New Initiatives for Research Funding Administration Reform in Japan

- Activities of “ORFA (Office of Research Funding Administration)” -

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Content

• What is “ORFA” ?
• Background
• “moth” or “mold” ?
• Countermeasures for misuse
• Steps toward effective and efficient funding system
What is “ORFA”? 

• ORFA = “Office of Research Funding Administration”

  - 2007 is the first year for ORFA.
  - Science and Technology Bureau
    Ministry of Education, Culture, Sports, Science and Technology (MEXT)
  - 9 staff
What is “ORFA”?

1. Planning and conducting countermeasures against misuse of research fund

2. Developing research funding reform
   - Cross-Ministerial “R&D management system”
   - Common rules for funding administration

* Other division covers “Scientific misconduct” issues.
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**Background**
- Increasing Budget for Competitive fund (16% of total S&T Budget)

**Recent Actions**
- Heavier Penalties
- Clarification of Institution’s responsibilities

**Guiding Principle for Misuse of Competitive Research Funds (Aug 31st, 2006)**

**New Actions**

**Guidelines for Management and Auditing of Public Research Fund at Research Institutes (Feb. 15th, 2007)**

1. Clarification of responsibilities within institutes
2. Improvement of the environment that enables appropriate operation and management
3. Identification of the risk of misuse and establishment and implementation of countermeasures
4. Appropriate use/management of research funds
5. Establishment of a system that secures communication
6. Monitoring within institutes
7. MEXT’s monitoring, guidance and enforcement actions

The case of misuse by a famous Japanese researcher in 2006
S&T Basic Plans are formulated to implement a 5-year S&T policy with a 10-year outlook, based on the S&T Basic Law.

[ First S&T Basic Plan ]
Total expenditures for governmental R&D investment:
approx. 17 trillion yen
System reforms for construction of a new R&D system

[ Second S&T Basic Plan ]
Total expenditures for governmental R&D investment:
approx. 24 trillion yen (21 trillion yen including local gov.)
Clarification of Japan’s objectives
Strategic priority setting for S&T
  Promotion of basic research
  Priority setting for four prioritized fields, etc.
S&T System Reforms
  Building a competitive environment for research
  Human resource-fostering and university reform, etc.

[ Third S&T Basic Plan ]
Total expenditures for Governmental R&D Investment: approx. 25 trillion yen

< Basic Stance >
1. Continuous improvements in the level of science, and returning the fruits of research to society and the public through innovation.
2. Emphasis on the training of human resources and the establishment of a competitive environment.

< 6 Policy Goals under 3 Basic Concepts >
1. Quantum jumps in knowledge discovery & creation
2. Breakthroughs in advanced S&T
4. Innovator Japan – strength in the economy & industry –
5. Nation’s good health over a lifetime
6. Making Japan the world’s safest country

< Strategic Priority Setting in S&T>
1. Promotion of basic research
2. Four primary priority fields, four other fields to be promoted, promotion strategies of each of the 8 fields
3. Strategic Prioritized S&T topics
   (Key technologies of national importance, Safety and security, International competitiveness)

< Reforming the S&T System >
1. Developing, securing and activating human resources
   (young researchers, female researchers, foreign researchers)
   Enhancing the human resource development functions in universities
2. Creating scientific development and persistent innovation
3. Reinforcing the foundation for promoting S&T

< Strategically promoting International Activities (Cooperating with Asian Nations)>

< S&T to be support from the society and the public >
Time-trend of Competitive Research Funds

- Other Ministries
- Grants-in-Aid for Scientific Research
- JST Basic Research Program
- Special Coordination funds for Promoting S&T
- Others

MEXT Total

75% of total governmental Competitive Research Funds

2.9 bn. EURO

2.2 bn. EURO
Case of Misuse

Refund Order for misused expense (2004FY – 2006FY)

- 30 cases
- 0.55 bn. JPY (3.4M EURO)

* > 50,000 active projects / year

* 997 bn. JPY (6.2 bn. EURO)
(MEXT’s total expenditure for Competitive funds (2004FY – 2006FY))
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Reports
“Committee for the countermeasures against misuse of research funding “ (Dec.26th, 2006)
Chair person; Shiro Ishii (Tokyo Univ., JSPS)

The case of misuse by a famous Japanese researcher in 2006

Background
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CSTP
Cause of Misuse
(Report “Committee for the countermeasures against misuse of research funding)
(Dec.26th, 2006)

- Researchers (moral issue)
  penalties
- Lack of organizational management system within research institutes
  guidelines
- Inflexibility of funding system
  funding system reform
Law of “moth” and “mold”

Misuse in U.S. ---- “moth” type

- motivation “personal interest”
- sporadic
*countermeasures ---- penalties for individuals “insecticide”

Misuse in Japan ---- “mold” type

- motivation “organizational interest”
- lasting along with the “position”
*countermeasures ---- eliminate underlain factors
  “dehumidifying and cleansing”
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Guidelines require Institutes…

1. Clarification of responsibilities within institutes

2. Improvement of the environment that enables appropriate operation and management
   - clarification and simplification of rules
   - clarification of responsibilities
   - Improvement of the mind set
   - Improvement of the guidelines on investigations and punishment for fraud
Guidelines require Institutes…

3. Identification of the risk of misuse and establishment and implementation of countermeasures
   - risk management

4. Appropriate use/management of research funds
   - Check system for placing order/receiving goods by impartial third party
Guidelines require Institutes…

5. Establishment of a system that secures communication
   - window for consultation
   - window for allegations

6. Monitoring within institutes.
   - monitoring and management system
   - internal auditing system
Guidelines for MEXT/JSPS/JST.

7. MEXT’s monitoring, guidance and enforcement
   - Committee for follow-up
   - Reviewing Annual reports from research institutions
   - Consulting
   - Site Visits
   - Find problems
     - Requesting “improvement plan”
     - Enforcement Actions
Audit Cycle based on Guideline

Guidelines for Management and Auditing of Public Research Funds at Research Institutes

- Universities
- Research institutes

Guidance
Direction
Enforcement actions

Verification

Site Visit (Sampling)

MEXT / JSPS / JST

37 programs
(including 6 competitive funding)

Institutes

Reviewing
Reforming
Reporting

Committee for “Enforcement actions”
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Cross-ministerial R&D management system will be used in January, 2008

Accountability and Transparency

- Checking “current & pending research projects”
- Checking “unreasonable overlap” and “excessive concentration”

CSTP (Council for S&T Policy)

- For Policy Analysis of R&D activities

For research institutes
- Research management based on “effort” control

For applicants
- Easy apply via internet
- Easy find grant opportunities

Ministries
Funding Agencies

Research Institutes

- Project Data
- Researcher Data
- Institution Data

Researcher

Researcher

Researcher

Researcher
Research Funding System

< 3 major channels > (13 programs, 2006FY)

1. Grant type (2 programs, 63%)

   MEXT / JSPS  ➔  Awardees

2. Commission type (4 programs, 15%)

   MEXT  ➔  Awardees

3. Commission type (Funding Agency) (7 programs, 21%)

   MEXT  ➔  FA  ➔  Awardees

   Government Subsidies for administration
   Independent administrative Institutions
Research Funding System Reform

1. Single Accounting year Principle
   - Exceptional permission system for carry-over
   - More flexible system

2. Flexibility
   - Earlier transfer of money in advance

3. Comprehensiveness
   - Simplification / unification of complex rules of the jungle of research programs
Thank you!

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