

Policy for Ensuring Research Integrity (Overview)



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Secretariat of Science, Technology and Innovation Policy, Cabinet Office

Responses Related to Ensuring Research Integrity

- In recent years, concerns such as conflicts of interest and commitment and technology leaks caused by undue foreign influence have come to light.
- Major countries such as the U.S. have been taking countermeasures while attaching importance to international research cooperation and respecting independence of universities.
- While responding to these new risks, it is indispensable for Japan also to build an internationally reliable research environment in order to promote necessary international cooperation and exchange.
 - ➔ To autonomously secure the soundness and fairness of research (“Research Integrity”), the government needs to declare a policy seeking transparency and accountability from researchers and research institutions and start working on concrete responses early on.

International trend

U.S.

- In 2019, it was pointed out at the U.S. Senate that integrity in research activities were threatened by foreign countries and its national security is exposed to danger.
- Since 2019, there have been a series of indictments involving researchers such as that of a professor who made false statements regarding his participation in China’s Talent Recruitment Plans.
- Commissioned by the National Science Foundation (NSF), the expert group JASON recommended improvements in transparency (December 2019). NSF updated the application forms and procedures and clarified the policy on importance of transparency and information disclosure.

U.K.

- The Centre for the Protection of National Infrastructure and other organizations formulated and published checklists and guidelines to ensure integrity in international research cooperation (September 2019).

Australia

- A study panel was established within the government, which prepared and published Guidelines to Counter Foreign Interference for universities (November 2019).

Integrated Innovation Strategy 2020

<Protect>

- It is important that the research community recognizes the concerns regarding damage to Japan’s excellent research activities and the values, such as openness and transparency, which form the base of and research environment, caused by undue foreign influence and takes initiatives to autonomously secure the soundness and fairness of research (research integrity). To this extent, discuss and urge preparation of reports to develop common understanding of clarifying the issue and measures for responding to it within the research community.
- Make it a requirement to disclose information of the status of acquisition of foreign funds upon application for research funds and seek transparency and accountability of research in which government funds are used. At the same time, discuss concrete measures of framework including cancellation of the decision to allocate funds when false reports are found and take necessary measures.

Responses Related to Ensuring Research Integrity

Government's Policy Directions

(decision at the Integrated Innovation Strategy Promotion Council on April 27, 2021)

*A policy based on the recommendation by an expert panel consisting of specialists from universities and research funding agencies (published in March 2021)

(i) Appropriate information disclosure by researchers

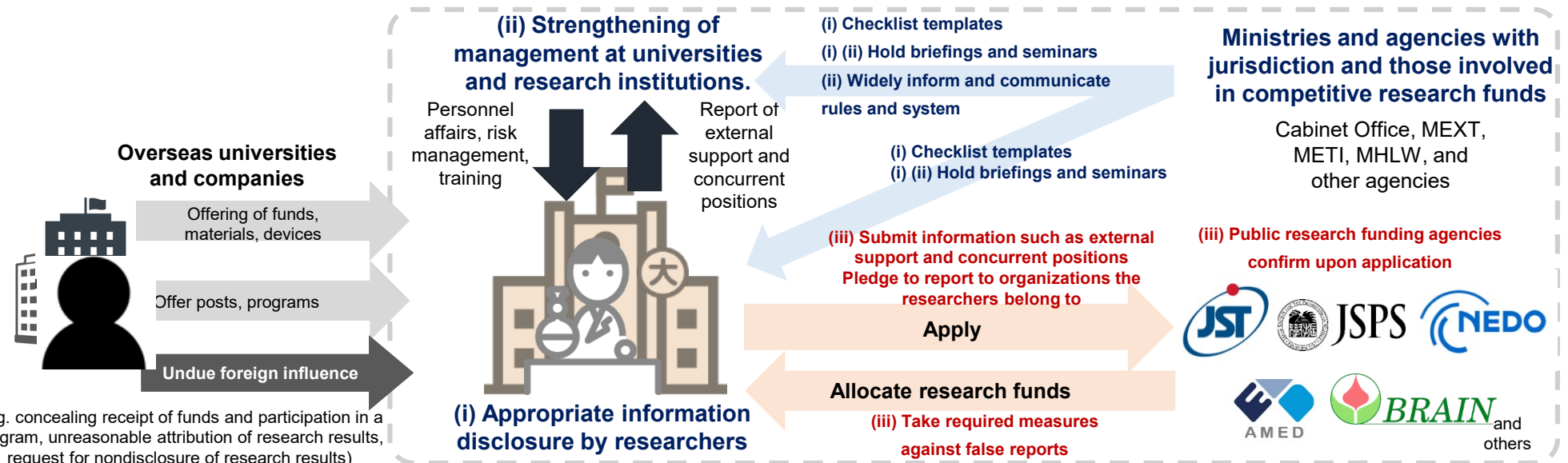
- Prepare, publish, and distribute **checklist templates** for researchers and organizations the researchers belong to. [Cabinet Office, MEXT, and other agencies]
- Hold briefings and seminars for researchers and organizations they belong to. [Cabinet Office, MEXT, and other agencies]

(ii) Strengthening of management at universities and research institutions.

- Hold briefings and seminars for researchers and organizations they belong to. [Cabinet Office, MEXT, and other agencies]
- Widely inform and communicate related **development of rules and system** [Ministries with jurisdiction] (-> to follow up in fiscal year 2022)

(iii) Public research funding agencies confirm upon application

- **Revise guidelines** regarding competitive research funds **as early as possible in the year** [Cabinet Office, related ministries]
 - Require researchers to submit information regarding external support and concurrent positions including those overseas and pledge appropriate reporting to organizations the researchers belong to
 - Clearly state the importance of development of rules regarding conflicts of interest and commitment and confirm the status as necessary
 - False reports shall be announced, involved research topic shall be rejected or withdrawn, researchers shall be made to return research funds, and they shall face application restriction for 5 years (incorporated from solicitations in fiscal year 2022)



Key Points of Revision of Common Guidelines for Competitive Research Fund Projects

Scope of target projects

- Target not only competitive funds but competitive research fund projects

Scope of information to be submitted

- Seek to submit information regarding external support in Japan and abroad*¹ and concurrent positions *²

*¹ Current status of application and acquisition of other competitive or other research funds (all research funds which the researcher is being allocated for individual research content such as subsidies, grants, joint research funds, consigned research funds both in Japan and abroad. Excluding basis expenses distributed within the organization to which researchers belong or internal fund and funds procurement through commercial transactions stipulated by the Commercial Code and direct or indirect financing)

*² All organizations they belong to and positions (including concurrent positions, participation in a foreign recruitment program, position of honorary professor without employment contract)

Handling of information of research for which a non-disclosure agreement is signed

- As for the information such as joint research for which a non-disclosure agreement is signed, researchers are sought to submit only the necessary information*³ and such information is handled only by those who have confidentiality obligation, from the perspective of avoiding constraining activities of commitment in industry-academia collaboration.

*³ As a rule, it is limited to information such as the name of counterpart organizations of joint research, the amount of research funds being accepted, and effort. However, for the time being, if it is difficult to respond because a non-disclosure agreement has already been signed and so on, such information can be limited to information regarding research effort.

Handling of information of donations and non-fund support

- Require researchers to pledge appropriate reporting of information on support*⁴ such as donations, and non-fund support including facilities and equipment to organizations they belong to.

*⁴ Including information regarding the acquisition status of facilities, equipment, etc. used in research they are separately engaged in although they are not used for the concerned research topic.

Development of rules regarding conflicts of interests and commitment and related responses

- Clarify the importance of developing rules regarding conflicts of interests and commitment and the policy to possibly confirm the status of grasping and managing of information with organizations the researchers belong to when necessary.

Response to false reports

- There may be announcements, rejections or withdrawals of research topics, reduction in fund allocation, and application restriction for 5 years.
(Responses are unchanged for descriptions that differ from facts and fund receipts by deception or other improper means.)

Timing of implementation

- The responses shall be made in the solicitations made in fiscal year 2021 to the extent possible in accordance with the purpose of these guidelines and the responses shall be fully implemented with solicitations made from April 2022 onwards.

(Reference) Research Integrity Investigation Committee

1. Aim and positioning of the committee

Along with the increasing internationalization and openness of research activities, concerns such as conflicts of interest and commitment and leakage of science and technology information are coming to light. Taking such a situation into consideration, we held Research Integrity Investigation Committee meetings as part of a Cabinet Office Commissioned Project, and discussed research integrity that should be secured by Japan's researchers and research institutions and the concept of the initiatives for securing that. We will sort out the basic concept by the end of fiscal year 2020.

<Reference> Integrated Innovation Strategy 2020
(July 17, 2020 Cabinet Decision)

(Excerpt)

- It is important that the research community recognizes the concerns regarding damage to the values, such as openness and transparency, which form the base of Japan's excellent research activities and research environment, caused by undue foreign influence and takes initiatives to autonomously secure the soundness and fairness of research (research integrity). To this extent, discuss and urge preparation of reports to develop common understanding of clarifying the issue and measures for responding to it within the research community.
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2. Members

○ Committee members

Takashi Shiraishi: Chancellor, Prefectural University of Kumamoto (Chair)

Setsuko Aoki Professor, Keio University Law School

Makoto Asashima: Chairperson, Association for the Promotion of Research Integrity; Academic Advisor and Research Professor, Teikyo University

Hiroaki Ishizuka: Chairman, New Energy and Industrial Technology Development Organization (NEDO)

Takahiro Ueyama: Executive Member, Council for Science, Technology and Innovation

Teruo Kishi: Professor Emeritus, the University of Tokyo; former Science and Technology Advisor to the Minister for Foreign Affairs

Susumu Satomi: President, Japan Society for the Promotion of Science (JSPS)

Atsushi Sunami: Executive Advisor to the President, Adjunct Professor, and Director of the Science for RE-designing Science, Technology and Innovation Policy (SciREX) Center, National Graduate Institute for Policy Studies

Michinari Hamaguchi: President, Japan Science and Technology Agency (JST)

Yoichiro Matsumoto: President, Tokyo University of Science; Science and Technology Advisor to the minister for Foreign Affairs

Toshiya Watanabe: Professor, Institute for Future Initiatives, the University of Tokyo

(in Japanese alphabetical order except for the chair)

○ Observers

Noritaka Akiyama: Director, Research Management Department, Bio-oriented Technology Research Advancement Institution (BRAIN), National Agriculture and Food Research Organization (NARO)

Masato Masaki: Senior Director, Japan Agency for Medical Research and Development (AMED)

(Reference) Newly Required Research Integrity

Improper cases confirmed in the U.S.

(i) False reports regarding involvement in China's Talent Recruitment Plans

E.g. The U.S. Department of Justice indicted Harvard professor and chair of Department of Chemistry and Chemical Biology Charles Lieber (Concurrent researcher at DOD and NIH) and two Chinese researchers on allegations of making false statements in the investigation of their involvement in China's Talent Recruitment Plans. He is an authority in the research on interdisciplinary field of nanoelectronics and medicine. At the same time as receiving more than \$15 million for research from NIH and DOD, he was receiving \$50,000 per month from Wuhan University of Technology and the Chinese government in return for publishing papers in the name of the university among other things.

*China's Talent Recruitment Plans: Launched in 2008 as one of the measures to encourage Chinese people overseas to return to the country, it included foreigners from 2011 and offers large amounts of research funds or salary to attract outstanding overseas researchers in an attempt to gain the most advanced technologies outside the country.

(ii) Improper management of conflicts of interest and commitment of researchers

E.g. A researcher at University of California San Diego, who received \$10 million a year from NIH for 11 years, had failed to disclose that he was the founder and major shareholder of a biotech company in China that specializes in the said researcher's research field, and that he was participating in a recruitment program of a foreign government, and resigned because of inappropriate management of conflicts of interest and commitment.

Research integrity which needs to be newly assured from the perspective of reducing risks



Figure; Overall structure of research integrity

[Direction of responses by researchers, universities and research institutions and FA]

[Direction of response by the government]

Code researchers should follow

- Recognize new risks associated with increasing internationalization and openness of research
- Understand necessity to ensure transparency and accountability of own research activities
- Recognize the risk of conflicts of interest and commitment and technology and information leaks as well as the importance of prevention

- Cabinet Office and MEXT to prepare and distribute checklist templates
- Build understanding through briefings and seminars
- Strengthen training at universities and research institutions

Responses by universities and research institutions

● Strengthen management for human resources and risk control

- Work history, research history
- All organizations a researcher belong to and positions there including concurrent positions (including participation in a foreign recruitment program, the position of honorary professor)
- All funds and non-fund support provided by external organizations both in Japan and abroad
- Information of the counterpart and participants of all joint research where the researcher is involved

Development of rules and organizations at universities and research institutions

(MEXT to inform and communicate with various organizations)

Responses as FA when distributing public research funds

● Require submission of the information below at the time of application

- Work history, research history
- All organizations a researcher belong to and positions there including concurrent positions (including participation in a foreign recruitment program, the position of honorary professor)
- Status of acquisition of all funds offered by external organizations in Japan and abroad related to research effort management *To also consider declaration of non-fund support
- Information regarding co-investigators and collaborators involved in the concerned topic

● Upon application, require the researcher to pledge reporting of other information to the organization he or she belongs to

(E.g. information regarding the status of non-fund support acquisition and the counterpart and participants in joint research where the researcher is involved, other than the concerned topic)

- Revise the guidelines regarding competitive research funds in accordance with the agreement by the Inter-Ministry/Agency Liaison Group Regarding Competitive Research Funds
- Each FA revises solicitation guidelines and application forms
- False reports shall be announced, involved research topic shall be rejected or withdrawn, researchers shall be made to return research funds, and they shall face application restriction for 5 years