

# JST Strategic Basic Research Programs (CREST, PRESTO, ACT-X)

Program Introduction

April 2023

Department of Innovation Research



**Japan Science and Technology Agency**

# Strategic Basic Research Programs

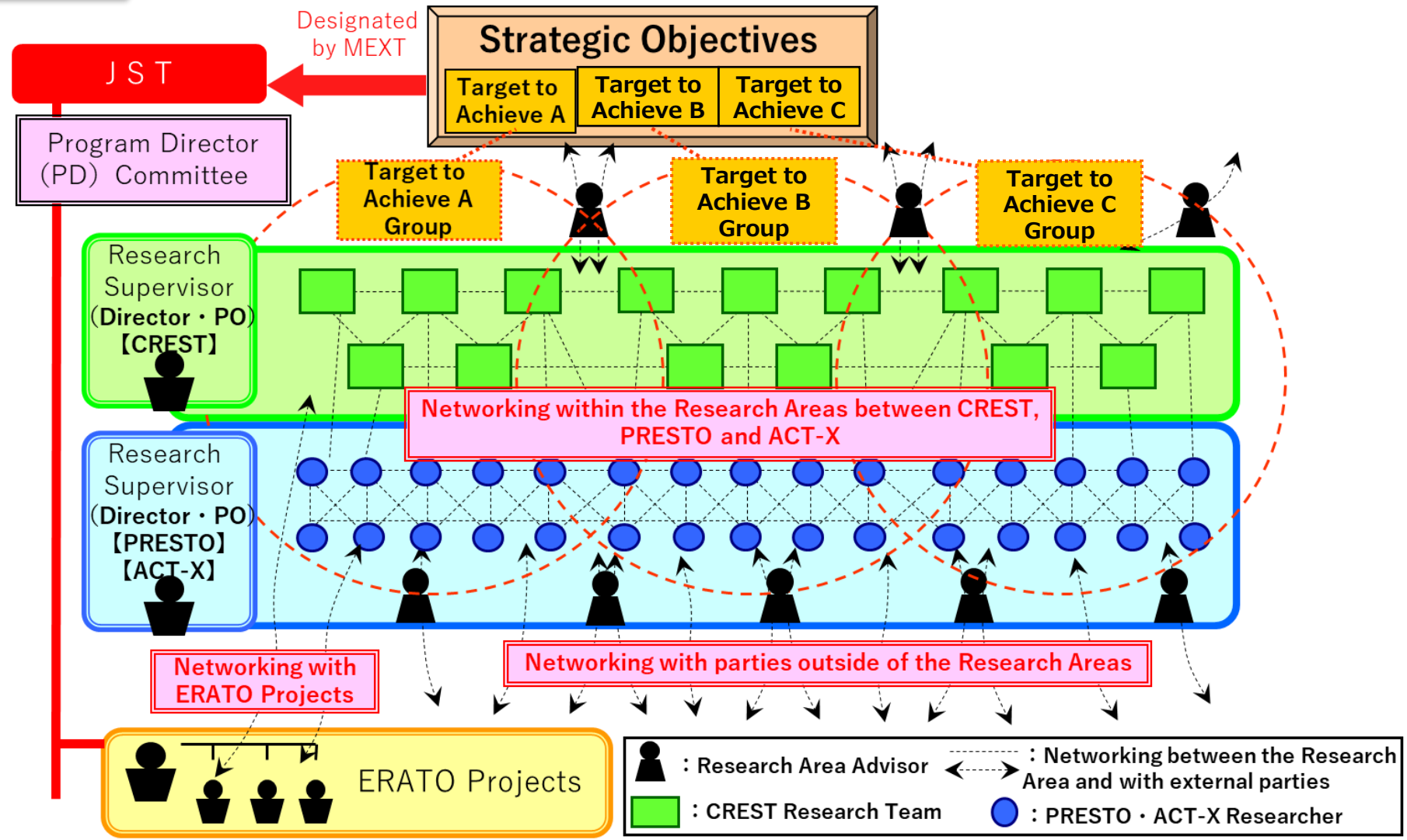
Japan Government (Ministry of Education, Culture, Sports, Science and Technology “MEXT”) prescribes Strategic Objectives based on national science and technology policies and social/economic needs.

## Promote Network-Based Research at JST

- JST **promotes Strategic Basic Research Programs** and **create the seeds of innovative technologies** based on new scientific knowledge that gives rise to scientific and technical innovation leading to social and economic change.
- Under “Strategic Objectives”, JST specifies **Research Areas** to pursue and **Research Supervisors (Program Officers)** to lead them. The Research Supervisors establish Research Areas as a most suitable researchers and research project beyond industry-academia-government frameworks (**Network-Based Research Institute**) and **manage research areas to accomplish Strategic Objectives**.
- Under the management of research supervisors, researchers carry out their research while building up networks with other researchers; the world of industry, which will receive the outcomes of the research; and participants from wider society.

**For Innovation in Science and Technology**

# Standard model for Research Institute



Standard Model for CREST/PRESTO/ACT-X “Research Institute”

# What is “CREST” ?

## CREST

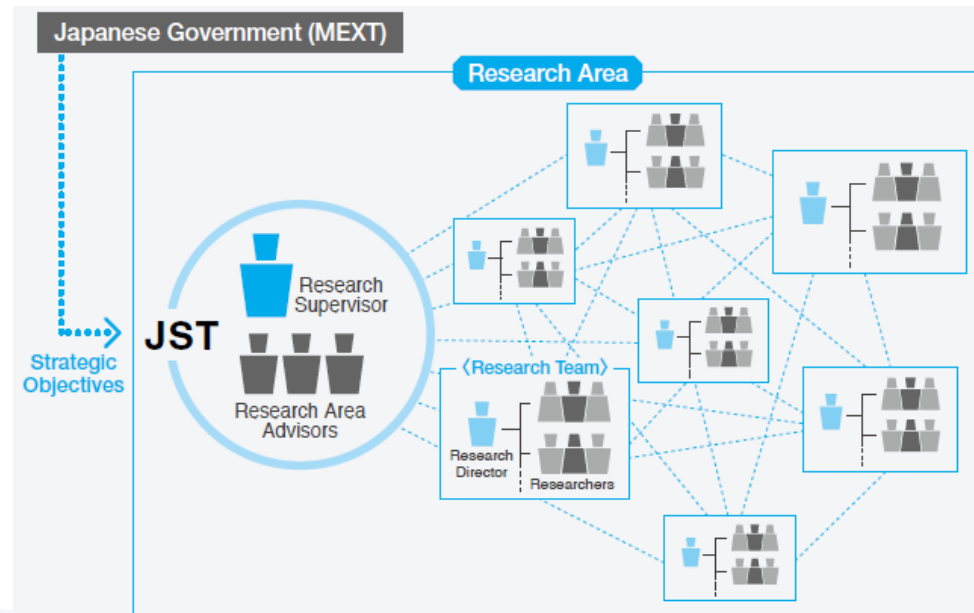
(Core Research for Evolutionary Science and Technology)

- Promote unique and internationally high-level basic research to achieve Strategic Objectives.
- Realize creative and outstanding new technology seeds based on new scientific knowledge that greatly contribute significantly to scientific and technological innovation.
- Multiple best teams led by top researchers in Japan promote research toward the achievement of Strategic Objectives while training young researchers to participate in the teams.

Network-based (**team-based**) research giving rise to outstanding results that lead to scientific and technological innovation.

Research Period	5.5 years or less
Research Cost (Direct Cost)	Total of 150-500 M¥/team

\* Since the upper limit setting may be different depending on the research area, please check "Overview" and "Research Supervisor's Policy" of each Research Area on "Call Research Proposals" website.



# What is "PRESTO" ?

## PRESTO

(Precursory Research for Embryonic Science and Technology)

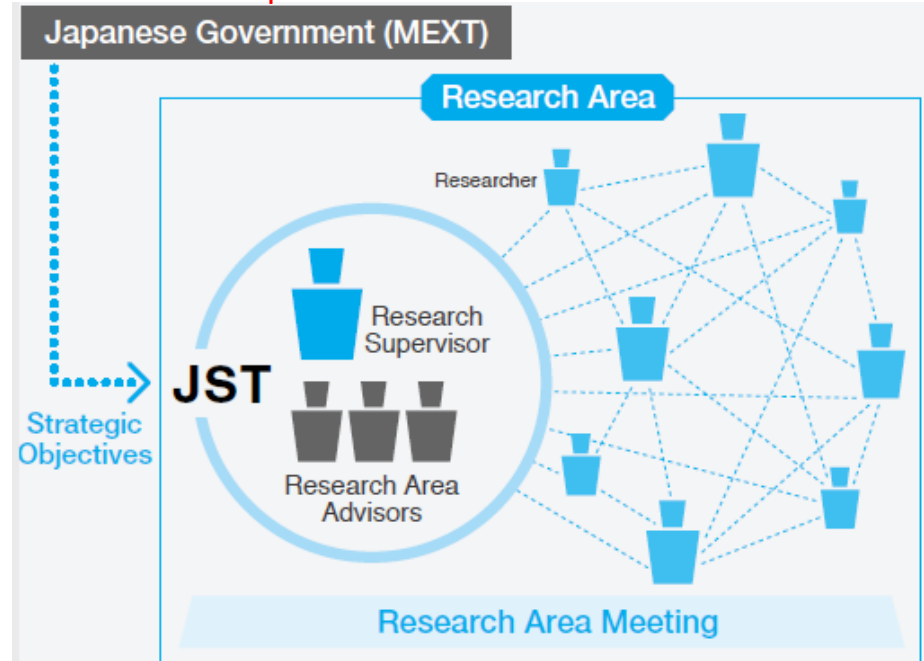
- Promote pioneering directed basic research that is original and challenging, and expected to lead to the development of high international standards to achieve Strategic Objectives
- Create new technology seeds based on new scientific knowledge toward the science and technology innovation in advance in the world.
- Building new networking with researchers in different fields, the young researchers conduct their challenging studies.

Network-based (**individual**) research giving rise to wellsprings of scientific and technological innovation

Research Period  
Research Cost  
(Direct Cost)

3.5 years or less  
Total of 30-40 M¥

\* Since the upper limit setting may be different depending on the research area, please check "Overview" and "Research Supervisor's Policy" of each Research Area on "Call Research Proposals" website.



# What is “PRESTO” ?

## Large Research Expenses for Individual Researcher

- PRESTO researcher can use the large research expenses for PRESTO independent project based on own ideas..
- JST’s research supervisor will visit PRESTO researchers’ supervisor/professor to check their research conditions as well as request the independent study for PREST project.

## Networking

- In “camp-style progress meetings” , PRESTO researcher has new networking opportunity to meet new researchers in different research fields. The researchers will be able to get new ideas for their study as well we get a possibility for new research collaboration.
- JST’s research supervisors and research area advisors from academia and industries give various advices to PRESTO studies.

## Career Advancement Opportunities

- Approximately 40 percent of PRESTO researchers who completed their research in 2021 were promoted during the research period.

## Various Events

- PRESTO researchers can have various experiences that cannot be obtained only by university research activities, e.g. JST’s NEW Technology Presentation Meetings, SciFos, Talk events, and so on.

# What is "ACT-X" ?

## [Background]

In order to further encourage young researchers to carry out independent and challenging research, we will enhance and strengthen funding for young researchers such as PRESTO. **Established a challenging research support system "ACT-X" in 2019 to support young researchers** (including graduate students) based on the "ACT-I" that was implemented in advance.

## [Program Summary]

### ➤ Support target

#### Young researchers less than 8 years after obtaining a doctoral degree

- \* If not obtained a doctoral degree, a young researcher less than 13 years after obtaining a bachelor's degree.
- \* Including researchers who have less than the above-mentioned years of experience, excluding the period of pre/postnatal leave or childcare leave taken after obtaining the doctoral degree.

Regardless of the above, students can apply only for graduate students.

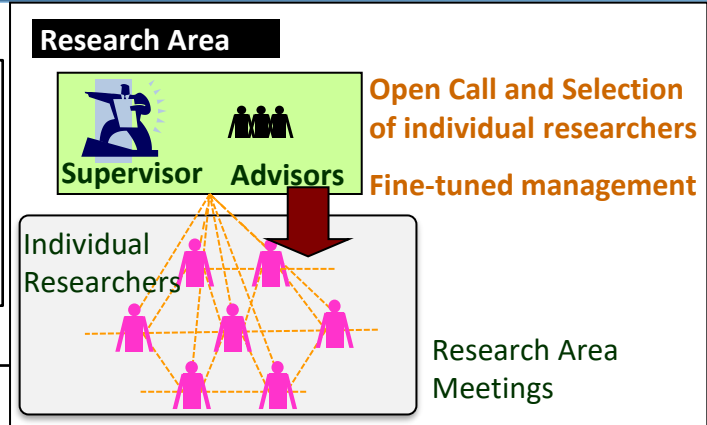
### ➤ Support scale

#### Total Standard Amount (direct expense) : 4.5—6 million yen / 2.5 year

- Highly evaluated research project of ACT-X might receive an additional year of support as an acceleration phase. (The evaluation will be based on the research results of two years from the start of ACT-X research project.)

### ➤ Features of the program

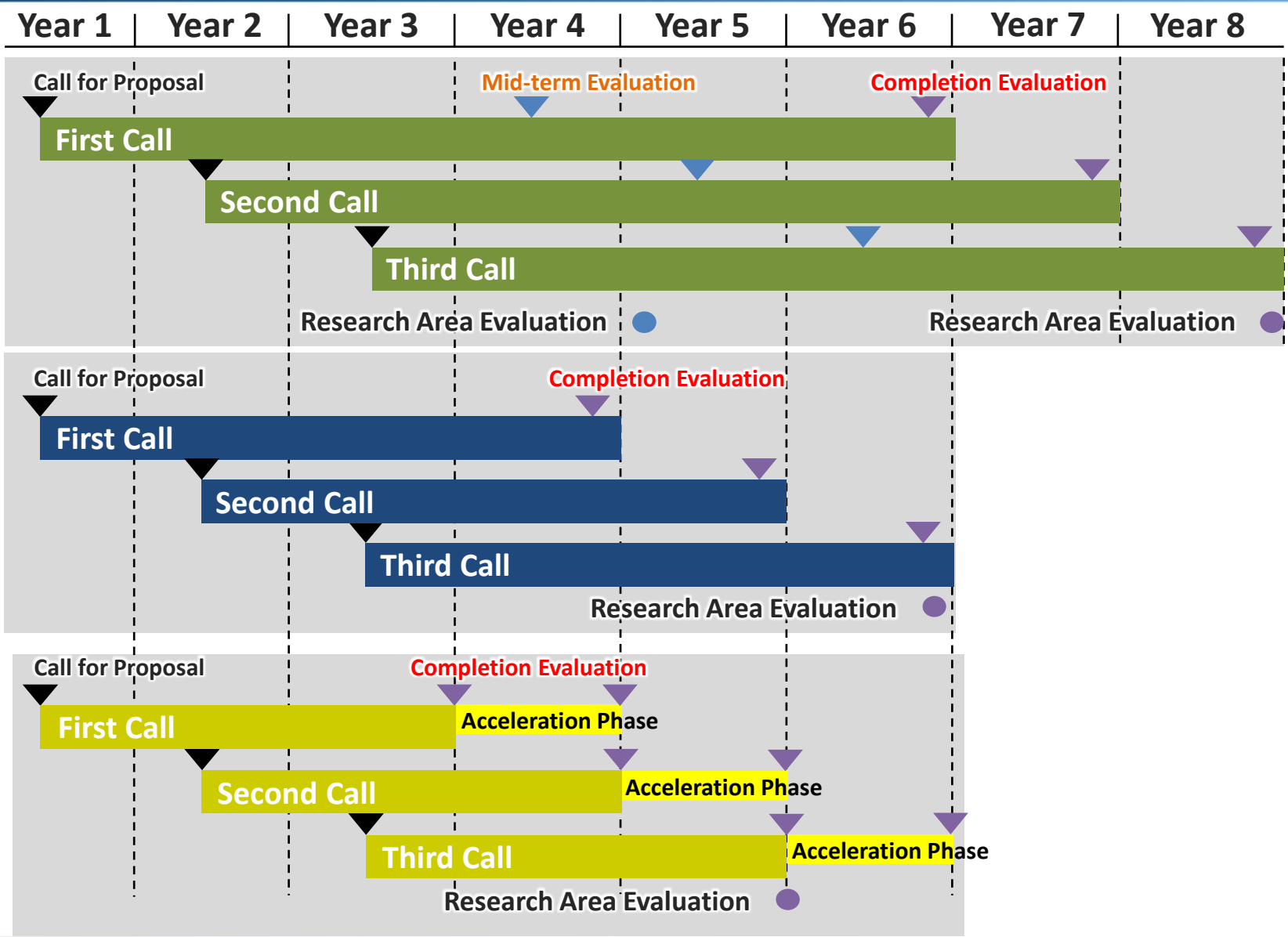
- The advisor in charge, who is the top researcher in the field, will give detailed advice and guidance to two or three researchers, and strategically develop them as a theme that will lead to pioneering.
- By holding research summaries and area meetings where advisors and participating researchers gather, it will lead to the formation of mutual networks among young researchers.
- Implement flexible program management such as introducing a small start.



\* From the perspective of human resource development, we accept applications (early graduation) for PRESTO during ACT-X.  
 \* If a graduate student is selected, he / she can apply for his / her own RA expenses in addition to the usual research expenses (see application guidelines 4.2.7).



# Time schedule of CREST, PRESTO and ACT-X





# AIP Network Laboratory

Under the "AIP\* Project" of MEXT that started in 2016, JST's Strategic Basic Research Programs' CREST, PRESTO, and ACT-X promote integrated management of AI-related research areas. \*AIP: Advanced Integrated Intelligence Platform




**MEXT**  
MINISTRY OF EDUCATION,  
CULTURE, SPORTS,  
SCIENCE AND TECHNOLOGY-JAPAN  
**AIP Project**


AI/Big Data/  
IoT/Cyber Security  
Integration Project

**RIKEN**  
Center for  
Advanced  
Intelligence  
Project  
(AIP Center)












**JST AIP Network Laboratory**  
Laboratory Director: Dr. Katsumi Emura











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Bio-DX (Dr. Y. Okada)		Mathematical Information Platform (Dr. N. Ueda)	
Society 5.0 System Software (Dr. Y. Okabe)		Symbiotic Interaction (Dr. K. Mase)	
Trusted Quality AI Systems (Dr. A. Aizawa)		Artificial Intelligence (Dr. M. Etoh)	




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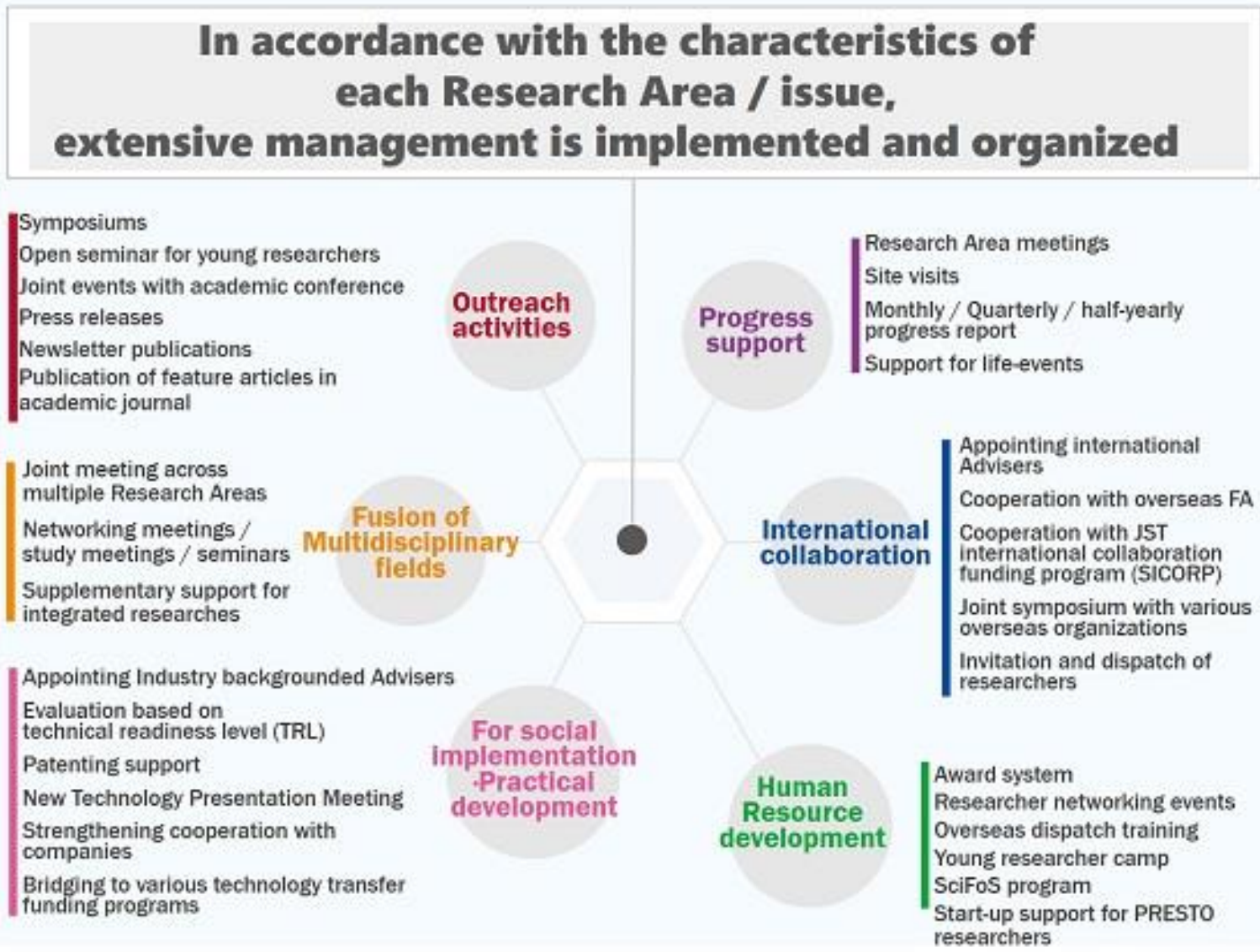
Human-Centered Interaction (Dr. H. Kuzuoka)		Trustworthy AI (Dr. H. Arimura)	
Social Transformation Platform (Dr. S. Kurihara)		Math-Structure (Dr. T. Sakajo)	
Platform Software (Dr. T. Higashino)		IoT (Dr. H. Tokuda)	

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NextAI-math-info (Dr. T. Hara)		Math and Info (Dr. K. Kawarabayashi)	
AI Powered Research Innovation / Creation (Dr. Y. Kuniyoshi)			

# Feature of Strategic Basic Research Programs



# Challenging in PRESTO program

## SciFoS (Science for Society)

Activities to check hypotheses and gain awareness of your research through interviews with various stakeholders

1. Kickoff Meeting



2. Interview



3. Hypothesis Review



- \* Learn the method and receive ongoing advice from a professional advisor.
- \* Interviewees will be introduced by JST while listening to the opinions of researchers.

Feedback to the Research

## Talk events

For the purpose of thinking about the significance and role of research in society, JST holds a "talk event" to explain easily the research activities and results to visitors of the National Science Museum "MIRAIKAN".

## Short term study abroad program

Accelerate the research activities of PREST researcher by conducting overseas short visits to Silicon Valley, etc., and experiencing world-class development sites through dialogue and discussions with overseas investors and entrepreneurs.

# Flow: application to research start



# Number of Proposal/Selected

CREST (2022 Selected Rate 8.2%)

	Male	Female	Total
Proposal	502	48	550
Select	41	4	45

PRESTO (2022 Selected Rate 11.0%)

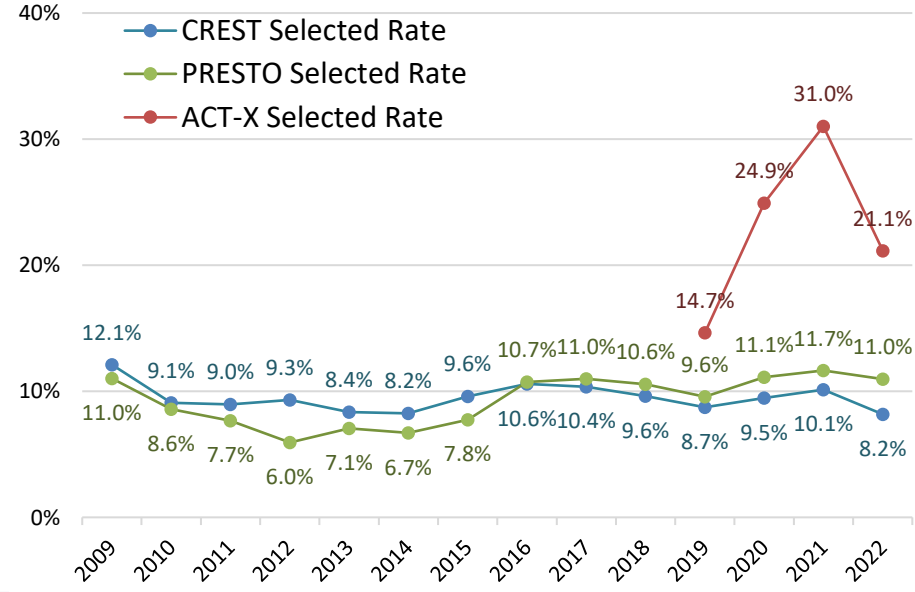
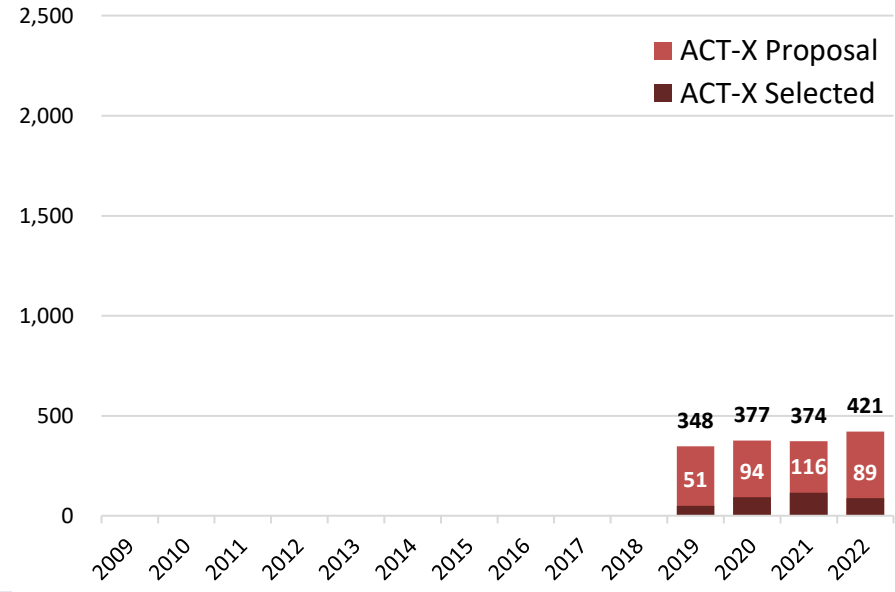
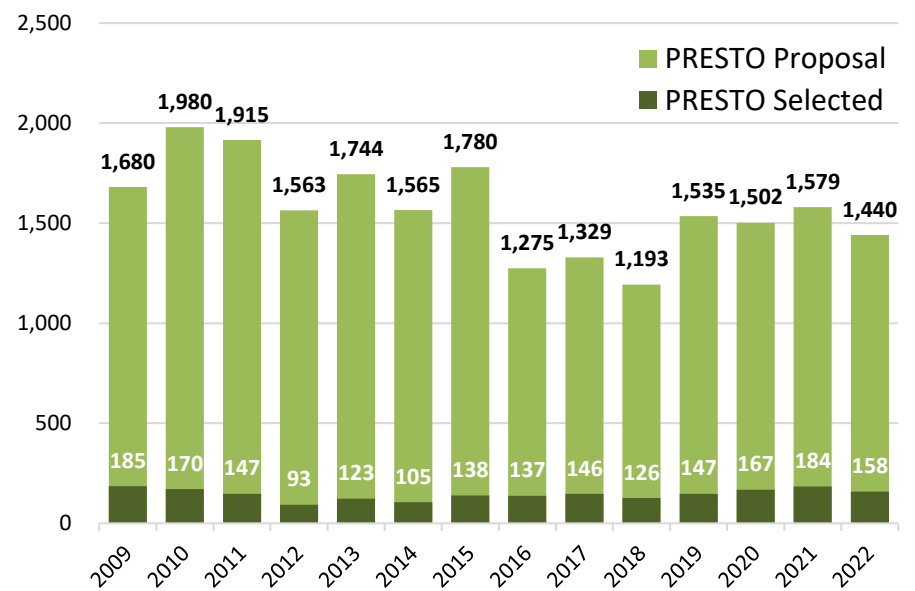
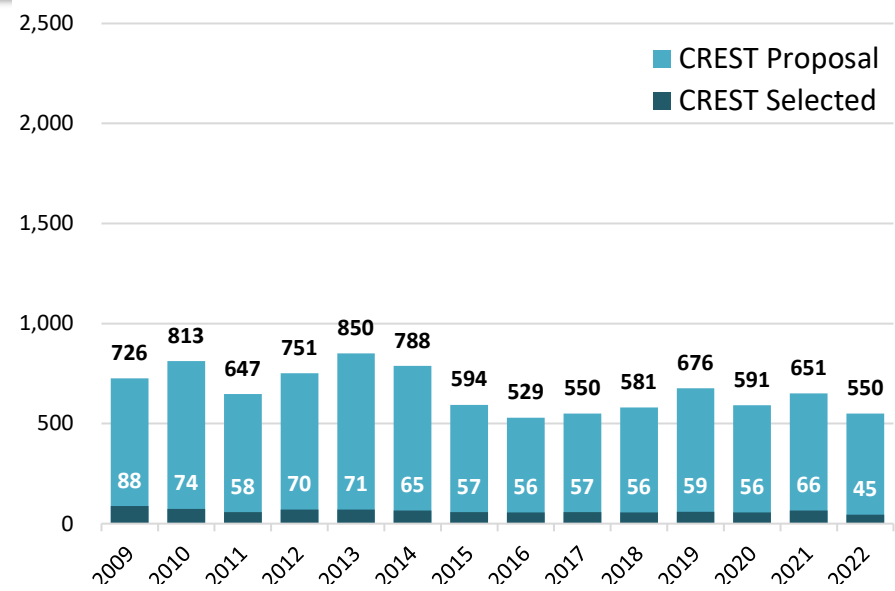
	Male	Female	Total
Proposal	1,267	173	1,440
Select	134	24	158

ACT-X (2022 Selected Rate 21.1%)

	Male	Female	Total
Proposal	359	62	421
Select	75	14	89

Master Course Students:  
Proposal 11, Selected 1  
Doctor Course Students:  
Proposal 66, Selected 15

# Recent changes in Proposal/Selected





# FY2023 Call/Selection Schedule

The research areas which call research proposals as followings.  
(CREST: 10 Areas, PRESTO: 15 Areas, ACT-X: 4 Areas.)

## CREST: 10 Research Areas

Application Period April 11th to **June 6th Noon**  
(Japan Time)

Selection Period Mid-June to mid-August

Research Start October 1st (Planning)

## PRESTO: 15 Research Areas ACT-X: 4 Research Areas

Application Period April 11th to **May 30th Noon**  
(Japan Time)

Selection Period Mid-June to mid-August

Research Start October 1st (Planning)

**Please note that we will not accept any proposals after the deadline.**

\* For the latest Call/Selection schedule, please check the website of Call for Research Proposals.



# Japan-France Joint Research Proposals (CREST)

- JST has an Agreement with ANR (The French National Research Agency) to support Japan-France joint research projects within the framework of CREST
- In FY2023, JST agreed with ANR to establish the following three CREST Research Areas as common priority research areas and to invite Japan-France joint research proposals, as well as regular (non-joint) proposals:

## CREST

**[MultiSensing] Research on Multi-sensing Biosystems and Development of Adaptive Technologies**  
(Research Supervisor: Ryozo Nagai)

**[Exploring Unknown Materials] Exploring Innovative Materials in Unknown Search Space**  
(Research Supervisor: Hiroshi Kitagawa)

**[Society 5.0 System Software] Creation of System Software for Society 5.0 by Integrating Fundamental Theories and System Platform Technologies**  
(Research Supervisor: Yasuo Okabe)

### Application Process

1. To apply, Principal Investigators (PIs) from both the Japanese side and French sides need to prepare a common joint research proposal (English, CREST-ANR common form).
2. PI from the French side will apply and submit the common joint research proposal to ANR.  
ANR application acceptance period: Tue, March 7<sup>th</sup>, 2023 – Mon, June 5<sup>th</sup>, 2023, 10AM CEST.
3. PI from the Japanese side will apply and submit the common joint research proposal to CREST of JST.
  - Please apply through e-Rad during the normal CREST proposal call period.
4. ANR and JST will evaluate proposals in parallel and make common funding decisions.
5. Funded research projects will start in October 2023 or later. \* For detail, please see the website

Selection Criteria for CREST as below. All criteria from a. to d. should be satisfied.

- a. Contributes to the achievement of a Strategic Objective.
- b. Consistent with the Research Area purpose.
- c. Basic research that is unique, **highly appreciated internationally**, and expected to produce **outstanding results** that contribute greatly to scientific and technological innovation.
- d. Meets all the following conditions
  - The research project applicant has produced research results for achieving the research objectives.
  - Promising preliminary results have been obtained for pursuing the research project.
  - The research proposals is clearly specifying : (i) the background of the research project (its necessity and importance); (ii) the research record of the research project applicant; and (iii) the research initiative and plan, separately.
  - **An optimal research organization is proposed. The research project applicant will exercise strong leadership and bear responsibility for the entire research team. And if there are Lead Joint Researchers (Co-PIs), they are essential for the pursuit of the research project. A collaboration framework sufficient for enabling significant contributions toward the achievement of research objectives is provided.**
  - Research budget plan is necessary and sufficient for pursuing the research project.
  - The research institutions with which the research project applicant and Lead Joint Researchers (Co-PIs) are affiliated have R&D capabilities and other technical foundations in the subject research field.

\*Whether or not it corresponds to Unreasonable Duplication or Excessive Concentration is also a factor in the selection.

\*Please also check the HP for policy of each research area

The selection criteria common to each PRESTO research area are as follows.  
All items from a. to e. must be satisfied.

- a. Contributes to the achievement of a Strategic Objective
- b. Consistent with the Research Area purpose
- c. Basic research that is unique, challenging, **internationally expected to develop to an advanced level**, and expected to produce **groundbreaking results** that lead to scientific and technological innovation
- d. The research project applicant can be expected to contribute to the development of the subject overall PRESTO Research Area and to the ongoing development of related research fields through the content of the proposed research, the applicant's research approach, and the applicant's efforts to engage with other researchers in discussions and activities that mutually inspire.
- e. Meets all the following conditions
  - **The uniqueness of the research project is based on the original ideas of the research applicant.**
  - Promising preliminary results have been obtained for pursuing the research initiative.
  - The proposed research project is of a scale appropriate for pursuit by an individual researcher.

\*Measures against Unreasonable Duplication and Excessive Concentration will also be considered

\*Please also check the HP for policy of each research area

The selection criteria common to each ACT-X research area are as follows.  
All items from a. to e. must be satisfied.

- a. Contribute to the achievement of strategic objectives
- b. Consistent with the Research Area purpose.
- c. Proposals that are **original, challenging, innovative, and expected to attain high-quality developments** by international standards over the coming decades and **generate new values** necessary for scientific and technological innovation.
- d. The research project applicant is expected to contribute to the development of the subject overall ACT-X Research Area and to the ongoing development of related research fields through the content of the proposed research, the applicant's research approach, and the applicant's efforts to engage with other researchers in discussions and activities that mutually inspire.
- e. Meets all the following conditions
  - **The uniqueness of the research project is based on the original ideas of the research applicant.**
  - The proposed research project is of a scale appropriate for pursuit by an Individual Researcher.

\*Measures against Unreasonable Duplication and Excessive Concentration will also be considered

\*Please also check the HP for policy of each research area

## Requirements for Research Project Applicants

- Research project applicants, who will be the Research Director, must be affiliated with a domestic Japanese research institution, where they will organize and pursue the proposed research (The nationalities of research project applicants are not considered.)
- Researchers who are able to bear overall responsibility for a research project as the party responsible for the research team throughout the entire research period.
  - \* The applicant must either: have already completed the educational program for research integrity at his/her affiliated research institution; or complete the JST- designated educational program by the application deadline.

## Research Institution Requirement

- Research Institutions must fully understand that the research funds are public funding, ensure compliance with related law, and make efforts to conduct the research effectively.
- When applying, prior consent of the Research Institution at which the implementation of research is planned must definitively be obtained.

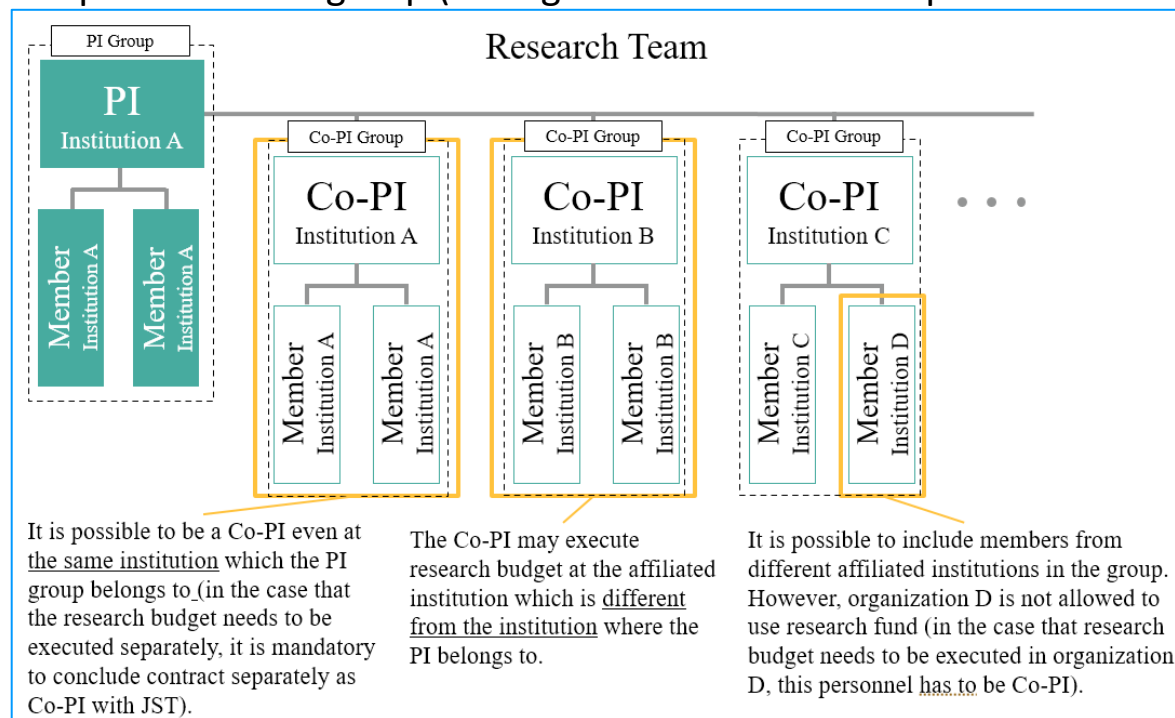
## Requirements for Organizing a Research Project

- A research team is optimally organized for pursuing the research initiatives of the research project applicant, who will be the Research Director.
- When a joint research group is organized to work with the research team, the joint research group is essential for pursuing research initiatives and can contribute significantly to achievement of the research objectives.
  - \* We strongly welcome participation by research groups overseas in the CREST program. However, the research costs of the groups belonging to an institute overseas are, in principle, not funded by JST; therefore, their research costs may need to be funded by themselves.

## Requirements for Organizing a Research Project (continued)

• For details, see Chapter 2

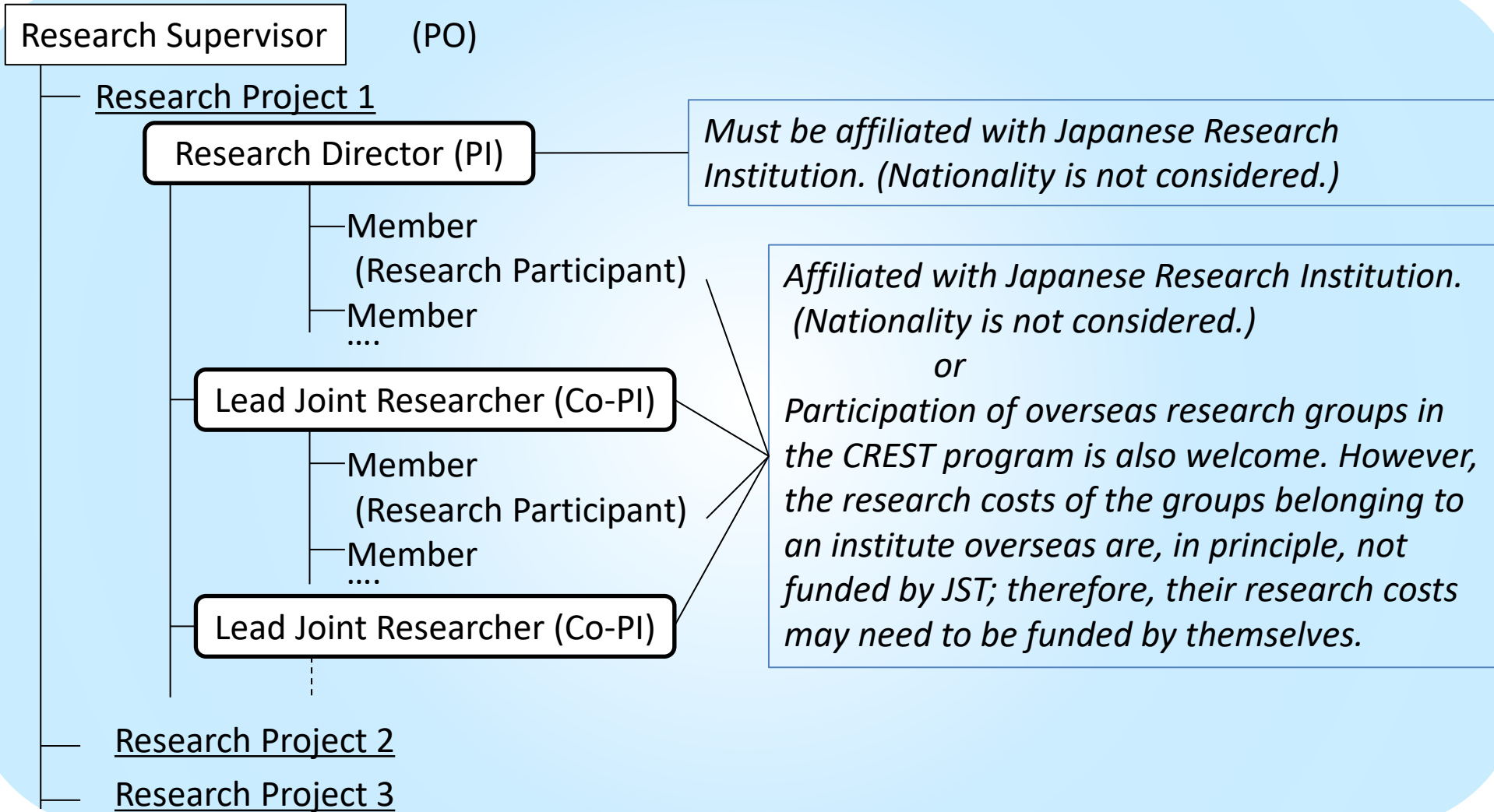
- In order to work on the same research item, multiple organizations (laboratories, departments, research institutes, etc.) may be included in one group.
- However, it is essential that “the institution to which the researcher (PI, Co-PIs) who presides over the group belongs can manage the research funds spent by members belonging to different organizations”.
- If this is not possible, researchers belonging to different institutions should form separate Co-PI's groups.
- Even if the member belong to the same institution, and if it is necessary to pay the expenses separately, please also make it a separate Co-PI's group (the figure below is an example of the structure of the groups).



# CREST ... Research Team Organization

\* For details, see Chapter 2 and 5  
( Reference )

## CREST Research Area





## Requirements for Research Project Applicants

\* For details, see Chapter 3

- The research project applicant must be the actual person who will be the PRESTO Individual Researcher.
- The research project applicant must be the proposer of the subject research initiative and must be the researcher who will independently perform research work in pursuit of the research initiative.
- Research project applicants must hold Japanese citizenship or be a foreign researcher who will pursue research work within Japan. \*It is required that the foreign researcher need to handle paperwork in Japanese (or in an environment where the researcher can proceed it).
- The researcher must be a person who can take responsibility for his/her PRESTO research project throughout the entire research period and oversee it to its completion.
  - \* Other requirements (research integrity program completion, responding to misconduct in research, etc.) are described in the Application Guidelines. JST strongly recommends that all applicants check these requirements.

## Research Institution Requirement

- Research institutions conducting PRESTO research must fully recognize that the research funds are public funding, ensure compliance with related laws and regulations, and make efforts to implement the research effectively.
- When applying, the prior consent of the research institution at which the implementation of research is planned shall definitively be obtained.
- As for “PRESTO-Researcher JST employed”, researcher's belonging institution will be requested to conclude a job assignment contract with JST. the researcher must obtain the permission of the belonging institution for this type of contract in advance.

## Requirements for Performing Research Work at an Overseas Institution

\* For details, see Chapter 3

- If an applicant wishes to carry out research at an overseas research institution, please describe the reason for wishing to carry out research overseas in the research proposal form 7.
- As a general rule, the applicant belonging institution must conclude a research contract with the content presented by JST. Please submit the prescribed form (to be provided later) indicating prior approval of the person in charge of the contract department of the overseas research institution has given prior consent **before the interview review meeting.**
- The contract wording adjustment period will be up to 3 months in principle after JST starts negotiations. In addition, please note that it may be necessary for the researcher himself / herself to explain to the contractor of the overseas research institution.

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## Joint Appointment

\* For details, see Chapter 3

- If the applicant is affiliated by the same research institution at the time of adoption, the research contract will be concluded between the institution and JST to carry out the PRESTO research.
- Although it is possible to conduct research outside of the affiliated institution, in this case, JST will sign the research contract with the institution where will execute the PRESTO research funds.

\* April 2022 and after, the Joint appointment as concurrently working for JST was discontinued. Along with that, monthly salary payment was also abolished.

## Exclusive appointment (limited to research at Japanese research institution)

- Those who are not affiliated with a research institution, company, etc. at the time of adoption, or who have no choice but to resign due to the circumstances of their affiliated institution, will be hired by JST as a "PRESTO Researcher" after a strict examination of their necessity by JST.
- In conducting the research, on the same day as the employment start date, **a contract is signed to send the full-time researcher** to the belonging research institution / company (recipient research institution), and the full-time researcher conducts research at the belonging research institution.
- From the viewpoint of safety and health management, **Exclusive appointment researchers are limited only from domestic research institutions, and not from overseas research institutions.**
- Currently, researchers who belong to overseas research institutes can apply for environmental maintenance expenses in addition to their usual research expenses if it is necessary to prepare the research environment for conducting PRESTO research at domestic research institutions. Details will be announced after adoption.

## Requirements for Applicants

\* For details, see Application Guidelines Chapter 4

- The research project applicant must be the actual person who will be the individual researcher.
- **Applicants must have received their doctoral degree less than 8 years before April 1st, 2023**
  - \* If the applicant does not hold a doctoral degree, he/she must have received a bachelor's degree less than 13 years before April 1, 2023.
  - \* Maternity leave and childcare leave acquired after obtaining a degree are excluded from the above-mentioned time periods.  
The above notwithstanding, persons who are graduate students can only apply for this program.
- The applicant must write his/her research proposal as a person who suggested the idea and undertake such research independently, to bring the idea into reality. The ACT-X program is open to researchers from corporations and other entities, so long as they are deemed fully capable of conducting individual research in accordance with the ACT-X policy.
- Applications by students in masters and doctoral programs are required to be submitted via e-Rad, with a memorandum of confirmation on requirements co-signed by the applicant and his/her academic supervisor.
- Research of an applicant must be conducted at a research institution in Japan at the time of adoption, and **research must be conducted in Japan until the end of ACT-X research period.**
  - \* If you are a graduate student and graduate during the 2.5-year ACT-X program period, you may apply if you are willing to do your best to meet the above requirements so that you can continue the ACT-X program after graduation.
  - \* There are no limitation on the individual researcher's nationality, but the researcher must be able to handle paperwork in Japanese (or be in an environment that can handle it).
  - \* ACT-X will hold progress meetings in Japanese after selection, so a certain level of Japanese communication skill is required.
- The researcher who can conduct the ACT-X research tasks responsibly throughout the entire research period.
- ✂ Other requirements include completing a research ethics education course and pledging not to commit research misconduct.

## Requirements for Institutions

- In conducting research, research institutions must fully recognize that the funding for contract research is public funding, comply with relevant laws and regulations, and strive to conduct research efficiently.
- Before applying, be sure to obtain the prior consent of the research institution where the research will be conducted.

\*For detail, please refer to Application Guidelines Chapter 9

- An applicant may submit only one Research Proposal to one of Research Areas of the CREST, PRESTO, ACT-X, AMED-CREST, or PRIME program which calls for application in FY2023.
  - \* In some cases, duplicate application may be allowed as exception (see next page).
- Applications will not be accepted if any of the following applies.
  - Applicants in the position of a to g currently, cannot apply for CREST, PRESTO, or ACT-X as a research proposer.
  - Applicants in the position of h. currently, or used be in the position of a. to g. cannot apply for ACT-X. (Applicants in the position of h. are able to apply CREST and PRESTO as early graduation, however, ACT-X research will terminate at the end of the fiscal year selected to CREST or PRESTO (Early Graduation))
    - \* In all cases, it is excluded that the research period for the relevant research project finishes within 2023.
  - a. Research Supervisor or Deputy Research Supervisor of ERATO in the Strategic Basic Research Program
  - b. Research Director of CREST in the Strategic Basic Research Program
  - c. Individual Researcher of PRESTO in the Strategic Basic Research Program
  - d. Research Director of AIP Accelerated Program in the Strategic Basic Research Program
  - e. Research and Development Director of AMED-CREST in the Strategic Basic Research Program (Advanced Research and Development Programs for Medical Innovation)
  - f. Research and Development Director of PRIME in the Strategic Basic Research Program (Advanced Research and Development Programs for Medical Innovation)
  - g. Research and Development Director of FORCE, LEAP in the Strategic Basic Research Program (Advanced Research and Development Programs for Medical Innovation)
  - h. Individual Researcher of ACT-X in the Strategic Basic Research Program
- CREST has restrictions on applying as Co-PI or other Research Participant. For detail, please refer to the Application Guidelines.

\*For detail, please refer to Application Guidelines Chapter 9

- It is possible to concurrently conduct research as an individual researcher for "PRESTO" or "ACT-X" and as Co-PI for "CREST". **The same applies to PRIME individual researchers, AMED-CREST, FORCE, and LEAP R&D sharers, and ERATO group leaders.** For more details, please refer to "Chapter 9, Table 1: Eligibility for Application/Participation in CREST, PRESTO, ACT-X" and "Table 2: Eligibility for Concurrent Application/Participation in CREST, PRESTO, ACT-X" in the recruitment guidelines.
- As a result of being selected as a candidate for CREST, PRESTO, and/or ACT-X in FY2023 by all competitive research funding programs operated by the JST, adjustments such as a reduction in research funds or selecting only one research project for the researcher to conduct may be made, should the researcher participate in multiple research projects (except in cases in which the research period ends in FY2023). The subject of adjustment includes not only the proposer of the research but the Co-Pis and other research participants in the case of application to CREST.
- Concerning the CREST "Research on Multi-sensing Biosystems and the Development of Adaptive Technologies" and PRESTO "Multisensory Integration in Biological Systems" research areas, an exception has been made to allow duplicate applications with the AMED "Integrated Understanding of Multi-sensing Networks and the Elucidation of Their Control Mechanisms Leading to the Innovation of Medical Technologies" research and development field, which was launched under the same strategic objective.
- Regarding the PRESTO "Fundamental Understanding of Age-related Organismal Transformations" research area, an exception has also been made to allow duplicate applications with the AMED "Bridging the Fundamental Mechanism of Aging and the Effective Treatment of Age-related Disease Associated with Impaired Functional System" research and development field, which was launched under the same strategic objective.

\*For detail, please refer to Application Guidelines Chapter 9

- Although it is possible to concurrently apply both for the Emerging Research Support Project and to be a CREST research director (PI) or PRESTO individual researcher (PI), it is not possible to conduct both research projects concurrently. However, it is possible to concurrently apply and conduct research for CREST Co-PI as well as for ACT-X individual researchers.
- Even if one is currently conducting the Emerging Research Support Project as a principal investigator (individual researcher), it is still possible to apply as a CREST research director (PI) or PRESTO individual researcher (PI) for this particular call for application. For research projects under the Emerging Research Support Project, after being selected for CREST and/or PRESTO, it is necessary to confirm the research project with the person in charge of the Emerging Research Support Project.



Research proposals are called for in each Research Area.

At research proposal submission, please confirm the followings.

- Outline of Research Area
- Research period, research expenses (direct expenses)
- Research Supervisors' direction and policy about call, selection, and research area management
  - \* The briefing explanation videos and materials are posted on the web page of “Call for Research Proposal”, please see them.
- Strategic Objective

Web page of the “Call for Research Proposal”

<https://www.jst.go.jp/kisoken/boshuu/teian-en.html>

**Application submission will be accepted through the e-Rad.**

Researchers who do not have a login ID and password should immediately complete the researcher registration procedure

- ✓ **Every year, there are many troubles caused by applying just before the deadline, so please allow enough time to apply.**
- ✓ **JST will not accept proposals which the application process has not completed on the e-Rad system by the deadline for any reasons!**
- ✓ **After the deadline, Application Withdrawal is strictly prohibited**
  - \* JST will not be held responsible for any deficiencies in the form or text that occur by the application deadline, regardless of whether the proposal is accepted or rejected. Therefore, please be aware in advance that JST will not correct the proposal after confirming with the applicant in advance or will not make any correction request to the applicant by the application deadline.

A Frequently Asked Question when applying through the e-Rad system.

**Q:** When apply through e-Rad, an error message comes out "You cannot make your project application, because some of your project members have not given pledges about research integrity."

**✖** You cannot make your project application, because some of your project members have not given pledges about research integrity.(Number of error: 1 items)

**A:** Please try the following (in the case of CREST, Co-PI also needs to proceed it).

A screenshot of a user profile menu. The user's name is 'Kobayas...'. The menu items are: 'Confirm and amend researcher details' (highlighted with a red box and a circled '1'), 'Change login ID', 'Change password', 'Change secret question and answer', 'Email settings', and 'Quick menu settings'.

A screenshot of the 'Modify Researcher Details' page. It has tabs for 'Basic information', 'Research area', and 'Main research institution' (highlighted with a red box and a circled '2'). Below the tabs is the 'Affiliated research institution' section, which includes a table with columns: 'Date of appointment', 'Research institution code', 'Research institution', 'Type of employment', 'Resource for employment', 'Fixed term', and 'Main research institution'.

A screenshot of the 'Status of research expenses outside e-Rad and status of notification' page. It contains several sections:

- (1) research expenses other than e-Rad: A table with columns 'Kind of Contract', 'Partner institution(Country name of the partner institution) Funding system (Research period)', and 'Research subject name'.
- (2) organizations you belong to and your positions (including concurrent positions, part-time professor, professor emeritus without employment contract): A section with an 'Add line' button.
- (3) Pledge status: A section with an 'Add line' button and a checkbox labeled 'Reported' which is checked.

Applicants who have the conflict of interest with Research Supervisor (corresponds to any of a. - c.) shall be **excluded from selection**.

- a. The research project applicant is a relative of the Research Supervisor
- b. The research project applicant and the Research Supervisor are both affiliated with the same smallest organizational unit (i.e. same research lab) of a university, national or other national government-funded research institution or, the research project applicant and the Research Supervisor are affiliated with the same company
- c. The research project applicant and the Research Supervisor are presently working in close cooperation on the same joint research project, or have done so within the past three years

## → If the judgment is difficult, please contact JST

\* Please submit the Conflict of Interests inquiry form when required.

<https://www.jst.go.jp/kisoken/boshuu/teian-en.html>

\* (Attachment) Please also use the pre-submission confirmation sheet about Conflict of Interests with the Research Supervisor“

\* For inquiry by May 10, JST will reply to the applicant by the application deadline.

# Remind point at application (4) Measures against Inappropriate Usage of Research Funds

Based on the revision of the “Guidelines for the Proper Execution of Competitive Funds” (FY2012), JST strictly deals with cases of inappropriate usage of research funds and Restriction Measures are taken against the application and participation eligibility of researchers, depending on the levels of inappropriate usage .

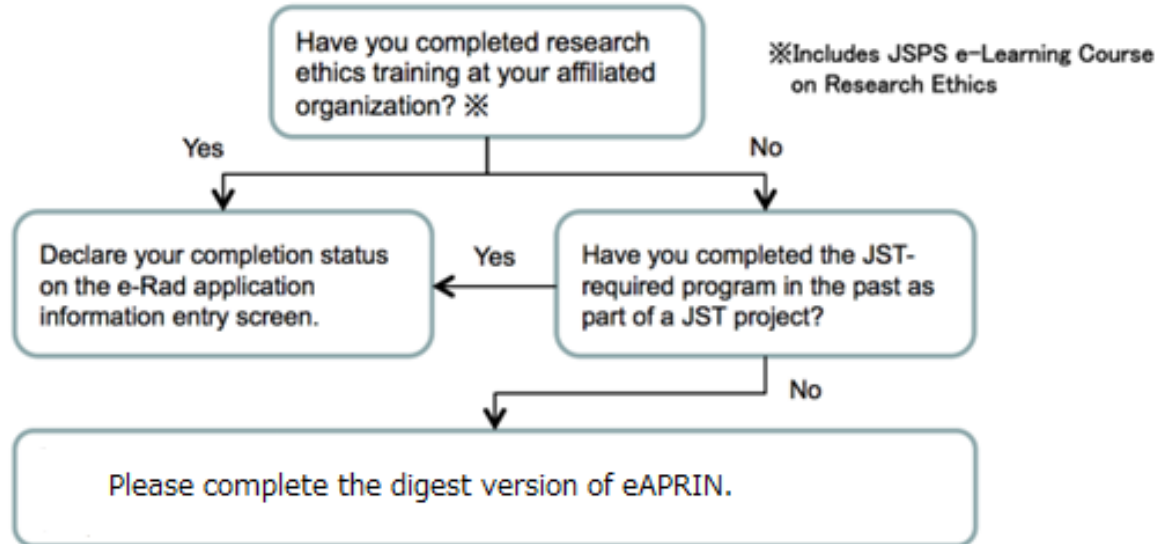
Classification of person who committed or is involved in misconduct in use of research budget	Extent of maliciousness in misconduct	Period of ineligibility for applying to competitive research fund, deemed to be reasonable
A researcher who committed a misconduct or a researcher who was in conspiracy with a person who committed a misconduct	1. Use of a research budget to make a private profit	10 years
	① Impact of the misconduct on the society is substantial and maliciousness of the misconduct is judged to be high	5 years
	2. Other than 1. ② Neither ① or ③	2-4 years
	The impact of the misconduct on the society is small and the maliciousness of the misconduct is judged to be low.	1 year
A researcher who used a fabrication and other dishonest means to receive a research fund or etc. and a researcher who was in conspiracy with the person who committed this misconduct		5 years
A researcher who did not commit or was not involved in a misconduct, but used a research budget, inappropriately, failing to fulfill his/her duty of due care of prudent manager *		1 to 2 years (in maximum) in accordance with the degree of failure of fulfilling his/her duty of due care of prudent manager

\* Although it was not recognized that it was involved in inappropriate usage, etc., Researchers who violate their duty of due care of prudent manager.

The research project applicant **must complete the educational program for research integrity as a prerequisite for application.**  
 Note that if completion of the program cannot be confirmed, the application will be disqualified for failing to meet the requirements

URL: <https://edu2.aprin.or.jp/ard/>

<Flow chart for Reporting Completion of Research Ethics Education Programs>



For detail, please see the Website or Application Guideline

In accordance with the policy of the Japanese Government, the following operations are considered appropriate.

- Operation of a "system for sharing research facilities and equipment for research organization units" (hereinafter referred to as "equipment sharing system") at universities and national research and development agencies, etc.
- In principle, large-scale facilities and equipment that are funded by competitive research funds should be shared.

Based on this policy, please check the following points prior to application;

1. Purchase and sharing by combining multiple research expenses of research equipment and apparatuses
2. Sharing with other research etc. within the range that does not interfere with the promotion of the proposed research subject
3. Utilization of research equipment and apparatuses purchased by other research expenses etc.
4. Aggressive utilization of commonly available devices and confirmation of redundancy with existing devices that can be utilized
5. Proactive registration in purchasing research equipment and apparatuses sharing system etc.

**JST may check the condition of use of the equipment and apparatuses sharing system**



- When research requires compliance with legal and/or regulatory procedures, complete all the necessary procedures such as obtaining approval from the ethics committee inside and outside of the research organization.
  - In implementing the research concept, research that requires consent and cooperation of the other party
  - In the case of Studies that need consideration of handling of personal information
  - Research requiring efforts for bioethics and safety measures
- When conducting on-site research activities overseas or joint research with overseas research institution, please check in advance and comply with all the relevant laws and regulations of the related countries

**We expect proactive / passionate applications from young researchers.**

**We JST hope that young researchers will engage in challenging research and development through these projects and further expand their fields of activity.**

## PRESTO:

- Research Supervisors and Advisors will play the roll of “mentors”
- PRESTO will provide young researchers the opportunity to work on their own research project as PI
- PRESTO will create opportunities to interchange among researchers and create platforms for stimulating each other

## ACT-X:

- Established in FY2019 to support young researchers to be an independent researchers
- ACT-X will provide opportunities for many young researchers, including graduate students, researchers at companies or who have just started their research careers

## CREST:

- Many young researchers participate in each CREST research project. We ask our Research Directors to nurture young researchers in your team so that they are enabled to conduct their research independently and achieve good results and also being encouraged to play active roles in various fields in the future.

**JST promotes diversity (gender, nationality, age, etc.) especially, encourages positive contribution by Female Researchers**

- “Diversity” is necessary for the base that brings about science and technology innovation. JST will try to resolve the issues of the future society by promoting diversity in all science and technology and will contribute to strengthening Japan's competitiveness and improving the affluence of the mind.
- JST is constantly improving the system, such as listening to the voices of researchers who are users of the "childbirth / child-rearing / nursing care support system" that has been implemented and creating an environment where researchers can return to research.
- When inviting applications for new research projects and during the screening process, applications are also considered from the perspective of diversity

Diversity Initiatives at JST

<https://www.jst.go.jp/diversity/index.html>

Diversity initiatives in CREST, PRESTO, and ACT-X

<https://www.jst.go.jp/kisoken/crest/nadeshiko/index.html>

## JST contributes to the implementation of the SDGs

- At the "United Nations Sustainable Development Summit" held in September 2015, the "Sustainable Development Goals (SDGs)" were established as the core of new, more comprehensive global action goals for people, the planet, and prosperity. The outcome document "Transforming our world: the 2030 Agenda for Sustainable Development" was unanimously adopted.
- The SDGs are global goals that can encompass JST's mission, and through JST's projects, we will co-create with industry, academia, government, and the private sector, and work with researchers to realize a sustainable society.

### SUSTAINABLE DEVELOPMENT GOALS



# Remind points after selection (1) Measures against Inappropriate Usage of Research Funds

In case that research funds are used inappropriately in a research project, measures will be taken to **cancel the research** and **return all or part of the research funds**. In addition, depending on the level of the fraud, etc., **measures will be taken to restrict applications and participation in this program and other competitive funding programs in Japan**.

- Public research funding is funded by the precious tax paid by citizen and must be properly managed according to the usage rules of the funding agencies and the research institutions.
- Care is required, as misunderstanding of the rules of use often leads to unexpected misconduct.
- It is important to consult regularly with the administrative staff of the research institution, etc. to confirm the usage rules of research funds.

## Main Measures for Researchers Involved in Fraud

### Personnel disposal

[Disciplinary rules of institution]

- \* Examples of disciplinary actions include disciplinary exclusion, suspension, and salary reduction.

### Refund of inappropriately used funds

[Subsidy adequacy law or Research Agreement Clause]

- \* Additional fees etc. will be added according to the date from the time of unauthorized use to the return.

### Criminal Penalties

[Criminal Law]

- \* Many malicious fraud cases are fraudulent.

### Competitive funding eligibility restrictions

[Consultation with relevant ministries]

- \* Please note the revised law of FY2012.

## ● “Promoting Open Science in Japan ”

(March 2015、Cabinet Office ” Promoting Open Science in Japan –Opening up a new era for the advancement of Science–”)

⇒ Specified that each ministry, funding agency, university/research institution develop policy and plan for implementation of open science.

## ● Response by JST

⇒ For all research areas, Principal Investigators (PIs), etc. should prepare data management plan after adoption, and research data are stored, managed, and released based on this plan.

**Items to be included in the Data Management Plan**

**✘Need to prepare as a research plan after adoption**

1. Policy for storage and management of the research data
2. Policy for open/close of the research data
3. Method and system for distribution of the open research data
4. Expected usage of the open research data
5. Action for the promotion of utilization of the open research data
6. Others

## Remind points after selection (3) Registration to “researchmap” and usage of R3: R-cube

Selected CREST PI / Co-PI, PRESTO PI and ACT-X PI  
need to register **“researchmap”**

- JST’s Strategic Basic Research Programs including CREST, PERSTO and ACT-X utilize “research map” as a master database of achievement information in various areas, including future achievement reports. In addition, the community function of “researchmap” is used for project management, including distribution of various files and event notices.
- The information in “researchmap” is utilized effectively for surveying national academic or science and technology plans, as well as for statistical purposes.
- During these JST’s program, researchers will apply their research plans and reports through JST’s research project management system “R3: R-cube” working with “researchmap”.
- Applicants as CREST research director and the lead joint researcher, PRESTO individual researcher and ACT-X individual researcher, who will have the research interview, need to register “researchmap”. For this reason, researchers who have not yet registered are recommended to register as soon as possible.



- JST support researchers to balance research and life events for career development (support for gender equality expenses that promote R&D and reduce the burden on the researcher). Researchers continue R&D during life events (childbirth, childcare, nursing care), or if they have to temporarily suspend it, support to restart R&D.

In addition, we publish role models for female science students.  
Please see the details as follows.

- Effort for Diversity Promotion of CREST, PRESTO and ACT-X  
<https://www.jst.go.jp/kisoken/crest/nadeshiko/index.html>
- Guidelines for the management of research funds during life events of Principal Investigators, etc.  
<https://www.jst.go.jp/diversity/about/research/life-event.html>
- Childbirth/childcare/nursing care support system  
<https://www.jst.go.jp/diversity/about/research/child-care.html>

CREST, PRESTO, and ACT-X have established implementation policies for introduction of the buyout system, expenditure of PI personnel expenses and relaxation of exclusive appointment of young researchers.

#### ● Buyout System : Use of Direct Costs for Someone to Carry Out Duties Other Than Research

[https://www.jst.go.jp/kisoken/crest/manual/buyout\\_houshin.pdf](https://www.jst.go.jp/kisoken/crest/manual/buyout_houshin.pdf)

- **Eligibility:** PI (affiliated in universities, etc.) of CREST, PREST (excluding exclusive appointment researchers) and ACT-X(excluding students)
- **Expenditure limit:** PRESTO: 2 million yen/year ACT-X: 0.3 million yen/year  
CREST and ACCEL: no spending upper limit is set.

#### ● Use of Direct Costs for Principal Investigator (PI) Personnel Expenses

[https://www.jst.go.jp/kisoken/crest/manual/pi\\_houshin.pdf](https://www.jst.go.jp/kisoken/crest/manual/pi_houshin.pdf)

- **Eligibility :** PI (affiliated in universities, etc.) of CREST, PREST (excluding exclusive appointment researchers) and ACT-X
- **Expenditure limit:** PRESTO: 1 million yen/year ACT-X: 0.15 million Yen/year  
CREST and ACCEL: no spending upper limit is set.

#### ● Relaxation of exclusive appointment

[https://www.jst.go.jp/kisoken/crest/manual/senjukanwa\\_houshin.pdf](https://www.jst.go.jp/kisoken/crest/manual/senjukanwa_houshin.pdf)

- **Eligibility :** Researcher participants (affiliated in universities, etc.) hired by CREST research budgets and PRESTO exclusive appointment researchers
- **Expenditure limit:** No more than 20% of research efforts

**We welcome applications and participation from researchers who boldly engage in challenging research that creates the source of top innovation from outstanding basic science.**

- For more information of Call for Research Proposal, please visit the website below.

<https://www.jst.go.jp/kisoken/boshuu/teian-en.html>

\* Information such as documents, interview review, schedule of selection result notification, etc. will be updated as appropriate.

- Please refer to the past year's research summary review.

CREST <https://www.jst.go.jp/kisoken/crest/application/2022/220920/220920.html>(Japanese only)

PRESTO <https://www.jst.go.jp/kisoken/presto/application/2022/220920/220920.html>(Japanese only)

ACT-X <https://www.jst.go.jp/kisoken/crest/application/2022/220920/220920.html>(Japanese only)

- Contact about Call for Research Proposal

Please contact us from the above website "Contact Information".

For inquiries by email, please contact "[rp-info@jst.go.jp](mailto:rp-info@jst.go.jp)".

# <For Reference> Information via twitter

- CREST, PRESTO, ACT-I/X twitter [@JST\\_Kisokenkyu](https://twitter.com/JST_Kisokenkyu) also provides information of research proposal application, symposium, etc.



**CREST, PRESTO, ACT-I/X twitter**  
**@JST\_Kisokenkyu**

# Contact and inquiries regarding application and selection

Contact information for application and selection period

- **CREST, PRESTO, ACT-X Call for Research Proposals website:**

<https://www.jst.go.jp/kisoken/boshuu/teian-en.html>

see page "Updates"

The update is available at

- Twitter (  [@JST\\_Kisokenkyu](https://twitter.com/JST_Kisokenkyu) )

Please don't hesitate to contact us if you have any questions about application.

 E-mail: [rp-info@jst.go.jp](mailto:rp-info@jst.go.jp)