

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

Program Introduction and FY2022 CALL for Research Proposal

CREST

PRESTO
sakigake

ACT-X

April 2022

Department of Strategic Basic Research
Japan Science and Technology Agency (JST)

Strategic Basic Research Programs

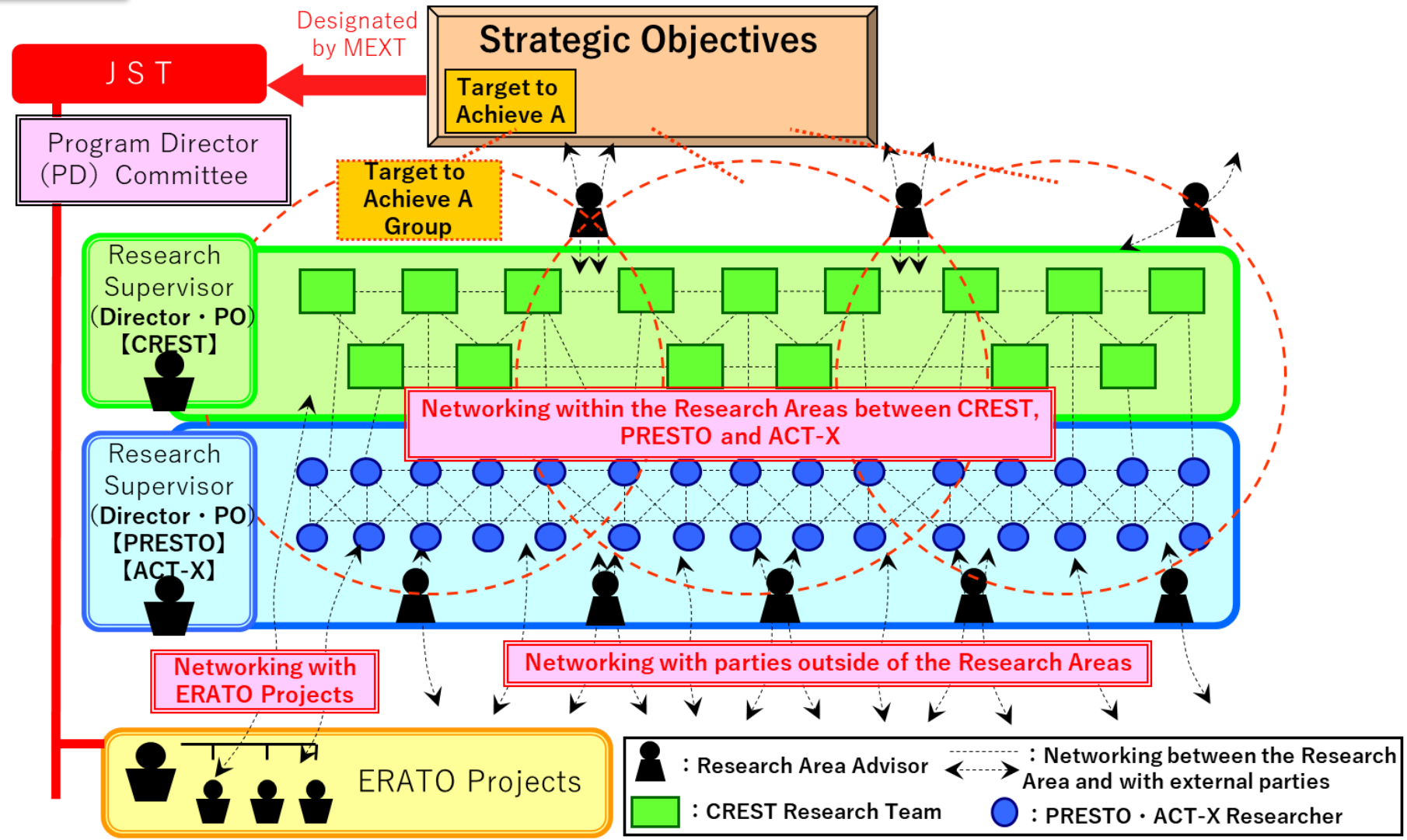
Japan Government (Ministry of Education, Culture, Sports, Science and Technology “MEXT”) prescribes Strategic Objectives based on national science and technology policies and social/economic needs.

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

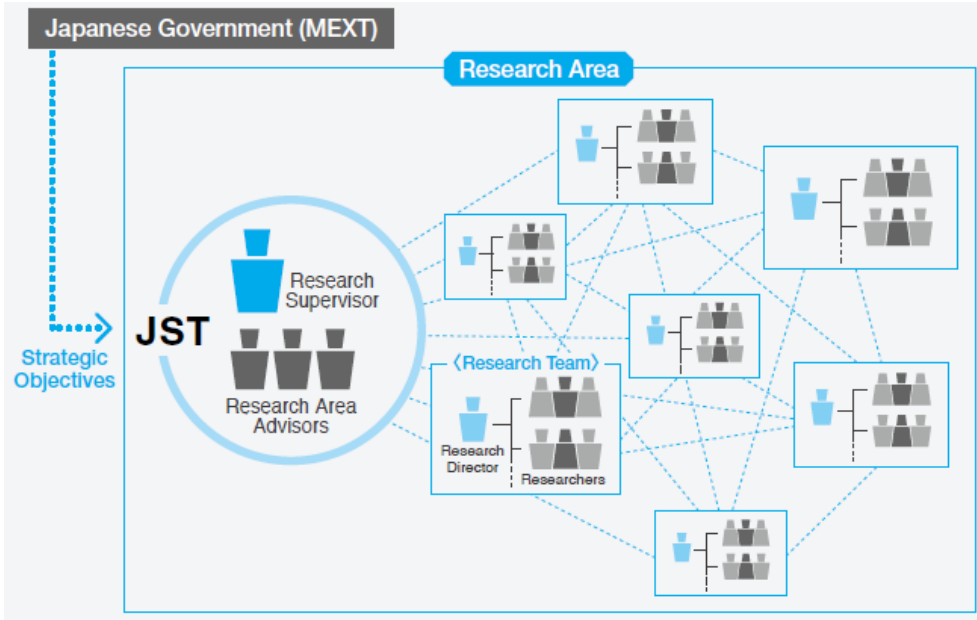
(Core Research for Evolutionary Science and Technology)

- 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 the application guidelines.



What is "PRESTO" ?

PRESTO

(Precursory Research for Embryonic Science and Technology)

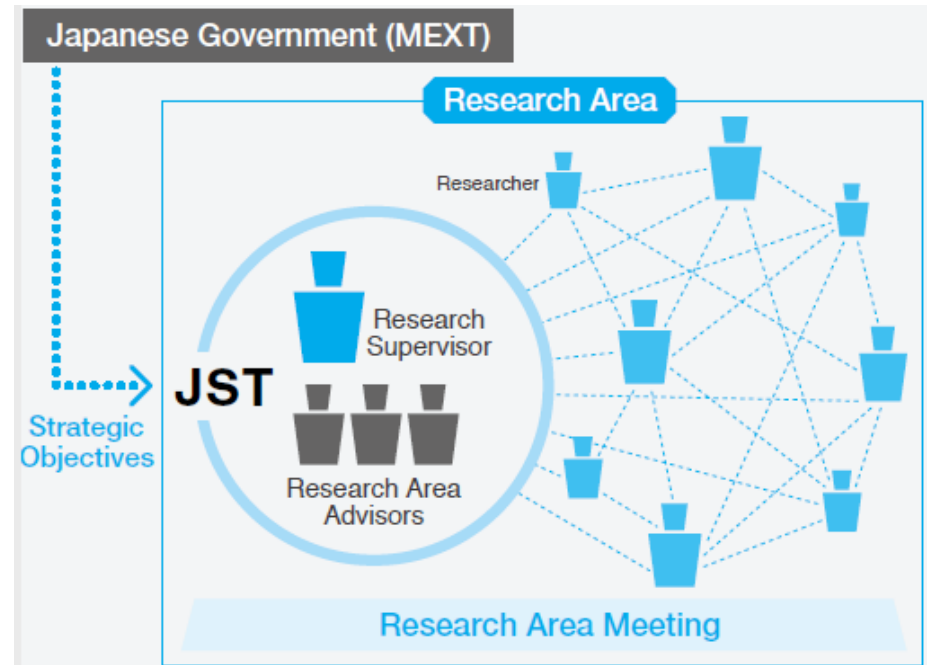
- Promote pioneering directed basic research that is original and challenging, and expected to lead to the development of high international standards to achieve Strategic Objectives
- Create new technology seeds based on new scientific knowledge toward the science and technology innovation in advance 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 the application guidelines.



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

- 69 out of 144 PRESTO researchers who completed their research in 2016 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

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 those who are less than the above applicable years excluding the period of prenatal / postnatal leave / childcare leave acquired after obtaining a degree.

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

* Since the upper limit setting may be different depending on the research area, please check the application guidelines.

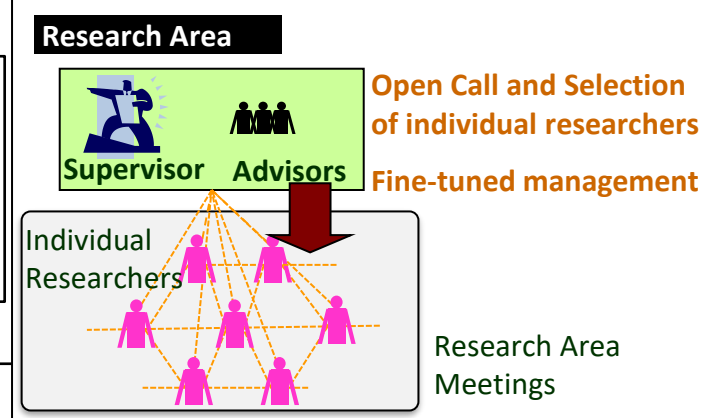
➤ Support scale

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

- * Total Standard Amount depends on Research Area, so please clarify it on each Research Area information.
- * Additional support for highly evaluated issues as an acceleration phase (about 1 year).

➤ Features of the program

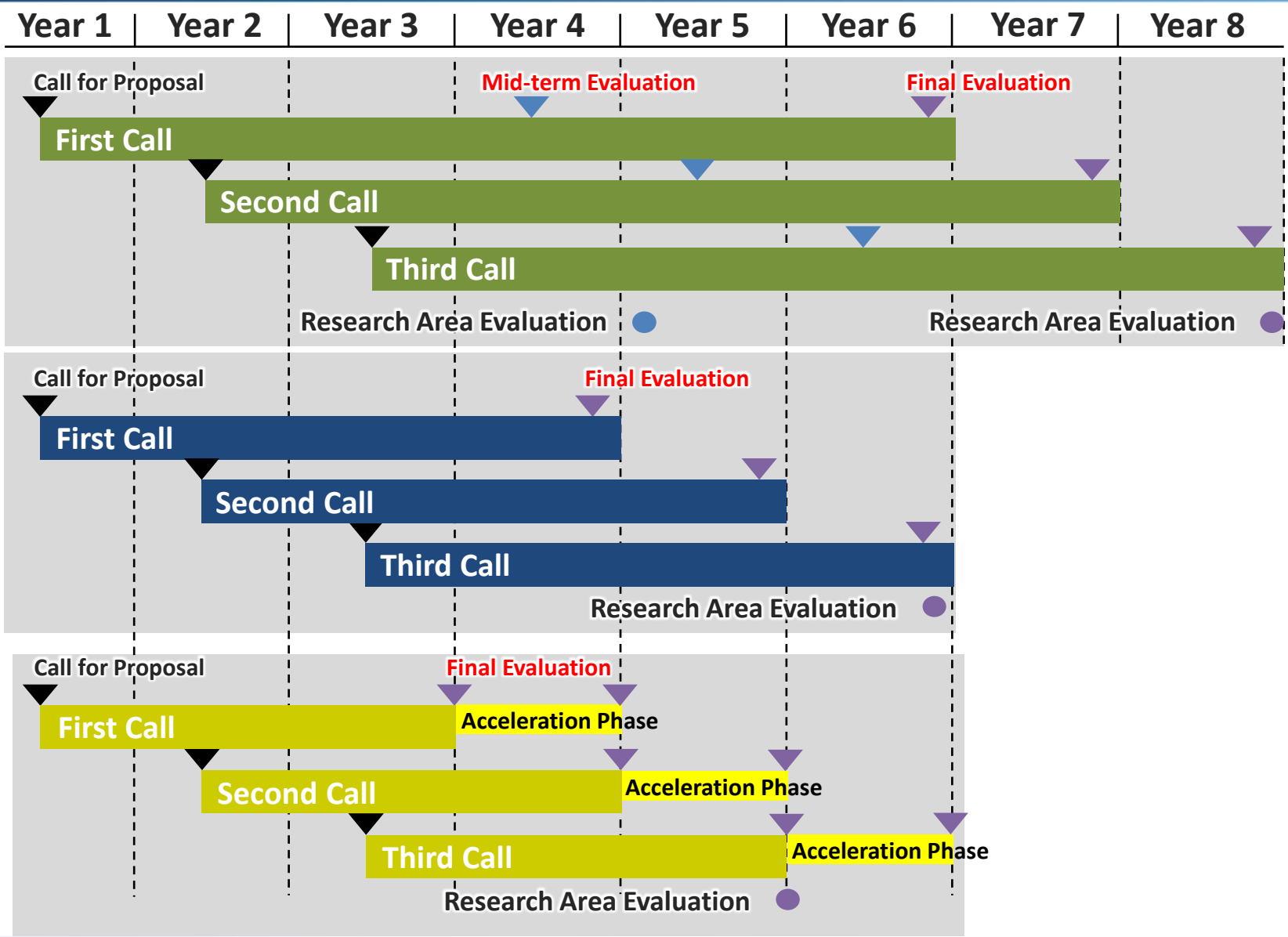
- The advisor in charge, who is the top researcher in the field, will give detailed advice and guidance to two or three researchers, and strategically develop them as a theme that will lead to pioneering.
- By holding research summaries and area meetings where advisors and participating researchers gather, 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

AIP: Advanced Integrated Intelligence Platform Project

AIP Network Laboratory is established in 2016 to promote innovative research activities in the field of AI, bigdata, IoT, and cyber security by utilizing the framework of JST Strategic Basic Research Program.



AIP Project

*AIP (Advanced Integrated Intelligence Platform)

RIKEN
AIP Center
Director:
Dr. M. Sugiyama



Promote
Integrally

Personnel
/Results



Research Area calling for
Proposals in FY2022

JST AIP Network Laboratory

Laboratory Director: Dr. Katsumi Emura



CREST

Bio-DX (Dr. Y. Okada) ★



Society 5.0 System Software
(Dr. Y. Okabe) ★



Trusted Quality AI Systems
(Dr. A. Aizawa) ★



Mathematical Information
Platform (Dr. N. Ueda)



Symbiotic Interaction
(Dr. K. Mase)



Artificial Intelligence
(Dr. M. Etoh)



PRESTO

Social Transformation Platform
(Dr. S. Kurihara) ★



Platform Software (Dr. T. Higashino) ★



Trustworthy AI (Dr. H. Arimura) ★



Math-Structure (Dr. T. Sakajo)



IoT (Dr. H. Tokuda)



Humans and Interactions (Dr. J. Rekimoto)



ACT-X

AI Powered Research Innovation / Creation
(Dr. Y. Kuniyoshi) ★

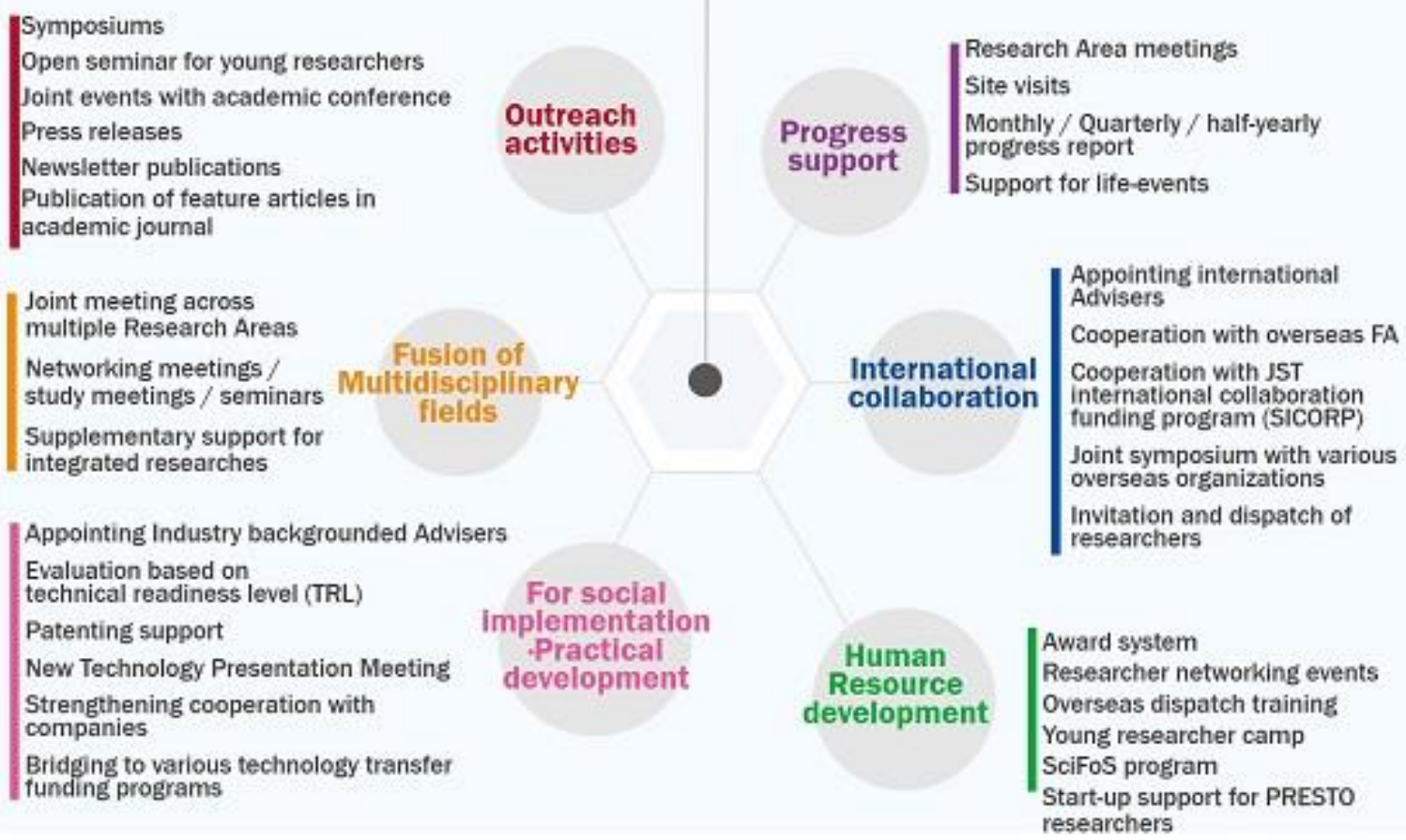


Math and Info (Dr. K. Kawarabayashi)



Feature of Strategic Basic Research Programs

In accordance with the characteristics of each Research Area / issue, extensive management is implemented and organized



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 (2021 Selected Rate 10.1%)

	Male	Female	Total
Proposal	603	48	651
Select	60	6	66

PRESTO (2021 Selected Rate 11.6%)

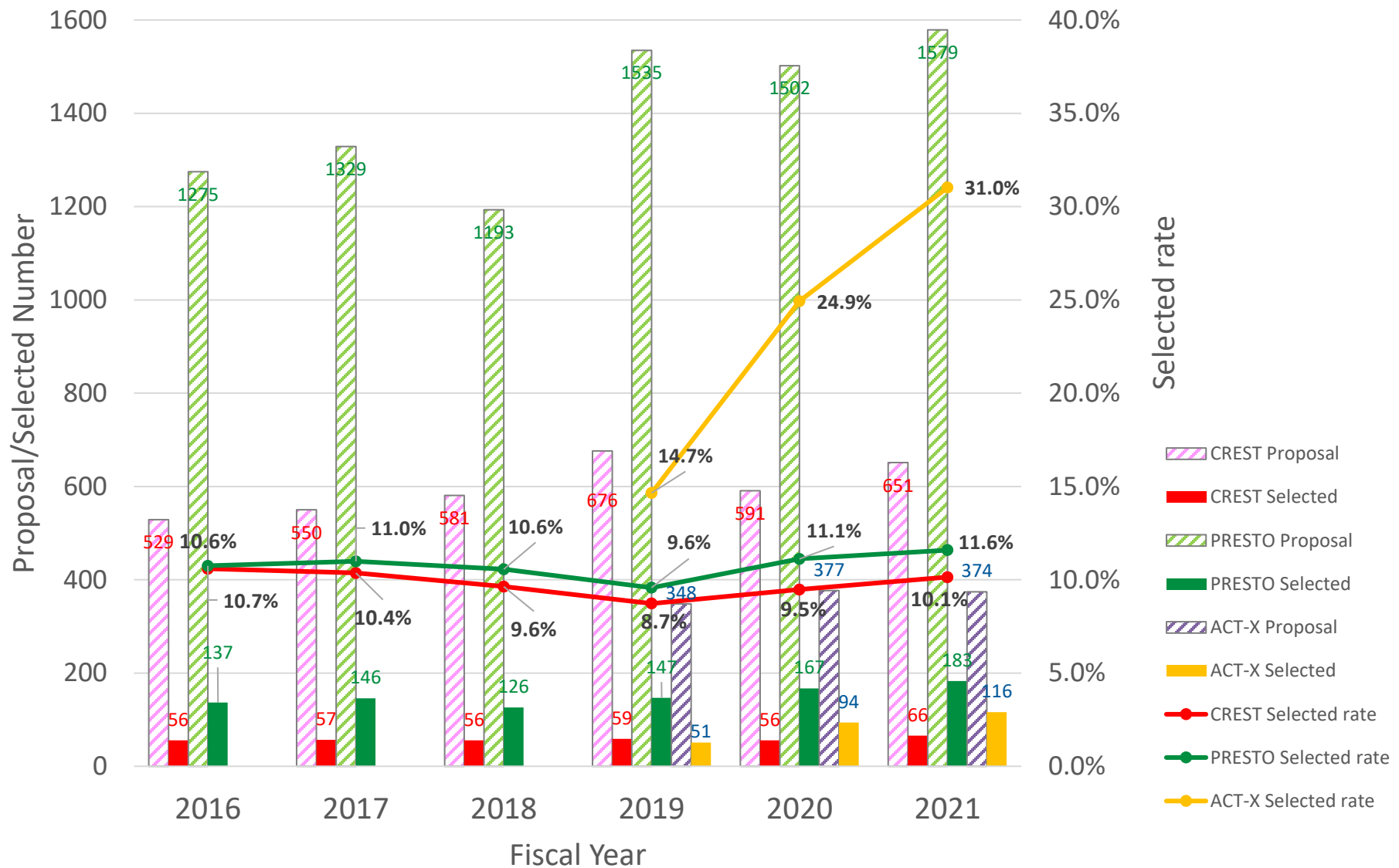
	Male	Female	Total
Proposal	1,402	177	1,579
Select	160	23	183

ACT-X (2021 Selected Rate 31.0%)

	Male	Female	Total
Proposal	316	58	374
Select	96	20	116

Master Course Students:
Proposal 10, Selected 2
Doctor Course Students:
Proposal 57, Selected 20

Recent changes in Proposal/Selected



FY2022 Call/Selection Schedule

CREST
Proposal Deadline | **12:00 Tue June 7th**
 Japan Time

PRESTO, ACT-X
Proposal Deadline | **12:00 Tue May 31st**
 Japan Time

After Deadline	CREST	PRESTO, ACT-X
Document Selection	Mid June - Early July	Early July – Late July
Notification of Document Selection	Late June – Mid July	Early July - Early August
Interview Selection	Late July – Early August	Late July – Mid August
Notification and Publication of Selection	Late August – Late September	Late August – Late September
Research Start	October or After	October or After

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 FY2022, JST agreed with ANR to establish the following two CREST Research Areas as common priority research areas and to invite Japan-France joint research proposals, as well as regular (non-joint) proposals:

CREST

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

[Trusted quality AI systems] Core Technologies for Trusted Quality AI Systems
(Research Supervisor: Akiko Aizawa)

Application Process

1. To apply, Principal Investigators (PIs) from the Japanese and French sides prepare a common joint research proposal and submit it to JST and ANR in parallel. The joint research proposal should be prepared in English using the Common Application Form.
2. The PI from the French side will apply and submit the common joint research proposal to ANR.
ANR application acceptance period: Monday February 21 – Monday May 9th, 10AM CEST.
3. PI from the Japanese side will apply and submit the common joint research proposal to CREST via the e-RAD system with a summary of research proposal in Japanese.
4. JST and ANR will evaluate proposals in parallel and make common funding decisions.
5. Funded research projects will start in October 2022 or later. *** For details 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, 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 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 of 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 of 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.

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.

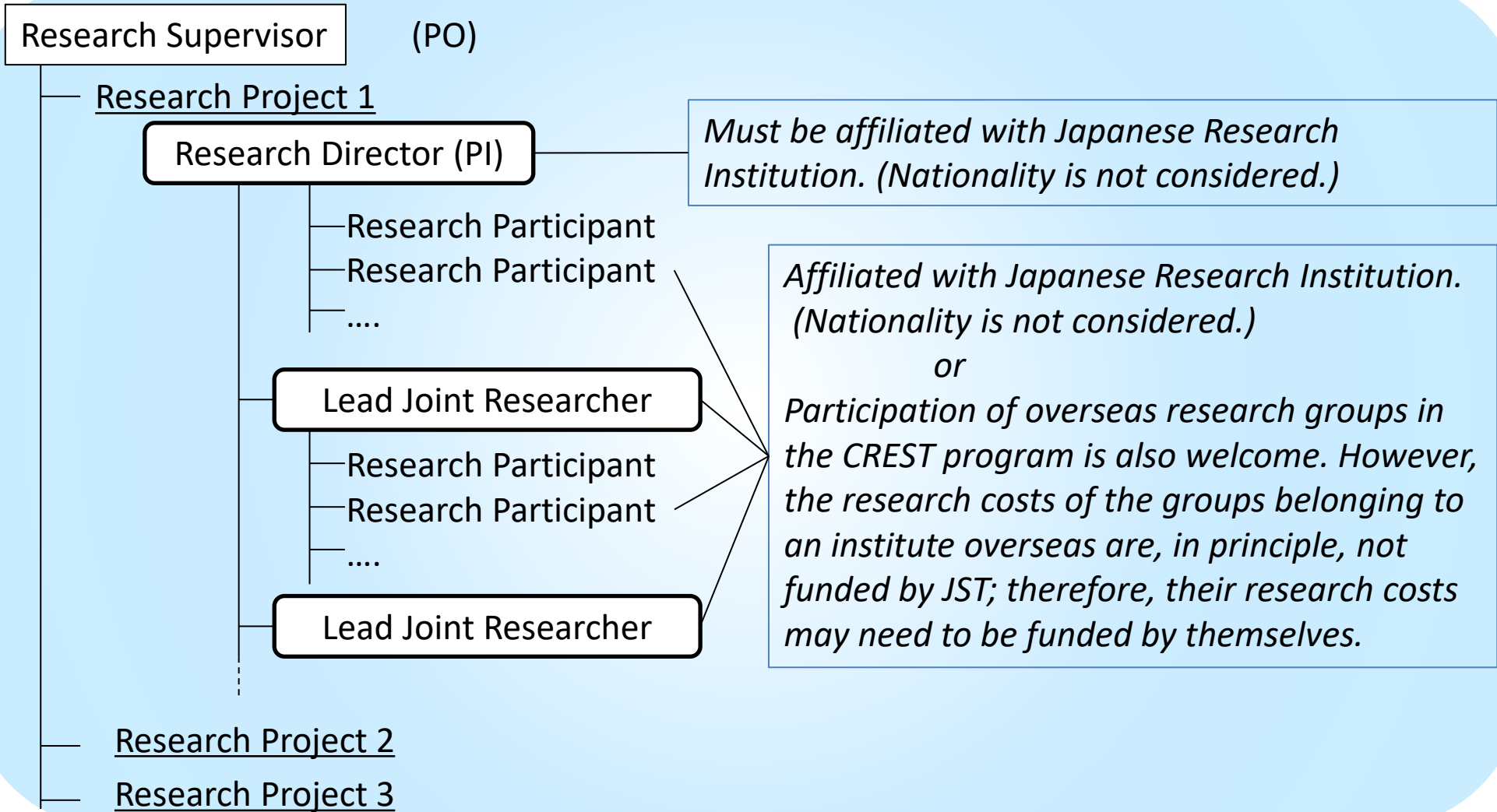
Research Institution Requirement

- 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.

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, 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 approval of the person in charge of the contract department of the overseas research institution has given prior consent **by the interview selection 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

- This appointment type is for Individual Researchers conducting their PRESTO research at their affiliated institutions and concurrently receiving a commission form JST as a joint appointment researcher.

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

Exclusive appointment (limited to research at Japanese research institution)

- This type of appointment is for Individual Researchers who are not affiliated with either a research institution or a company, or who must resign their current positions in order to conduct the PRESTO research.
- 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, 2022**
 - * 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, 2022.
 - * 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 FY2022.
- 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)
- * In all cases, it is excluded that the research period for the relevant research project finishes within 2022.
 - 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 a Lead Joint Researcher or other Research Participant. For detail, please refer to the Application Guidelines.

*For detail, please refer to Application Guidelines Chapter 9

- **From FY2022, researcher may be to carry out "PRESTO", "ACT-X" individual researchers and "CREST" Lead Joint Researcher at the same time. Similar measures will be taken for PRIME individual researchers, AMED-CREST, FORCE, LEAP R & D coordinators, and ERATO group leaders.** For details, please refer to the application guidelines "Chapter 9 Table 1: CREST / PRESTO / ACT-X application / participation permission and Table 2: CREST / PRESTO / ACT-X simultaneous application / participation permission".
- As a result of the application for "CREST", "PRESTO", and "ACT-X" in FY2022, multiple participation in research projects has been made through all competitive research funding systems operated by JST. In such cases, adjustments may be made such as reducing research expenses or selecting one research conducted by the researcher (except when the research period finishes within FY2022). In addition to the research proponent herself / himself, the subject of adjustment includes the main collaborators and other research participants in the case of application to CREST.
- **Regarding CREST "Research on Multi-sensing Biosystems and Development of Adaptive Technologies" and PRESTO "Multisensory Integration in Biological Systems" research areas, duplicate applications with AMED "Integrated understanding of multi-sensing networks and elucidation of their control mechanisms leading to the innovation of medical technologies" based on the common strategic objective, are accepted as an exception.**

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>

The Cross-ministerial R & D Management System (e-Rad) has been revised in this year. Application submission will be accepted through the new e-Rad. (Please check the detail in website, etc.).

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.

Remind point at application (3) Conflict of Interest with Research Supervisor

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 .

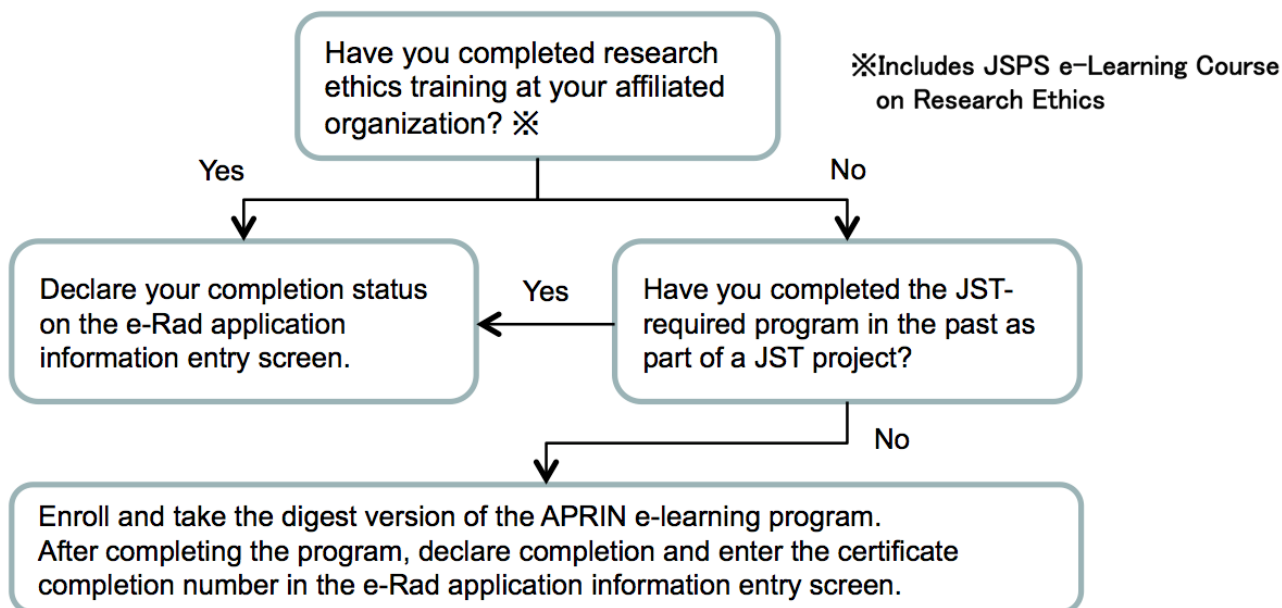
Classification of person who committed or is involved in misconduct in use of research budget	Extent of maliciousness in misconduct	Period of ineligibility for applying to competitive research fund, deemed to be reasonable
A researcher who committed a misconduct or a researcher who was in conspiracy 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
	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 competitive 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

Remind point at application (6) Equipment and Apparatuses Sharing

In accordance with the policy of the Japanese Government, it is necessary to operate a "**shared system of research equipment and apparatuses of research organization**" (hereinafter referred to as research equipment and apparatuses sharing system) in universities and national research institutes, etc. It is especially considered appropriate to share large equipment and apparatuses on competitive research funds in principle.

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 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 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

- In September 2015, the United Nations General Assembly unanimously adopted the 2030 Agenda for Sustainable Development that comprise of 17 Sustainable Development Goals (SDGs) and 169 targets. The SDGs provide the universal goals to the issues the world including Japan and the humanity faces.
- JST promotes not only the research and development (R&D) but also plans R&D strategies as well as enhance science communication, science education and open data, we are taking inclusive initiatives nationally and internationally for achieving the SDGs.



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 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

✕ Prepared 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

Selected CREST Research Director and the Lead Joint Researcher, PRESTO Individual Researcher and ACT-X Individual Researcher 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.

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>

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

- **Eligibility:** PI (affiliated in universities, etc.) of CREST, PREST (excluding exclusive appointment researchers) and ACT-X(excluding students)
- **Expenditure limit:** CREST : no more than 20% of the direct cost of each fiscal year
PRESTO: 2 million yen/year ACT-X: 0.3 million yen/year

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

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:** CREST : no more than 10% of the direct cost of each fiscal year
PRESTO: 1 million yen/year ACT-X: 0.15 million Yen/year

● Relaxation of exclusive appointment

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

Information of Call for Research Proposal

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 selection, 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/index.html> (Japanese only)

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

ACT-X <https://www.jst.go.jp/kisoken/act-x/application/index.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".

<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.



Contact and inquiries regarding application and selection

Contact information for application and selection period

- Call for Research Proposals at Strategic Basic Research Programs

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

see “What’s new”



The update is available at

- Twitter (@JST_Kisokenkyu)

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



rp-info@jst.go.jp