Japanese Research Managers and Administrators on the Move

ARMS Singapore Chapter’s Annual Meeting
@ Nanyang Technological University
December 6, 2017

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Outline of today’s talk

• Background

• Increase of RMAs and their challenges in Japan

• RMAN-J, a Japanese professional association

• Hiroshima University: A case study

• Related updates
Japanese research in decline
A drop in the international share of scientific publications

<table>
<thead>
<tr>
<th>Fractional Count Paper</th>
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<tbody>
<tr>
<td>1 USA</td>
<td>182,135</td>
<td>221,367</td>
</tr>
<tr>
<td>2 Japan</td>
<td>47,588</td>
<td>67,888</td>
</tr>
<tr>
<td>3 UK</td>
<td>42,583</td>
<td>52,315</td>
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<tr>
<td>4 Germany</td>
<td>38,890</td>
<td>51,930</td>
</tr>
<tr>
<td>5 France</td>
<td>30,361</td>
<td>50,862</td>
</tr>
<tr>
<td>6 Canada</td>
<td>23,243</td>
<td>37,392</td>
</tr>
<tr>
<td>7 Russia</td>
<td>20,924</td>
<td>30,358</td>
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<tr>
<td>8 Italy</td>
<td>18,140</td>
<td>27,847</td>
</tr>
<tr>
<td>9 Australia</td>
<td>11,982</td>
<td>21,527</td>
</tr>
<tr>
<td>10 Netherlands</td>
<td>11,639</td>
<td>20,319</td>
</tr>
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Source: “Digest of Japanese Science and Technology Indicators 2017” (NISTEP, August 2017)
Japanese research in decline
A drop in the international share of Top 1% of scientific publications

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<tr>
<td>1 USA</td>
<td>3,223</td>
<td>55.7</td>
<td>1 USA</td>
<td>3,983</td>
<td>47.2</td>
<td></td>
</tr>
<tr>
<td>2 UK</td>
<td>471</td>
<td>8.1</td>
<td>2 UK</td>
<td>673</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td>3 Germany</td>
<td>321</td>
<td>5.5</td>
<td>3 Germany</td>
<td>503</td>
<td>6.0</td>
<td></td>
</tr>
<tr>
<td>4 Japan</td>
<td>271</td>
<td>4.7</td>
<td>4 Japan</td>
<td>365</td>
<td>4.3</td>
<td></td>
</tr>
<tr>
<td>5 Canada</td>
<td>241</td>
<td>4.2</td>
<td>5 France</td>
<td>311</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>6 France</td>
<td>231</td>
<td>4.0</td>
<td>6 Canada</td>
<td>295</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>7 Netherlands</td>
<td>137</td>
<td>2.4</td>
<td>7 China</td>
<td>283</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>8 Italy</td>
<td>113</td>
<td>1.9</td>
<td>8 Netherlands</td>
<td>211</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>9 Swizterland</td>
<td>108</td>
<td>1.9</td>
<td>9 Italy</td>
<td>200</td>
<td>2.4</td>
<td></td>
</tr>
<tr>
<td>10 Australia</td>
<td>100</td>
<td>1.7</td>
<td>10 Switzerland</td>
<td>178</td>
<td>2.1</td>
<td></td>
</tr>
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</table>

Source: “Digest of Japanese Science and Technology Indicators 2017” (NISTEP, August 2017)
Government’s responses
Funds from the Ministry of Education, Culture, Sports, Science and Technology (MEXT)

• Directly related:
  • *Program for the Development of Systems to Foster and Secure Research Administrators (2011 – 2014)*
    • 15 institutions awarded
  • *Program for Promoting the Enhancement of Research Universities (2013 – 2022)*
    • 22 institutions awarded

  → Encouraging universities to assign and utilize human resources who are engaged in research management and administration

• Indirectly related (more education-oriented):
  • *Top Global University Project (2014 – 2023)*
RMAs in Japan (since 2011, referred to as URAs: University Research Administrators)

Engaged in:
- Grant support
- Project management
- University planning
- and more ...

(MEXT's Top Global University Project launched in 2014)

2011: MEXT's Program for the Development of Systems to Foster and Secure Research Administrators

2013: MEXT's Program for Promoting the Enhancement of Research Universities

2015: Research Manager and Administrator Network Japan (RMAN-J) formed

2016: RMAN-J joined INORMS

*This diagram is a revised version of the one created for “Collaboration with Japan,” a session jointly presented by Osaka, Kobe, Kyoto, and Hiroshima Universities during EARMA 2017 Malta.
No. of URAs in Japan

Source: “The current status of the development of URA systems in FY 2015” (MEXT)
http://www.mext.go.jp/component/a_menu/science/micro_detail/__icsFiles/afieldfile/2017/05/11/1316577_03.pdf
Most institutions without URAs!

- No URAs: 87%
- National: 8%
- Prefectural / Municipal: 1%
- Private: 3%
- Other: 1%

Total responses: 702 institutions (FY 2015)

Source: “The current status of the development of URA systems in FY 2015” (MEXT)
http://www.mext.go.jp/component/a_menu/science/micro_detail/__icsFiles/afieldfile/2017/05/11/1316577_03.pdf
URAs’ ages and employment

Ages
- Over 60: 21%
- 50 - 59: 17%
- 40 - 49: 29%
- Under 40: 33%

Total URAs: 830 (FY 2015)

Employment
- Tenured: 25%
- Fixed-term: 75%

Source: “The current status of the development of URA systems in FY 2015” (MEXT)
http://www.mext.go.jp/component/a_menu/science/micro_detail/__icsFiles/afieldfile/2017/05/11/1316577_03.pdf
Challenges for URAs in Japan

Evaluation of performances

Clarification of duties/roles

Visibility on campus

Source: “Overview of human resources engaged in research support at universities” (Makiko Takahashi et al., 2017)
A professional association
The Research Manager and Administrator Network Japan

- **Established:** March 11, 2015
- **Chair:** Koetsu YAMAZAKI, Ph.D., President, Kanazawa University
- **Secretariat Office:** Located at Kanazawa University
- **Members (as of 8/17/2017):**
  - Institutional: 23 institutions
  - Individual: 436 from 107 institutions
- **Annual Conferences:**
  - 420 participants in Nagano (August 2015)
  - 530 participants in Fukui (August 2016)
  - 560 participants in Tokushima (August 2017)
- **Website:** www.rman.jp (in Japanese only)
### On our campus at Hiroshima U

<table>
<thead>
<tr>
<th>Year</th>
<th>Program Description</th>
<th>Institution</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-14</td>
<td>Program for the Development of Systems to Foster and Secure Research Administrators – funded by MEXT</td>
<td>Nationwide</td>
<td>- 15 institutions selected (not including Hiroshima U)</td>
</tr>
<tr>
<td>2013</td>
<td>10 existing admin. staff members appointed as URAs</td>
<td>@Hiroshima University</td>
<td></td>
</tr>
<tr>
<td>2013-22</td>
<td>Program for Promoting the Enhancement of Research Universities – funded by MEXT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014 (Jan-May)</td>
<td>9 URAs newly employed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014-23</td>
<td>Top Global University Project – funded by MEXT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015 (Mar)</td>
<td>RMAN-J established</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016 (Aug)</td>
<td>Joined RMAN-J</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018 (Mar)</td>
<td>22 URAs in total (planned)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Research environment and support system are insufficient.
The number of international research collaborations and the amount of international dissemination of our achievements is insufficient.
There are few large-scale projects and little interdisciplinary research.
Only a small proportion of researchers exhibit top-class activities.

Improving research support (e.g., assignment of URAs)
Continuing to create world-class Centers of Excellence in Research
Establishing a competitive environment to foster excellent researchers
Promoting international research activities

Challenges identified in 2013

Strengthening policies Proposed for the Program

Hiroshima U’s response

Under the Program for Promoting the Enhancement of Research Universities

Building a world’s leading comprehensive research university
Roles of URAs @ Hiroshima U

**General research strategy**
- Developing system to create COEs
- Supporting HU’s strategic planning on research
- Disseminating the information about HU’s research
- Facilitating int’l conferences/forums/symposia
- Assisting the design and operation of a faculty evaluation system

**Overhauling the system of enhancing research capabilities**

**Supporting large-scale projects** (interdisciplinary; university-industry-gov’t-community partnerships)
- Supporting proposal creation and strategy building
- Supporting partnership development
- Supporting operation building (e.g., rules)
- Supporting symposium preparation
- Assisting PRs
- Managing progress

**Supporting researchers in each discipline**
- Sharing information on research policy trends
- Supporting partnership development
- Supporting external funding proposals (grant writing)
- Supporting intellectual property creation/protection

**Pre-Award**
- Supporting proposal creation and strategy building
- Supporting partnership development
- Supporting symposium preparation
- Assisting PRs
- Managing progress

**Post-Award (Initiation support)**
- Developing system to create COEs
- Supporting HU’s strategic planning on research
- Disseminating the information about HU’s research
- Facilitating int’l conferences/forums/symposia
- Assisting the design and operation of a faculty evaluation system

**Post-award (Operation support)**
- Sharing information on research policy trends
- Supporting partnership development
- Supporting external funding proposals (grant writing)
- Supporting intellectual property creation/protection

**Specifically targeted support**
International research activities
supported by
URAs at Hiroshima University

- Promoting int’l MICE* in Hiroshima
  - Expanding Writing Center
  - Strengthening int’l science communication
    - Facilitating int’l research networking
    - Developing int’l research funds

* MICE = Meetings, Incentives, Conferences, and Events
Related updates from Japan

- Mid-term evaluation (2017) of the Program for Promoting the Enhancement of Research Universities
- WPI (World Premier International Research Center Initiative)
- Research University Consortium, Japan
- INORMS
# Mid-term evaluation

The Program for Promoting the Enhancement of Research Universities

## 2013 (outset)

<table>
<thead>
<tr>
<th>Annual fund per institution</th>
<th>No. of awarded institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>$4.8 M (SGD)</td>
<td>4</td>
</tr>
<tr>
<td>$3.6 M (SGD)</td>
<td>12 (including Hiroshima U)</td>
</tr>
<tr>
<td>$2.4 M (SGD)</td>
<td>6</td>
</tr>
</tbody>
</table>

## 2017 (mid-term)

<table>
<thead>
<tr>
<th>Ranks with evaluation description</th>
<th>No. of evaluated institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>S Outstanding progress</td>
<td>5</td>
</tr>
<tr>
<td>A Good progress</td>
<td>10 (including Hiroshima U)</td>
</tr>
<tr>
<td>A- Same as “A,“ but with some reservations</td>
<td>5</td>
</tr>
<tr>
<td>B Progressed, but greater effort required</td>
<td>2</td>
</tr>
<tr>
<td>CDelayed, and substantial restructuring required</td>
<td>0</td>
</tr>
<tr>
<td>DNo chance of success; termination recommended</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: MEXT (November 2017)
• Long-run financial support from the government; e.g., approx. $16M (SDG) annually per center for 10-15 years
• At least, 10-20 world-class PIs
• A total of at least 100-200 staff members

Science: leading-edge research
Globalization: international research environments
Reform: research organizations
Fusion: interdisciplinary domains
One indicator of high-quality papers is a ratio of top 1% paper to total (※). In this respect, the average number of top 1% papers among the five WPI centers is higher than such overseas institutions as Caltech, Harvard, and Stanford.

※ The percentage of papers from each institution that are ranked in the top 1% in terms of citations.

- Rockefeller University: 6.24%
- Massachusetts Institute of Technology: 5.30%
- Average ratio of 5 WPI Centers: 4.63%
- California Institute of Technology: 4.40%
- Harvard University: 4.39%
- Stanford University: 4.14%
- University of California Berkeley: 4.11%
- Princeton University: 4.00%
- University of Oxford: 3.18%
- University of Cambridge: 3.12%
- Max Planck Society: 3.10%
Research University Consortium (RUC)
A group of research universities formed under the MEXT’s leadership in 2017

• **Prompted by:** The FY2015 Follow-up Reports – Important to share information on effective practices (e.g., those at WPIs)

• **Launched:** August 4, 2017

• **General Meeting Convener:** Shinichi YAMAMOTO, Ph.D., Professor Emeritus, Nagoya University and Okayama University

• **Secretariat Office:** Located at National Institute of Natural Sciences (NINS)

• **Members (as of 12/1/2017):**
  • Institutional: 33 institutions (represented usually by their Vice Presidents for Research)

• **Symposium:** The first one being held in Tokyo today (Dec. 6)!
Research University Consortium (RUC)
A group of research universities formed under the MEXT’s leadership in 2017

**General Meetings**
- Website
- Symposia

**Task Forces**
- Utilization of highly skilled professionals in research management (e.g., URAs)
- Improvement of research activity analysis (e.g., indices, IR – Institutional Research)
- Promotion of International dissemination of research outcomes

**Secretariat Office at NINS**

**Operating Committee**
(Advisory Board)

**Suggestions**

**Collaborations with WPI Academy**

*This diagram is provided by NINS as the secretariat institution of RUC.*
RU Consortium (RUC) formed in 2017

RU 11 since 2009

Top Global University Type A

Program for Promoting the Enhancement of Research Universities

Former Imperial

Tokyo
Tokyo Tech
Keio
Waseda
Kyushu
Hiroshima
Hokkaido
Nagoya

Tokyo Med & Dental

KEK

NINS

Top Global University Type B
RMAs’ professional associations

- ARMS (Australasian Research Management Society)
- NCURA (National Council on Research Administration)
- RMAN-J (The Research Manager and Administrator Network Japan)

Groups of research universities

- Group of Eight Australia
- Association of American Universities
- RU11
International Network of Research Management Societies

and other 15 professional associations ...
INORMS World Congresses

2006: Brisbane, Australia (by ARMS)
2008: Liverpool, UK (by ARMA)
2010: Cape Town, South Africa (by ACU, SARIMA)
2012: Copenhagen, Denmark (by DARMA)
2014: Washington, D.C., USA (by CAURA, NCURA, SRA)
2016: Melbourne, Australia (by ARMS)
2018: Edinburgh, UK (by ARMA)
INORMS 2020 Hiroshima

Hiroshima Int’l Conference Center located in the Peace Memorial Park (May 25-28, 2020)

hosted by RMAN-J

Promoting Diversity in Research and Research Management Collaborations:
More Trans-national, More Trans-disciplinary, More Trans-sectoral