

# Initiatives of Tohoku University to ensure research integrity



Takahiko Sasaki, Prof.  
Associate Executive Vice President (for Research Integrity)  
Institute for Materials Research, Tohoku University



TOHOKU  
UNIVERSITY

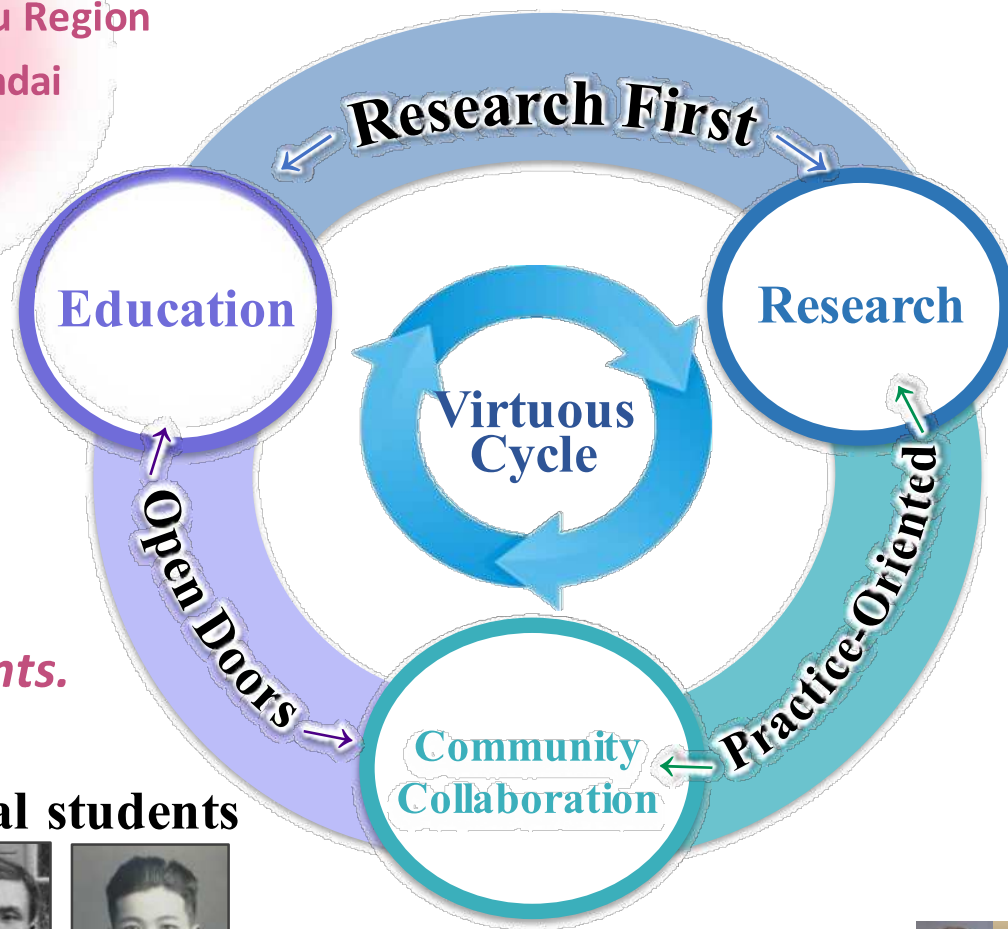


17,665 Students  
2,044 Foreign Students  
3,168 Faculty Members



Tohoku University is well known for its open and progressive policies. It was the first Imperial University to admit women and foreign students.

Engaged with Society based on “Research First”, “Open Doors” and “Practice-Oriented Research and Education”

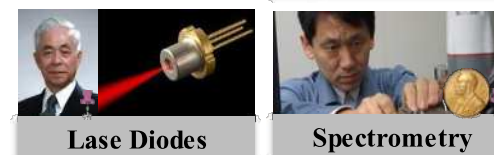


## Pioneering Research



A. Einstein, 1922

## Innovations via Excellence in Research



## “Open Doors” for ...

### First female students



Chika Kuroda Ume Tange Raku Makita

### International students



Lu Xun Chen Jiangong Su Buqing

November 26, 2013  
Board of Directors

## Tohoku University Code for Responsible Conduct of Research Activities

### 1. The Purpose of the Code of Conduct

Tohoku University pursues the "Research First" tradition, "Open Door" policy, and "Practical Research and Education" spirit. By doing so, it has consistently kept its door open to the research-centered university, and promoted the development of "an international center of creation and education" committed to diversity and underpinned by foresight and expertise. Through its efforts, Tohoku University tackles and strives to resolve the difficult problems confronting our society, and works to fulfill its responsibility to the future of humanity and the Earth.

Research is a craft that creates knowledge and culture shared by humanity, and its fruits contribute to the progress and advancement of society. Individuals engaged in research activities at Tohoku University, including faculty, staff, and students, are required to satisfy the social mandate as experts, exercise their right to uncover the truth based on their own professional judgment, as well as comply with the principles of responsible conduct of research activities, adhere to social norms, laws, and ordinances, and fulfill their social responsibility as researchers under academic freedom.

Researchers have a responsibility to ensure the quality of the expertise and the skills that they produce, and must endeavor to harness their expertise, skills, and experience to contribute to the uncovering of the truth, the health and welfare of humanity, the safety and tranquility of society, and the sustainability of the environment.

Bearing in mind the magnitude of the social role fulfilled by research activities, Tohoku University and its researchers have a responsibility to conscientiously take part in forging and maintaining sound relationships between their respective research and society. As part of this duty, Tohoku University hereby sets forth the principles of conduct which researchers should adhere to.

### 2. The Principles of Responsible Conduct of Research Activities

Researchers are required to take the following actions for the fair execution of research activities:

- (1) Respect the achievements of preceding research, and perform research based on objective and sound grounds;
- (2) Show fairness in citing and giving credit for the work of others;
- (3) Respect the characters of individuals in research, education, and academic societies' activities, not discriminating based on race, gender, social class, ideology, religion, or any other personal characteristics;
- (4) Handle humans, animals, the environment, and the objects of study with respect and care;
- (5) Carry out research in each discipline in accordance with proper research procedures, and appropriately manage and use data;
- (6) When publishing results, establish authorship appropriately based on substantive research contributions;
- (7) If carrying out activities in partnership and in cooperation with organizations or companies outside of the university, take care to avoid conflict of interest with the public good or with the duties of the university;
- (8) Account for research funding sources, and adhere to the rules on the use of research funds; and
- (9) Adhere to research-related laws, ordinances, and guidelines established by relevant government agencies and other institutions, including those regarding the environment, safety, bioethics, and security trade control, as well as the regulations of academic societies to which the researcher belongs. In the case of international joint research, adhere to the rules of relevant countries and organizations.

Research is a craft that creates knowledge and culture shared by humanity, and its fruits contribute to the progress and advancement of society. Individuals engaged in research activities at Tohoku University, including faculty, staff, and students, are required to satisfy the social mandate as experts, exercise their right to uncover the truth based on their own professional judgment, as well as comply with the principles of responsible conduct of research activities, adhere to social norms, laws, and ordinances, and fulfill their social responsibility as researchers under academic freedom.

(7) If carrying out activities in partnership and in cooperation with organizations or companies outside of the university, take care to avoid conflict of interest with the public good or with the duties of the university;

(8) Account for research funding sources, and adhere to the rules on the use of research funds; and

(9) Adhere to research-related laws, ordinances, and guidelines established by relevant government agencies and other institutions, including those regarding the environment, safety, bioethics, and security trade control, as well as the regulations of academic societies to which the researcher belongs. In the case of international joint research, adhere to the rules of relevant countries and organizations.

## **Policy Directions for Ensuring Research Integrity in Response to New Risks Associated with Increasing Internationalization and Openness of Research Activities**

April 27, 2021 Cabinet Office, Japanese Government

Provisional Translation

### Policy Directions for Ensuring Research Integrity in Response to New Risks Associated with Increasing Internationalization and Openness of Research Activities

April 27, 2021

Integrated Innovation Strategy Promotion Council Decision

#### 1. Purpose

Open science is the basic principle for promoting the creation of science and technology innovation in Japan, and it is necessary to continue to strongly drive forward international joint research with diverse partners. At the same time, in recent years, there have been concerns of damage to the values, such as openness and transparency, which form the base of the research environment, and the danger of researchers unintentionally falling into conflicts of interest and commitment due to the new risks associated with internationalization and increasing openness of research activities. Under such circumstances, it is indispensable for Japan to develop an internationally reliable research environment to promote necessary international cooperation and exchange while protecting the values forming the base of the research environment.

Taking into consideration this situation, the government, based on Integrated Innovation Strategy 2020 (July 17, 2020 Cabinet Decision) and Science, Technology, and Innovation Basic Plan (March 26, 2021 Cabinet Decision), will start working on the following matters as soon as possible in collaboration with researchers, universities, research institutions, and research funding agencies<sup>1</sup> to support to autonomously secure of the soundness and fairness of research (research integrity<sup>2</sup>) of researchers, universities, and research institutions.<sup>3</sup>

#### 2. Matters to be addressed going forward

##### (1) Initiatives related to appropriate information disclosure by researchers

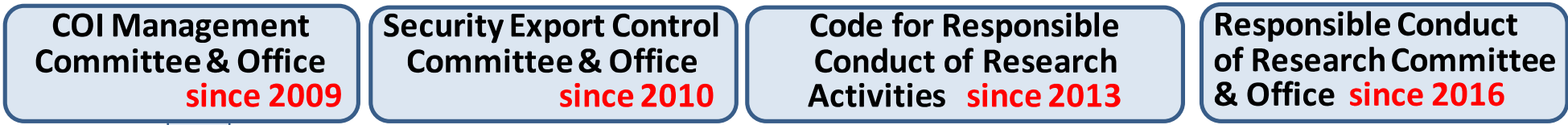
When researchers engage, in particular, in international collaboration upon recognizing the new risks associated with increasing internationalization and openness of research activities, the government will implement the following initiatives to promote researchers' understanding of the necessity of reporting and declaring required information (including reporting and declaration when such information is updated) to the organizations they belong to and research funding

### For Researchers

1. Appropriate information disclosure by **researchers**
  - ① Work experience, research background
  - ② Affiliated institutions and roles in concurrent positions
  - ③ Research funds and any other support they are receiving from other organizations
  - ④ The external organizations providing support

### For Research Organizations

2. Strengthening risk management by the **organizations** to which researchers belong
  - ① Establishing rules and management systems
  - ② Collecting information required for risk management
  - ③ Strengthening education and training systems



Sep.2019: Trusted Research Guidance for Academics (UK)  
 Dec.2019: "Fundamental Research Security" JASON Report (USA)

**Designing management systems (since 2020)**

Mar.2021: Research Integrity Investigation and Analysis Report (Japan)

*Policy Directions for Ensuring Research Integrity in Response to New Risks Associated with Increasing Internationalization and Openness of Research Activities*  
 Apr.2021: Cabinet Office ,Japanese Government

Jun.2021: G7 Cornwall Summit Research Compact

**Apr.2022: Start of the Research Integrity Management System (Committees, Website, Consultation Service)**

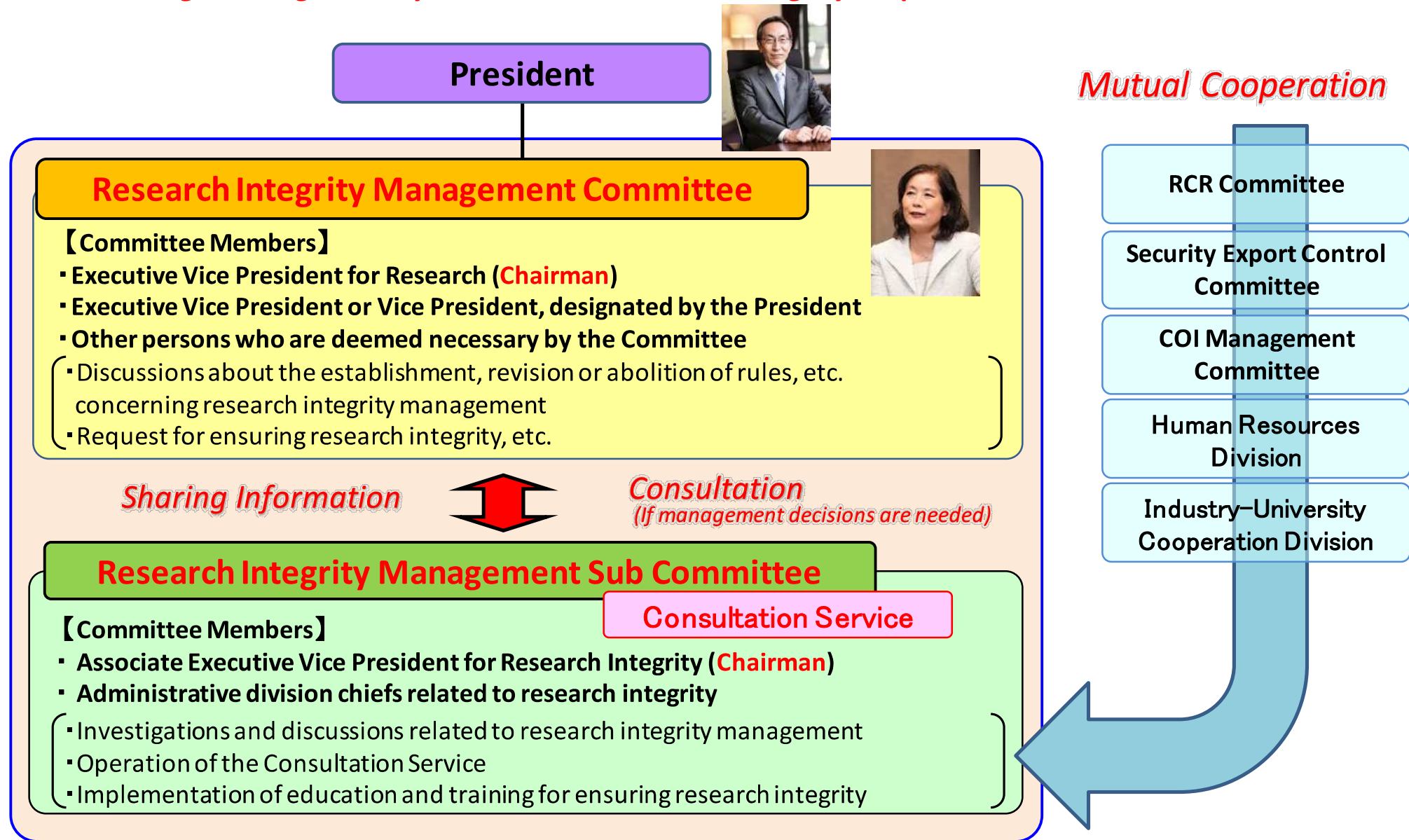
May.2022: オープン化、国際化する研究における研究インテグリティ (in Japanese)  
 Jun.2022: G7 Common Values and Principles on Research Security and Research Integrity  
 Nov.2022: JANU Statement on Research Integrity (Japan)



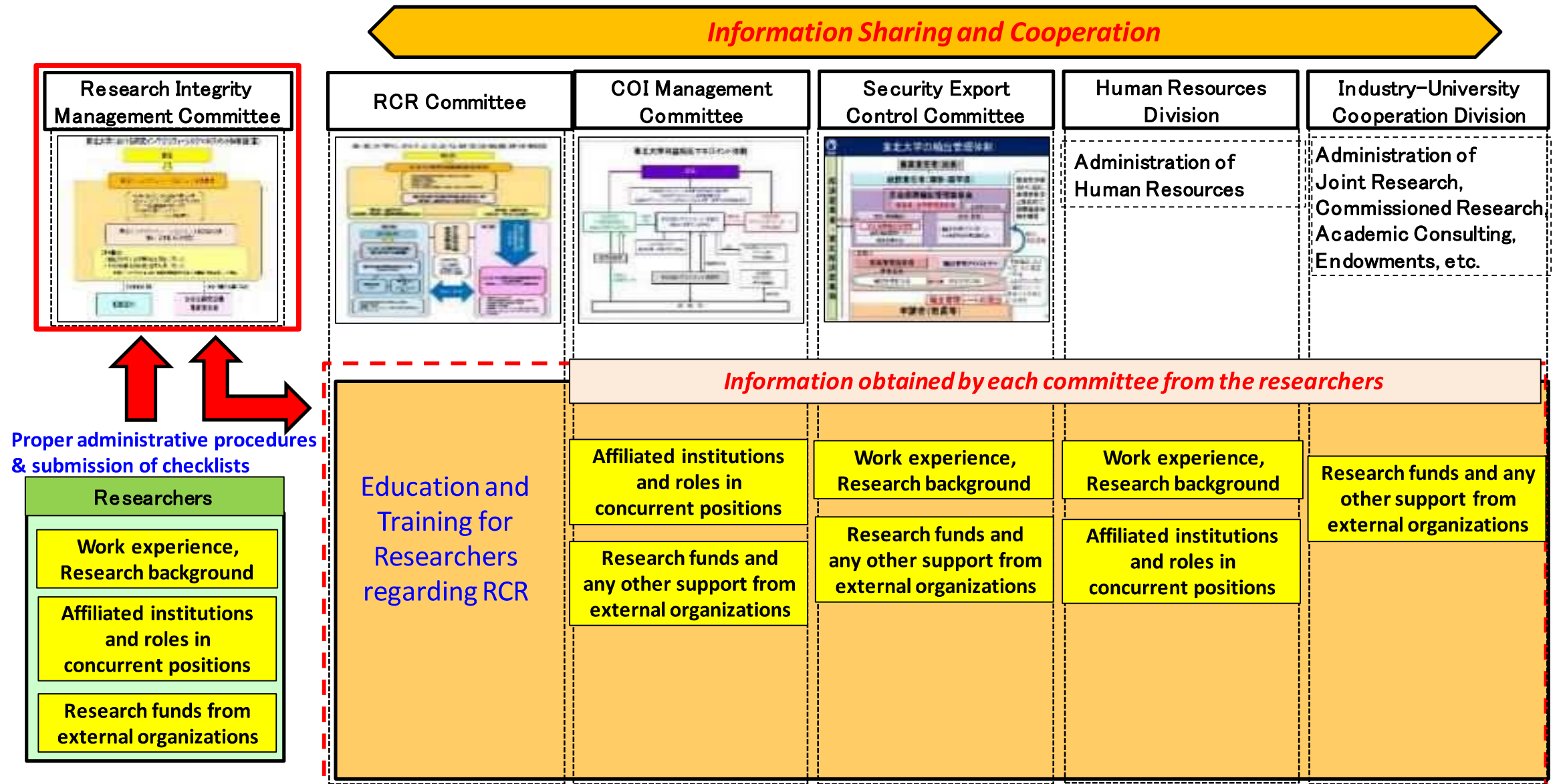
Tohoku Univ. Research Integrity Website (in Japanese)

## ○ Research Integrity Management System

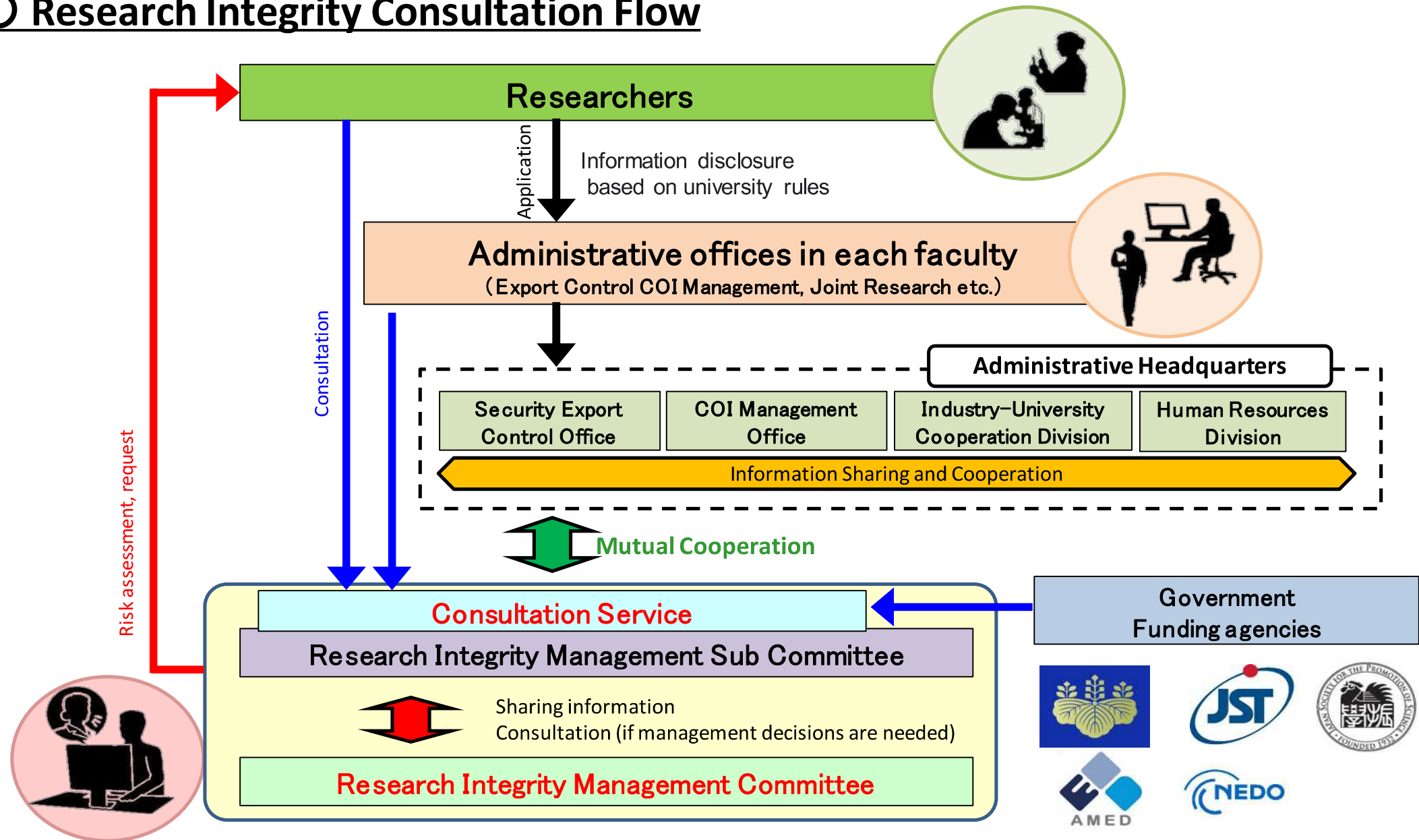
We started using a management system to ensure research integrity in April 2022



## ○ Research Integrity Management System



## ○ Research Integrity Consultation Flow





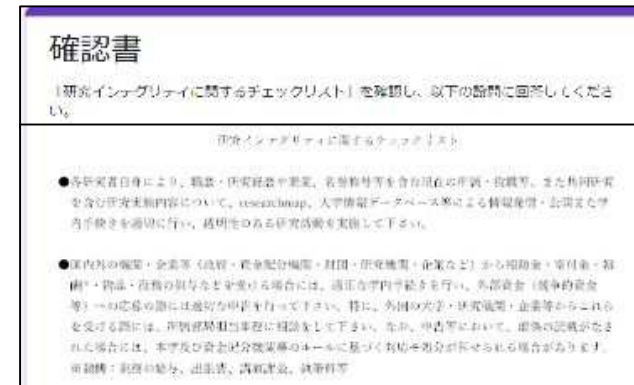
## Raising awareness and sensitivity for research integrity and research security

### Activities in FY2022

- Researcher and administrative staff training



- Submission of checklist by researchers



- Consultation on actual cases



- Information sharing with other universities



## To ensure effective operations in universities and research institutions

### Practical challenges facing universities

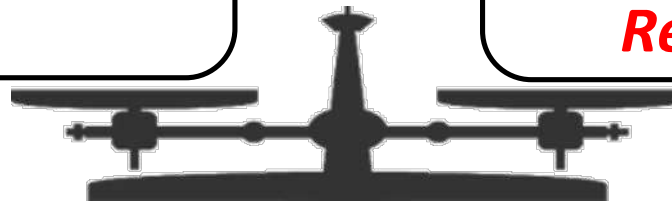
- Limited personnel and financial resources
- Limited investigative capabilities
- Difficulties in sharing information about sensitive cases

#### Academic Principles

***Open-door policy***  
***Academic freedom***  
***RCR***

#### Demands of Society Changes in the International Situation

***Research Integrity***  
***Research Security***



#### Risk Management

***-Balance between scientific benefits and risks-***  
***-Carried out on a case-by-case basis-***