Overview of JSPS and its International Collaborative Program

5 November, 2015

Japan Society for the Promotion of Science (JSPS)
S&T Policy System in Japan

Cabinet Office

Council for Science, Technology and Innovation (CSTI)

MEXT
Ministry of Education, Culture, Sports, Science and Technology

METI
Ministry of Economy, Trade and Industry

MHLW
Ministry of Health, Labour and Welfare

Other Ministries

JST
Japan Science and Technology Agency (Mission-oriented Approach) Top-down Approach

NEDO

AMED (2015-)

Research Fund

Universities and Research Institutes

Researchers

Prime Minister

Provides frameworks for S&T policy General coordination

Provides S&T policies and budgets

Research Education

Basic Research to Innovation

Research Fund
Basic Research to Innovation in Japan

Cabinet Office
(Council for Science, Technology, Innovation)

Provides S&T Policies and Budgets

Provides Frameworks and S&T policy
General coordination

MEXT
JSPS
JST

METI
NEDO

MHLW

AMED

Universities & Industries

Researcher-driven

Projects & Programs

Top-down Approach

Mission-Oriented

Bottom-up Approach

Universities & Industries

Industries

Universities

Projects & Programs

Funding

Funding

Funding

Funding

Ministries

Funding Agencies
Japan Society for the Promotion of Science (JSPS)

- Established through an endowment by Emperor Showa in 1932

**Major Objectives of JSPS**

1. Create world-class knowledge in diverse fields
2. Build robust international cooperative networks
3. Foster the next generations and enhance the education/research functions of universities
4. Build evidence-based science-promotion systems and strengthen linkage with society
Transition of JSPS Budget

(Unit: Bill. Yen)

<table>
<thead>
<tr>
<th>Year</th>
<th>Others</th>
<th>Grants-in-Aid for Scientific Research (KAKENHI)</th>
<th>Government subsidies for JSPS as an independent Administrative Institution</th>
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(Unit: Mill. USD)

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# Configuration of Grants-in-Aid Categories

## Covers all disciplines including the Humanities, Social Sciences

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<th>Categories</th>
<th>Characteristic</th>
<th>Term</th>
<th>Support (per yr per project/area)</th>
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<tr>
<td>Scientific Research on Innovative Areas</td>
<td>Creating new disciplines or markedly advancing existing disciplines</td>
<td>5 years</td>
<td>10 to 300 mil JPY</td>
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<tr>
<td>Challenging Exploratory Research</td>
<td>Research at an early stage with highly challenging goals</td>
<td>1-3 years</td>
<td>Up to 5 mil JPY</td>
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<tr>
<td>Specially Promoted Research</td>
<td>Internationally appraised research expected to produce outstanding results</td>
<td>3-5 years</td>
<td>500 mil JPY or more</td>
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<tr>
<td>Scientific Research (S),(A), (B) or (C)</td>
<td>(S)Cutting-edge research (A), (B) or (C) Creative and pioneering research</td>
<td>3-5 years</td>
<td>(S) 50 to 200 mil JPY (A) 20 to 50 mil JPY (B) 5 to 20 mil JPY (C) Up to 5 mil JPY</td>
</tr>
<tr>
<td>Grant-in-Aid for Young Scientists(A) or (B)</td>
<td>(A) or (B) Individual researcher of Up to age 39</td>
<td>2-4 years</td>
<td>(A) 5 to 30 mil JPY (B) Up to 5 mil JPY</td>
</tr>
<tr>
<td>Grant-in-Aid for Research Activity Start-up</td>
<td>Support newly tenured researchers or restart research</td>
<td>Up to 2 years</td>
<td>Up to 1.5 mil JPY</td>
</tr>
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<td>Grant-in-Aid for JSPS Fellows</td>
<td>Support JSPS young research fellows</td>
<td>Up to 3 years</td>
<td>Up to 1.5 mil JPY</td>
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</table>
Fostering Joint International Research

- Japanese researchers selected for Grant-in-Aid funding advance international research for set periods in collaboration with overseas universities and research organizations.

- International joint research is strengthened by rigorously selecting participants (e.g. professors, assistant professors) who can drive its advancement into the future.

- **Period:** about 6 months to one year
- **Support:** up to 12 million yen (about 100,000 US dollars)

**New program**
From FY2015

- **400 of Top level Researchers in Japan**
  - Dispatched

- **Collaboration with overseas researchers**

- **Other new categories under this program**
  - International Group
  - Returning Researcher Development Research
Number of Researchers Exchanged under JSPS Programs (FY2014)

**Foreign Researchers → Japan**
- Central / South America: 52 (Brazil: 34, Argentina: 6, Colombia: 3, Nicaragua: 2, Venezuela: 2)
- Middle East: 39 (Turkey: 13, Iran: 11, Israel: 10, Others: 5)
- North America: 316 (United States: 279, Canada: 37)
- Oceania: 94 (Australia: 66, New Zealand: 28)

**Japanese Researchers → Abroad**
- Central / South America: 87 (Brazil: 44, Mexico: 18, Chile: 17, Peru: 4, Others: 4)
- Middle East: 53 (Turkey: 29, Palestine: 8, Saudi Arabia: 7, United Arab Emirates: 3, Others: 6)
- Africa: 184 (Kenya: 57, South Africa: 30, Tunisia: 18, Egypt: 15, Tanzania: 14, Others: 50)
- Asia: 2,122 (Korea, Rep.: 416, China: 389, Thailand: 245, Indonesia: 188, Viet Nam: 176, Malaysia: 174, Others: 78)
- Oceania: 112 (Australia: 78, New Zealand: 34)

**Total**
- Foreign Researchers: 3,997
- Japanese Researchers: 5,902
- Total: 9,900

Note: The numbers in parentheses indicate the counts for each country or region.
JSPS Research Fellowship Programs

Career Stages of Researchers

- PhD student
- Ph.D.
- Postdoc
- Mid career
- Professor
- Nobel Prize level

JSPS Research Fellowships for Overseas Researchers

- Postdoctoral Fellowships for Overseas Researchers
  - Summer Program: 2 months
  - Strategic Program: 3-12 months
  - Short-term: 1-12 months
  - Standard: 1-2 years
  - Pathway: 1-2 years
- Invitation Fellowships for Research in Japan
  - Long-Term: 2-10 months
  - Short-Term: 14-60 days
  - Short-Term S: 7-30 days

JSPS Research Fellowships for Japanese Researchers

- Research Fellowships for Young Scientists
  - DC1: 3 years
  - DC2: 2 years
  - PD: 3 years
- Postdoctoral Fellowships for Research Abroad
  - 2 years

Awards for Japanese Researchers

- JSPS Prize
  For superlative researchers under age 45.
- JSPS Ikushi Prize
  For PhD students with outstanding academic records under age 34.
The 4th Global Research Council (GRC) Annual Meeting

1. Date: 27-28 May, 2015
2. Venue: Tokyo, Japan
3. Discussion Theme:
   1) Research Funding for Scientific Breakthrough
   2) Building Research and Education Capacity
4. Participants: 52 organizations from 47 nations and 4 international organizations
5. Organizer: Japan Society for the Promotion of Science (JSPS)
   Cosponsor: National Research Foundation (NRF)
6. Relevant events:
   - Global Symposium on Scientific Breakthroughs
   - Roundtable on Building Education and Research Capacity in Africa

“Equality and Status of Women in Research” and “Interdisciplinarity.” at 5th meeting in May, 2016 in New Delhi [SERB & RCUK]
JSPS International Programs
International Programs for Overseas Researchers

1. Fellowships for Research in JAPAN
   - JSPS Postdoctoral Fellowships
   - JSPS Invitation Fellowships etc.

2. Supporting International Joint Research and Seminars
   - Bilateral Programs (Joint Research Projects and Seminars)
   - JSPS Core-to-Core Program

3. Providing International Training Opportunities
   - World Premier International Research Center (WPI) Initiative
   - HOPE Meeting

4. Building Networks
   - Forming a Researcher Community (JSPS Alumni Association)
   - BRIDGE Fellowship Program
   - JARC-Net
Objective: To promote and support academic cooperation between highly qualified Japanese and overseas researchers

Type of activity: Joint Research Projects, Scientific Seminars, Scientist Exchanges

Practice: Equal cost sharing for implementing cooperative activities

Area of cooperation: All research fields

57 agencies in 39 countries

Open Partnership Joint Projects/Seminars
(Expected but not required)
JSPS Core-to-Core Program

Creative Research Hubs and Advanced Research Networks

**Advanced Research Networks**

Target: Any country in the world

Objective:
- Promote International collaboration in cutting edge fields by creating world-class research hubs
- Foster new generations of talented young researchers in Japan and other countries

**Asia-Africa Science Platforms**

Target: Asian/African countries

Objective:
- Japanese research institutions take the lead in building research hubs and fostering young researchers to contribute to Asian/African region
**Objective**

- Create a vibrant environment that will be of strong incentive to frontline researchers around the world to want to come and work at these centers

**9 WPI Centers**

- **Kyoto University**
  - Institute for Integrated Cell-Material Sciences (iCeMS)

- **Osaka University**
  - Immunology Frontier Research Center (IFReC)

- **Kyushu University**
  - International Institute for Carbon-Neutral Energy Research (I2CNER)

- **Nagoya University**
  - Institute of Transformative Bio-Molecules (ITbM)

- **Tohoku University**
  - Advanced Institute for Materials Research (AIMR)

- **University of Tsukuba**
  - International Institute for Integrative Sleep Medicine (IIIS)

- **National Institute for Materials Science**
  - International Center for Materials Nanoarchitectonics (MANA)

- **The University of Tokyo**
  - Kavli Institute for the Physics and Mathematics of the Universe (Kavli IPMU)
JSPS alumni associations have been established in Germany (1995), France (2003), the UK & Ireland (2004), the US (2004), Sweden (2005), Egypt (2008), Kenya (2008), Thailand (2010) and China (2010) in cooperation with JSPS Overseas Offices. Although there are no JSPS branch offices, former Indian (2006), Korean (2008), Bangladesh (2009), Finnish (2009) and Philippine (2013) fellows have established JSPS alumni associations in their countries.
Mission
Liaise with Overseas Counterpart Research- Promotion Organizations
• Hold Symposiums
• Support Alumni Networks Formed among Former Participants in JSPS Programs
• Disseminate Information on Scientific Trends in Japan
• Support Overseas Activities of Japanese Universities
Thank you!

www.jsp.go.jp/english
Singapore, 4-5 November 2015

Research
Society
Industry

With the support of