For Development and Sustainability of Female Researchers’ Career:
Practice and Perspectives in Japan

2010 International Symposium “Networking Across the Globe”
WiSE @ Syracuse University Perspectives”
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The 3rd Stage Basic Plan for Science and Technology (FY2006-2010)

Numerical Targets were specified for the first time for Promoting Female Researchers

Female Ratio in Recruitment should be 25% in overall Natural Sciences

- 20% in Science
- 15% in Engineering/Technology
- 30% in Agriculture
- 30% in Health
Various Funds Started in 2006 to Achieve the Promotion and Proactive Recruitment of Female Scientists specified in the Basic Plan

**Support for Institutions**

**Model programs to support female scientists**
Competitive grants made to support universities and research institutes that are taking hold (FY2007 budget: JPY 500 million)

**Returning to Lab**

**Support for returning to the lab after maternity/childcare leave**
Fellowship and research grant for postdocs to restart their scientific career (FY2007 budget: JPY 262 million)

**Outreach to Schoolgirls**

**Encouraging high school girls to take the science courses**
Opportunities for high school girls to become more interested in and more familiar with science and technology fields through exposure to role models and a vivid experience of various experiments
Support for universities and research institutes that
❤ proactively hire and promote female scientists
❤ construct a framework to enable female scientists to balance research and childcare

* FY2006-: 10 universities > Hokkaido University
* FY2007-: 7 universities, 3 institutes
* FY2008-: 13 universities
* FY2009-: 10 universities, 2 institutes
* FY2006-: 10 universities

55 institutions in total
An Integrated Master Plan for the Support of Female Researchers at Hokkaido University

"20% by 2020" (Triple Twenties Policy)
Increase the Female Ratio in Hokudai Researchers to 20% by 2020!

Support Office for Female Researchers
Policy making role: administration, change lobbying
Support, advice, information

One-stop contact point:

Transform NEEDS into SEEDS
Girls Be Ambitious and Cheerful!

More Women in Science and Technology!

Environment
Numbers
**Unique “Positive Action Hokudai-Scheme”**

**Academic Salary Pool**

- **Faculties and Departmental Budgets**
- **University Overheads**

By recruiting women, faculty/department has a larger salary pool at their disposal

- **Boost recruitment of only suitable women**
- **Not forced to appoint less qualified women**
- **Larger incentive for higher positions**

Men with equal qualifications are more expensive for faculty/department than women
Support Career Progression during Pregnancy or Upbringing of Children

Supporting Mom-Scientists “to be counted”

University/Institution should prepare the environment where young female researchers are warmly welcomed

♥ Temporary replacement or supporting staff for research and other lab work

♡ Research assistant or secretary for 20 – 30 hours/week hired by university budget
♡ Assist lab work, or lessen non-research related work to allow Mom-scientists to concentrate on their research for limited time

♥ Temporary nursing / day-care service responding to kid’s sickness or emergency

♡ Contract between university and nursing providers
♡ Registered female researchers should just call on emergency
♡ Charge is partially supported by university

SOS Child Care System “TRICYCLE” on Demand of Sudden Fever or Unexpected Injury

Prerequisite Conditions for Positive Action

Not only for female researchers themselves but also for surrounding lab members/collaborators
Researchers: Total = 2,785
Female = 328 11.9%

Faculty: Total = 2,115
Female = 182 8.6%

Non-Faculty: Total = 670
Female = 152 22.7%

<table>
<thead>
<tr>
<th>FY (Jan. 1st)</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2,149</td>
<td>2,150</td>
<td>2,107</td>
</tr>
<tr>
<td>Female</td>
<td>151</td>
<td>172</td>
<td>177</td>
</tr>
<tr>
<td>Female %</td>
<td>7.0 %</td>
<td>8.0 %</td>
<td>8.4 %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FY</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
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<tbody>
<tr>
<td>F. Employ %</td>
<td>11.4%</td>
<td>20.0%</td>
<td>14.6%</td>
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</table>
Integrated Master Plan for the Support of Female Researchers at Hokkaido University

“20% by 2020” (Triple Twenties Policy)
Increase the Female Ratio in Hokudai Researchers to 20% by 2020!

NEEDS-driven
Develop support plans in response to the concerns of female researchers:

Support Office for Female Researchers

VISION-driven
Increase diversity of human resources to reinforce research activity

Environment
Numbers

Various plans and policies: costs are partially borne by the university finance and being established in the system

Basic framework and systems have been established: promote further expansion and improvement

“Positive Action Hokudai-Scheme” boosted increase of female faculties: continues until 2020 and gears up for STA fields
Ratio of Female Researchers in Faculties and Positions in Japan

<table>
<thead>
<tr>
<th>Field</th>
<th>Professor</th>
<th>Associate Professor</th>
<th>Lecturer</th>
<th>Assistant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>16.5%</td>
<td>27.5%</td>
<td>38.3%</td>
<td>57.6%</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>7.7%</td>
<td>20.7%</td>
<td>29.3%</td>
<td>41.1%</td>
</tr>
<tr>
<td>Sciences</td>
<td>12%</td>
<td>18.9%</td>
<td>3.7%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Agricultural</td>
<td>3.8%</td>
<td>8.4%</td>
<td>8.2%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Technology/Engineering</td>
<td>1.2%</td>
<td>1.6%</td>
<td>5.2%</td>
<td>12.4%</td>
</tr>
<tr>
<td>Medical, Dental &amp; Pharmaceutical</td>
<td>22.9%</td>
<td>29.8%</td>
<td>17.8%</td>
<td>31.2%</td>
</tr>
<tr>
<td>Home Economics</td>
<td>20.1%</td>
<td>29.5%</td>
<td>12.1%</td>
<td>36.5%</td>
</tr>
<tr>
<td>Education</td>
<td>8.4%</td>
<td>8.2%</td>
<td>8.7%</td>
<td>12.4%</td>
</tr>
</tbody>
</table>
Accelerated Innovation of Fostering System for Female Scientists

An advanced project by the Special Coordination Fund for Promoting Science and Technology (FY2009 -; max. JP¥100,000,000/year/inst. for 5 years)
FY2009-: 5 universities >Hokkaido University / FY2010-: 7 universities

◆ Clear Aim: Increase and Invigorate Female Faculty Members in Science, Technology, and Agricultural Fields

◆ Faculty Recruitment Targeted Only for Women
For Recruited Female Faculty

❤ Salary Support: JP¥3,000,000/year for 3 years
❤ Research Expense Support: JP¥1,000,000/year + α
❤ Mentors Support: More than one Mentor

Support also goes to mentors and other female faculties in STA
To organize/attend international workshops/symposia
To create interdisciplinary, domestic, international networks
Hokkaido University F3 Project for Advanced Affirmative Action in STA Fields

F3 ....
■ **F**resh **F**emale **F**aculty
■ **3** Fields (Science, Technology, Agriculture)
■ **F**ilial **3** (3\textsuperscript{rd} generation)
  1\textsuperscript{st} generation < 2\textsuperscript{nd} generation < 3\textsuperscript{rd} generation
■ **fff** (fortississimo)

**Set a Large Financial Advantage on Female Faculty Cost in STA fields**

* **Strong Incentive for relevant departments/faculties to recruit female faculty staff:**
  Never fix ‘posts-for-female’, but strongly encourage recruitment of suitable female candidates for ordinary faculty posts

* **Stable employment for female researchers to demonstrate their ability in research and education activities even in parallel with childbirth/care**
Salary for Fresh Female Faculty

- **First 3 years (Green Period)**
  - No cost to the hiring Faculty
  - ½ from Special Cooordination Fund
  - ½ from University Overhead

- **Following 5 years**
  - Should bear ½ of the salary
  - ½ from University Overhead

- **After 8 years**
  - Fully responsible for whole salary

5 Faculty Posts/year for 5 years → 25 Posts in total
Recruited 5 in Science, 4 in Technology, 2 in Agriculture (2009-2010)
Hokkaido University strongly *(fff; fortississimo)* propels forward the "**F3 Project**" aiming at "**20% by 2020**" (Triple Twenties Policy)

**STAFF Recruitment**

From "**Sustainable Career**" Towards "**Career-Up**"

**STAFF**

Taking advantage of the Special Coordination Fund ‘Accelerated Innovation of Fostering System for Female Scientists’

Hokkaido University strongly *(fff; fortississimo)* propels forwards the “**F3 Project**” aiming at “**20% by 2020**” (Triple Twenties Policy)
Japan’s tipping point

With changing demographics, a tight economy and increasing competition, Japan could slide from the top ranks of research nations. Drastic action is needed.

….. the possibility of invigorating the research community by increasing international exchange, recruiting women and encouraging young Japanese scientists. ….. Meanwhile, the struggle to encourage women in science, after years of effort, has produced only modest gains. The 12% of researcher posts held by women still places Japan near the bottom of the heap. Attitudes change slowly, and Japan is still a long way from fully tapping this resource. …..
Problematic Issues for Appointing Female Faculties

Fewer women apply.

- **Women candidates are few:**
  - In certain fields, girl students are few.

- **Women candidates don’t apply:**
  - Women are more modest/humble than men?! Modesty is virtue?!
  - Environment/circumstances easily lead women to give up.
  - Women don’t apply for good posts with a low probability of appointment.
  - Women with a high load/burden don’t want to ‘waste’ time/energy.
  - Risk-adverse instinct is stronger in women?!

- **Women candidates can’t apply:**
  - Women are anchored to where family live.
  - “Dual Career” problems also concern.

Fewer women are selected.

- **A lower expectation for women because:**
  - Absence from work or ‘less active periods’ causing stress on the surrounding work environment is of concern: women are regarded as ‘risky’.

- **Women candidates are less evaluated:**
  - Evaluation focusing on “numbers of publications” (total / in recent years) are often unfavorable for female researchers with high workloads due to childbirth/childcare.
Both Male and Females should Face their own Careers Objectively as well as Subjectively

Set PRIORITIES individually for what they treasure, including non-negotiable items such as family

◆ Attain a Work Balance between Life and Research With Professional Awareness

◆ Have a Positive Attitude and Be Prepared for their Career- and Life-Style Choices

WANTS  SEEDS  NEEDS
Girls & Boys Be Ambitious!
No Quality Without Equality
Girls & Boys Be Cheered & Happy!!

Support Office for Female Researchers in Hokkaido University
Since 2006
FResHU
[fres ju:]-[sound]- [#4d2626]
FResHU

Since 2006

Support Office for Female Researchers in Hokkaido University