% of total output for a FoR for peer review.

### Esteem Measures
- **Editor of prestigious works of reference**
- Recipient of, Category 1 Fellowship or Australia Council Grant or Fellowship
- Membership of, statutory committee or Learned Academy
- Each individual esteem measure can be apportioned up to 3 four-digit FoRs of the institution’s choice.
- Esteem must be linked to an eligible researcher of the institution.
- Individual researchers cannot be identified through the esteem measures.

### Research Income
- **Category 1-4**
- Institutions can apportion each income item between as many four-digit FoRs as relevant.
- Number of grants is collected for Category 1 income only.
- FTE is used as a denominator for all Categories.
- Category 3 income is disaggregated into the 3 subcategories (Australian, International A and International B).

### Applied measures
- **Patents**
- Commercialisation Income
- Plant Breeder’s Rights
- NHMRC Endorsed Guidelines
- Registered Designs
- Institutions can select up to 3 four-digit FoRs (apportioned) for each applied measure submitted, except for commercialisation income where there are no limits on the number of four-digit FoR codes submitted.
- Applied measures are linked to either the institution or individual eligible researchers.
## Stages of Evaluation

### Stage 1
- **REC Member**
  - REC Members evaluate assigned material and record preliminary evaluations in SEER.

### Stage 2A
- **ERA Peer Reviewer**
  - ERA Peer Reviewers evaluate assigned material and record evaluations in SEER.

### Stage 2B
- **REC Member**
  - REC Members are given access to the preliminary evaluation outcomes for 4-digit UoEs from other REC Members and Peer Reviewers’ evaluations for moderation. REC Members complete preliminary evaluation of 2-digit UoEs.

### Stage 2C
- **REC Member**
  - REC Members are given view only access to moderated 2- & 4-digit evaluations to prepare for Stage 3 meeting.

### Stage 3
- **REC Member**
  - REC Members meet to finalise all UoE ratings.

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**ERA National Report**
# The ERA rating scale

<table>
<thead>
<tr>
<th>Rating</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>The Unit of Evaluation profile is characterised by evidence of outstanding performance <strong>well above world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
<tr>
<td>4</td>
<td>The Unit of Evaluation profile is characterised by evidence of performance <strong>above world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
<tr>
<td>3</td>
<td>The Unit of Evaluation profile is characterised by evidence of average performance <strong>at world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
<tr>
<td>2</td>
<td>The Unit of Evaluation profile is characterised by evidence of performance <strong>below world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
<tr>
<td>1</td>
<td>The Unit of Evaluation profile is characterised by evidence of performance <strong>well below world standard</strong> presented by the suite of indicators used for evaluation.</td>
</tr>
</tbody>
</table>
Income and Quality

2010

HERDC income Cat 1-3 by rating - 2010

ERA rating

- National Competitive
- Other Public
- Industry
Income and Quality

HERDC income Cat 1-3 by rating - 2012

- National Competitive
- Other Public
- Industry

2012

ERA rating

$1,400,000,000
$1,200,000,000
$1,000,000,000
$800,000,000
$600,000,000
$400,000,000
$200,000,000
$0
# Emerging Disciplines: Discipline Growth

<table>
<thead>
<tr>
<th>FoR Code</th>
<th>FoR Name</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>Total</th>
<th>Two-period Growth Rate*</th>
<th>Growth Index**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1104</td>
<td>Complementary and Alternative Medicine</td>
<td>90.2</td>
<td>116.1</td>
<td>122.5</td>
<td>159.8</td>
<td>163.3</td>
<td>162.6</td>
<td>814.5</td>
<td>48%</td>
<td>1.3</td>
</tr>
<tr>
<td>1205</td>
<td>Urban and Regional Planning</td>
<td>223.5</td>
<td>224.7</td>
<td>328.3</td>
<td>302.6</td>
<td>366.9</td>
<td>461.7</td>
<td>1,907.7</td>
<td>46%</td>
<td>1.3</td>
</tr>
<tr>
<td>1111</td>
<td>Nutrition and Dietetics</td>
<td>148.5</td>
<td>202.3</td>
<td>222.6</td>
<td>240.6</td>
<td>274.1</td>
<td>304.4</td>
<td>1,392.5</td>
<td>43%</td>
<td>1.3</td>
</tr>
<tr>
<td>1199</td>
<td>Other Medical and Health Sciences</td>
<td>250.2</td>
<td>253.0</td>
<td>295.6</td>
<td>348.5</td>
<td>366.6</td>
<td>389.8</td>
<td>1,903.7</td>
<td>38%</td>
<td>1.2</td>
</tr>
<tr>
<td>0904</td>
<td>Chemical Engineering</td>
<td>686.7</td>
<td>682.7</td>
<td>756.8</td>
<td>761.3</td>
<td>920.6</td>
<td>956.5</td>
<td>4,764.6</td>
<td>24%</td>
<td>1.1</td>
</tr>
<tr>
<td>1202</td>
<td>Building</td>
<td>203.0</td>
<td>261.3</td>
<td>273.0</td>
<td>322.0</td>
<td>284.4</td>
<td>307.8</td>
<td>1,651.5</td>
<td>24%</td>
<td>1.1</td>
</tr>
<tr>
<td>2002</td>
<td>Cultural Studies</td>
<td>446.3</td>
<td>470.4</td>
<td>526.7</td>
<td>598.8</td>
<td>588.8</td>
<td>578.3</td>
<td>3,209.3</td>
<td>22%</td>
<td>1.1</td>
</tr>
<tr>
<td>0805</td>
<td>Distributed Computing</td>
<td>364.5</td>
<td>320.5</td>
<td>323.4</td>
<td>363.8</td>
<td>397.5</td>
<td>405.4</td>
<td>2,175.1</td>
<td>16%</td>
<td>1.0</td>
</tr>
<tr>
<td>1201</td>
<td>Architecture</td>
<td>350.0</td>
<td>407.9</td>
<td>421.6</td>
<td>433.7</td>
<td>418.4</td>
<td>510.3</td>
<td>2,541.9</td>
<td>16%</td>
<td>1.0</td>
</tr>
<tr>
<td>1203</td>
<td>Design Practice and Management</td>
<td>184.2</td>
<td>192.8</td>
<td>273.3</td>
<td>212.3</td>
<td>271.1</td>
<td>267.2</td>
<td>1,400.9</td>
<td>15%</td>
<td>1.0</td>
</tr>
<tr>
<td>1701</td>
<td>Psychology</td>
<td>1,584.2</td>
<td>1,908.1</td>
<td>1,964.8</td>
<td>2,081.9</td>
<td>2,128.7</td>
<td>2,088.1</td>
<td>11,755.8</td>
<td>15%</td>
<td>1.0</td>
</tr>
</tbody>
</table>
## Two-Digit Compound Growth Rates and Trends

<table>
<thead>
<tr>
<th>FoR</th>
<th>Trend 2005-2010</th>
<th>Total Outputs*</th>
<th>CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Built Environment and Design</td>
<td></td>
<td>7847</td>
<td>10%</td>
</tr>
<tr>
<td>05 Environmental Sciences</td>
<td></td>
<td>7549</td>
<td>8%</td>
</tr>
<tr>
<td>17 Psychology and Cognitive Sciences</td>
<td></td>
<td>14951</td>
<td>7%</td>
</tr>
<tr>
<td>22 Philosophy and Religious Studies</td>
<td></td>
<td>5724</td>
<td>6%</td>
</tr>
</tbody>
</table>
Staffing profile by academic level

![Staffing profile by academic level](image-url)
## Outputs and Staff by Employment Levels

<table>
<thead>
<tr>
<th>Field</th>
<th>% Staff</th>
<th>% Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>09 Engineering</td>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td>10 Technology</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>11 Medical and Health Sciences</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>12 Built Environment and Design</td>
<td>12</td>
<td>28</td>
</tr>
<tr>
<td>13 Education</td>
<td>9</td>
<td>21</td>
</tr>
</tbody>
</table>

Legend:
- Level E
- Level D
- Level C
- Level B
- Level A
- Other FTE
Non Traditional Outputs 2010-2012

12 Built Environment and Design
13 Education
14 Economics
15 Commerce, Management, Tourism and Services
16 Studies In Human Society
18 Law and Legal Studies
19 Studies In Creative Arts and Writing
20 Language, Communication and Culture
21 History and Archaeology
22 Philosophy and Religious Studies

Curated or Exhibited Event
Live Performance
Original Creative Work
Recorded or Rendered Work
Portfolio
Distribution of outputs across Australian institutions by two-digit FoR code

09 Engineering
10 Technology
11 Medical and Health Sciences
12 Built Environment and Design
13 Education
14 Economics
15 Commerce, Management, Tourism and Services
16 Studies in Human Society
Contribution to National Landscape (%)
Assessed 4-Digit UoEs
4-Digit Ratings
4-Digit Ratings at World Standard and Higher