

FY2022

STRATEGIC BASIC RESEARCH PROGRAMS

(CREST/PRESTO/ACT-X)

Call for Research Proposals

[Application Guidelines]

Application Call Period

Tuesday April 12th ~ 12:00 (noon, Japan time) on Tuesday, June 7th : CREST

Tuesday April 12th ~ 12:00 (noon, Japan time) on Tuesday, May 31st : PRESTO, ACT-X

Note: This translation is provided as a reference material. If there is any discrepancy between this translated version and the original Japanese version, the original Japanese version prevails.



Department of Innovation Research  
Japan Science and Technology Agency

April 2022

## Overview of the Call for Research Application

### (1) Research Areas calling for Proposals

FY2022 application call and selection of research proposals are for research areas are CREST... 10 areas, PRESTO... 15 area, and ACT-X... 4 areas.

○ CREST

Research Areas	Strategic Objectives	Since
Creating innovative measurement and analysis systems aiming to solve social issues (Research Supervisor: Takashi Washio)	Innovation in measurement and analysis processes aimed at solving social issues	FY2022
Precise Material science for degradation and stability (Research Supervisor: Atsushi Takahara)	Precision control of bonding and decomposition for resource recycling	FY2021
Creation of System Software for Society 5.0 by Integrating Fundamental Theories and System Platform Technologies (Research Supervisor: Yasuo Okabe) (*A) AIP	System Software Technology to support Safety, Security, and Trust in the era of Society 5.0	FY2021
Innovation of Life Science through Digital Transformation Focused on Data-Driven and AI-Driven Technologies (Research Supervisor: Yasushi Okada) (Assistant Supervisor: Koichi Takahashi) (*A) AIP	Toward scientific discoveries through DX in life science research	FY2021
Exploring Innovative Materials in Unknown Search Space (Research Supervisor: Hiroshi Kitagawa) (*B) Japan-France Joint Proposal is called	Opening up of unexplored exploration space of materials with multi-element, composite, and metastable phases based on elements strategy	FY2021
Research on multi-sensing biosystems and development of adaptive technologies (Program Supervisor: Ryoza Nagai) (Research Supervisor: Atsushi Iriki)	Integrated understanding of human multi-sensing networks and elucidation of their control mechanisms	FY2021
Precise Arrangement towards the Functionality of Molecular Systems (Research Supervisor: Nobuo Kimizuka)	Precise arrangement toward functionality	FY2020
Integrated Devices and Systems Utilized by Information Carriers (Research Supervisor: Toshiro Hiramoto)	Information carriers and innovative device	FY2020

Core Technologies for Trusted Quality AI Systems (Research Supervisor: Akiko Aizawa) (*A) AIP (*B) Japan-France Joint Proposal is called	Trusted AI	FY2020
Spatiotemporal Dynamics of Intracellular Components (Research Supervisor: Toshiya Endo)	Functional dynamics in the cell	FY2020

\*A. In the Research Areas which belong to AIP network lab above, JST will support cooperative activities across the Research Areas to create innovation. See “5.1.4 About AIP project and AIP network laboratory” for details.

\*B. Call for joint research with ANR (France) within the framework of JST-CREST program

In the above-mentioned research areas belonging to the Japan-France joint proposal, within the framework of France's ANR (National Research Organization) and CREST, support the Japan-France collaborative research projects. For details, please refer to “5.1.6 Japan-France joint proposal for strategic research promotion project CREST with France ANR”.

○ PRESTO

Research Areas	Strategic Objectives	Since
Quantum Cooperation between Materials and Information (Research supervisor: Kensuke Kobayashi)	Creation of innovative quantum control technology through integrating quantum information and quantum materials	FY2022
Co-Creation of the transformation platform technology for human and society by integration of the humanities and sciences (Research Supervisor: Satoshi Kurihara) (*A) AIP	Creation of fundamental technologies to analyze human and society for Society 5.0	FY2022
Development of Basic Material Conversion Science for global environment (Research supervisor: Ichiro Yamanaka)	Recycling technology using a material conversion system pioneered through “Convergence of Knowledge”	FY2022
Fundamental understanding of age-related organismal transformations (Program Supervisor: MOCHIZUKI Naoki) (Research Supervisor: MIURA Masayuki)	Elucidation of the mechanisms relating to changes in biological robustness associated with aging and control of age-related diseases	FY2022
Secure bonding and gentle degradation for sustainable material design (Research Supervisor: Tadahisa Iwata)	Secure bonding and gentle degradation for sustainable material design	FY2021
New fluid science for understanding, prediction and control of complex flow and transport phenomena (Research Supervisor: Susumu Goto)	Comprehensive understanding and advanced prediction and control of complex transport phenomena	FY2021
Strengthening ICT Infrastructure for Social Change (Research Supervisor: Teruo Higashino) (*A) AIP	System Software Technology to support Safety, Security, and Trust in the era of Society 5.0	FY2021
Creation of future materials by expanding materials exploration space (Research Supervisor: Hiroshi Kageyama)	Opening up of unexplored exploration space of materials with multi-element, composite, and metastable phases based on elements strategy	FY2021
Social and technological framework for pandemic resilience (Research Supervisor: Hitoshi Oshitani)	Technology infrastructure for the post-COVID society built by "Convergence of Knowledge"	FY2021
Multisensory Integration in Biological Systems (Program Supervisor: Ryoza Nagai) (Research Supervisor: Ryohei Kanzaki)	An integrated understanding and elucidation of regulatory mechanisms for human multi-sensing networks	FY2021
Precise Arrangement of Atoms and Molecules and Its Properties and Functions (Research Supervisor: Hiroshi Nishimura)	Precise arrangement toward functionality	FY2020

Information Carriers and Their Integrated Materials/Devices/Systems (Research Supervisor: Hitoshi Wakabayashi)	Information carriers and innovative devices	FY2020
The Fundamental Technologies for Trustworthy AI (Research Supervisor: Hiroki Arimura) (*A) AIP	Trusted AI	FY2020
Function and Regulation of Plant Molecules (Research Supervisor: Kazuhiko Nishitani)	Design of plant-derived molecules building up the foundation for plant synthetic biology	FY2020
Dynamic Supra-Assembly of Biomolecular Systems (Research Supervisor: Hiroyuki Noji)	Functional dynamics in the cell	FY2020

\*A. In the Research Areas which belong to AIP network lab above, JST will support cooperative activities across the Research Areas to create innovation. See “5.1.4 About AIP project and AIP network laboratory” for details.

○ ACT-X

Research Areas	Strategic Objectives	Since
<p>Life Phenomena and Materials (Research Supervisor: Yoko Toyoshima)</p>	Elucidation of the mechanisms relating to changes in biological robustness associated with aging and control of age-related diseases	FY2022
	Integrated understanding of human multi-sensing networks and elucidation of their control mechanisms	
	Design of plant-derived molecules building up the foundation for plant synthetic biology	
	Functional dynamics in the cell	
	Development of core technology platforms for understanding spatiotemporal multicellular interaction	
	Establishing technologies for genome-scale DNA synthesis and functional expression, and creating technology seeds for material production and medical care	
	Construction of revolutionary material development methods through fusion among experiments and theory/data science	
<p>Hardware in Future for Resilience of Real Space (Research Supervisor: Shuji Tanaka)</p>	Technology infrastructure for the post-COVID society built by "Convergence of Knowledge"	FY2021
	Information carriers and innovative devices	
	Fundamental technologies for next-generation IoT (Internet of Things) to create a future smart society	
	Creation of innovative core technologies by merging material technology, device technology, and nano-system optimization technology toward the realization of information devices with ultra-low power consumption and multiple functions	
	Advanced interaction technologies within networked intelligent information environment	
	Elucidation of basic principles for innovative energy conversion, and synthesis of new materials, development of new energy harvesting devices, and other core technologies, that will contribute to the high-efficiency conversion of ambient microenergy into electricity and their new advanced applications	

AI powered Research Innovation / Creation (Research Supervisor: Yasuo Kuniyoshi) (*A) AIP	Establishment of environmentally-adaptive-plant design systems for stable food supply in the age of climate change	FY2020
	Creation of integration technology to enable utilizations of diverse and massive data using Artificial Intelligence core technologies rapidly growing in sophistication and complexity	
	Construction of revolutionary material development methods through fusion among experiments and theory/data science	
	Fundamental technologies for next-generation IoT (Internet of Things) to create a future smart society	
	Development of core technology platforms for understanding spatiotemporal multicellular interaction	
	Trusted AI	
Environments and Biotechnology (Research Supervisor: Nobuhiko Nomura)	Establishment of environmentally-adaptive-plant design systems for stable food supply in the age of climate change	FY2020
	Establishing Technologies for Genome-scale DNA Synthesis and Functional Expression, and Creating Technology Seeds for Material Production and Medical Care	
	Design of plant-derived molecules building up the foundation for plant synthetic biology	

\*A. In the Research Areas which belong to AIP network lab above, JST will support cooperative activities across the Research Areas to create innovation. See “5.1.4 About AIP project and AIP network laboratory” for details.

## (2) Call and Selection Schedule

The FY2022 schedule for the acceptance and selection of research proposals is shown in the following table.

Note that application deadline of CREST and PRESTO/ACT-X is different.

	CREST	PRESTO/ ACT-X
Research proposal acceptance begins	<u>April 12<sup>th</sup> (Tue), 2022</u>	
Application deadline (Deadline for submitting applications through the e-Rad system)	<b><u>12:00 (noon, Japan time) on Tuesday, June 7<sup>th</sup> (No delays accepted)</u></b>	<b><u>12:00 (noon, Japan time) on Tuesday, May 31<sup>st</sup> (No delays accepted)</u></b>
Document screening period	Early June – Late July	
Notification of document screening results	Early July – Late July	
Interview screening period	Late July – Early August	
Notification/announcement of selected Research Projects	Late September	
Research Start	October or After	

\*The underlined dates are final, but all others are expected dates. They are subject to change.

\*The schedule of explanatory meeting, document screening and the interview selection will be announced on the following website as soon as determined:

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

Applicants proceeding to interview-screening are noticed by email within a week after the document-screening of Research Proposals conducted by the Research Supervisor and are requested to prepare ‘materials for the review’ (The notice would not be sent in written document). The notice will be sent to the e-mail addresses of the applicants registered in the e-Rad system, therefore, please make sure that your registered e-mail address works properly being in a status capable of receiving an e-mail from JST. To applicants, where research proposals are regrettably rejected as a result of the document-screening, the result will be sent in in written document from JST after approximately a week after the document-screening as a standard. Applicants who have high possibility to pass the interview review will be noticed by phone or email by August 30th (Tue) from JST to check the availability to conclude contract with your institute and JST.



### (3) Submission of Research Proposal

Please download the documents needed for research application including application form from the “Call for Research Proposals” website. Some of the application forms are customized according to the Research Area so please make sure that you have downloaded the application form from the website of Research Area which you are going to apply.

Research proposal applications are processed by the e-Rad system (<https://www.e-rad.go.jp/>). As the application deadline approaches, heavy demands on the e-Rad system could slow down the application processing speed and even cause the application deadline to be missed. Please give yourself enough time to complete submission of proposal. **Withdrawal of the application is strictly prohibited after the deadline. JST will not accept proposals, which the application process have not been completed in the e-Rad system by deadline for any reason.** Please note that JST may give direction **on the “Call for Research Proposals” website** in case such as cause of e-Rad system trouble which untenable to submit the application during the application call period.

The name and affiliation of applicant in the e-Rad system and those given in research proposal should be matched (In case it differs, the research proposal will be considered as official). The application of a research proposal is not received by the e-rad system if it contains serious defects, which make the review of proposal difficult, including the lack of application form 1 (cover sheet of research proposal), serious character corruptions, and omissions of important items of the application forms.

**JST is not responsible for any defects in allocation forms of a research proposal, which may be caused by any reasons before submission deadline, regardless of its status of receipt.** JST asks, therefore, all research proposal applicants to understand that we will not require them to make any revisions of their research proposals, obtaining their consents on correction in advance before research proposal submission deadline.

Please refer to the following website and Chapter 8, 9 and 10 of this application guideline regarding submission of research proposal and items to be considered in application.

- Strategic Basic Research Programs: Call for Research Proposals > Call for Proposals

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

- The way to apply the Research Proposal :

e-rad user manual; [https://www.e-rad.go.jp/en/manual/for\\_researcher.html](https://www.e-rad.go.jp/en/manual/for_researcher.html)

- The items to be considered in application:

“Chapter 8 Key Points in Submitting Proposals” and

“Chapter 9 Limitations on Multiple Applications within the Strategic Basic Research Programs.”



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## **Chapter 1. Introduction to the Call for Research Proposals**

### **1.1 Purpose and Overview of Strategic Basic Research Programs**

#### **1.1.1 Purpose of the Programs**

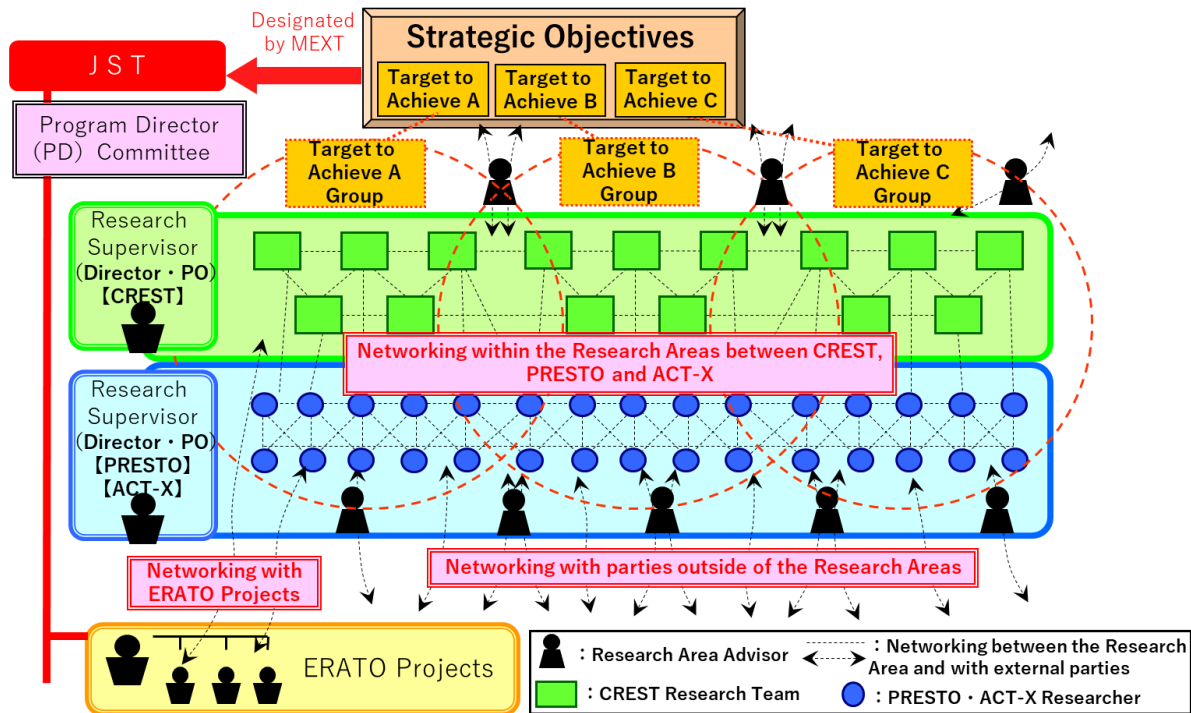
The purpose of Strategic Basic Research Programs is to advance strategic basic researches and create the seeds of innovative technologies, based on new scientific knowledge which will give rise to scientific and technological innovations leading to the social and economic transformation. We are eagerly awaiting applications and participation of researchers, who are valiantly undertaking their challenging research creating top innovation from excellent basic science, in our programs.

#### **1.1.2 Overview of the Programs**

Based on the national government's science and technology policies and social and economic needs, under "Strategic Objectives" prescribed by the Ministry of Education, Culture, Sports, Science and Technology, JST establishes Research Areas to pursue and assigns Research Supervisors (Program Officers) to lead the Research Area. The Research Supervisor pursues strategic basic research aiming at creating the seeds of innovative technologies that will give rise to science and technology innovations leading to the achievement of solutions for the Strategic Objectives.

Research Supervisors of JST consider and propose management policies and system reforms for each Strategic Basic Research Program. For "CREST" (Research projects pursued by research teams led by Research Directors), "PRESTO" and "ACT-X" (Research projects pursued by individual researchers), JST establishes Research Areas and assigns Research Supervisors (Program Officers) based on prior evaluations by Program Directors.

The Research Supervisor oversees his/her Research Area as a "research institute." More specifically, the Research Supervisor acts as the lab director, builds a finite-period system for conducting research by organizing a research project and constructing an optimal organization connecting researchers from existing institutions and research fields—from industry, academia, and government—and, enlisting the cooperation of Research Area Advisors and others, oversees work in the Research Area to achieve Strategic Objectives. CREST Research Directors and PRESTO/ACT-X Individual Researchers are obliged to conduct research projects proposed by them under the Research Area management policy of their Research Supervisor, while being supported by him/her, and to have dialogs with their Research Area Advisors and build communication networks of researchers, domestically and internationally, to find a possible scheme of developing their research science and technology innovations.



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

- Strategic Objectives
    - The National Government (Ministry of Education, Culture, Sports, Science and Technology) prescribes Strategic Objectives based on national science and technology policies and social/economic needs.
    - Approx. three “Targets to Achieve” are presented for realizing each Strategic Objective
  - Program Director Committee
    - Presentation and sharing of research institutes’ cross-program operational policies
    - Preliminary evaluations of new Research Areas and Research Supervisors
    - Determinate most appropriate distribution of resources and promotes/coordinates collaborations across Research Areas
- \*Set the Research Area within the coverage of CREST, PRESTO, or ACT-X (include two or more or compound areas).
- Research Supervisor (Program Officer)
 

With the aims of creating innovation and achieving Strategic Objectives,

    - Formulates and shares operational policies for Research Areas and manages the Research Area in cooperation with the Research Area Advisors (including selection/evaluation of research projects);
    - Provides leadership and support to create networks inside/outside his/her Research Area to promote science and technology innovation.

## 1.2 For Researchers Considering Applying or Participating in the Programs

### 1.2.1 Contribution to the accomplishment of sustainable development goals (SDGs)

#### **JST to contribute to the accomplishment of SDGs!**

At the "United Nations Sustainable Development Summit" held in September 2015, "Transforming our world: the 2030 Agenda for Sustainable Development" was unanimously adopted; the document was an achievement with "SDGs" at the core as a further comprehensive and new action target common to the world for the human beings, the Earth, and the welfare. The seventeen goals in the SDGs do not only indicate various problems in relation to the sustainability that is facing the humankind but also demand that those problems be solved comprehensively and in an integrated way. It is expected that scientific and technological innovation solves such social problems and that scientific evidence is provided to contribute to the formulation of excellent policies. We can say that these roles conform to "the science in the society and the science for the society," a new task of the science that was declared in "World Declaration on Science and the Use of Scientific Knowledge" (Budapest Declaration\*), adopted at International Council for Science in 1999. As a core organization to promote the science and technology policies in Japan, JST promotes advanced fundamental research and works on the research and development of a problem-solving type to meet the requests from the society. SDGs are one of the worldwide objectives that can itemize all JST missions. We, in the course of the JST programs, want to collaborate with industries, academia, government agencies, and private enterprises and cooperate with researchers to realize a sustainable society.

President, Japan Science and Technology Agency (JST)

\*The Budapest Declaration states that "science for knowledge," "science for peace," "science for development," and "science in society and science for society" are the responsibilities, challenges, and obligations of the science in the 21st century.

○For SDGs, the endeavors of JST, etc., access the following website.

<https://www.jst.go.jp/sdgs/en/actionplan/index.html>



 **SUSTAINABLE DEVELOPMENT GOALS**



## 1.2.2 Promotion of Diversity

### **JST Promotes Diversity!**

The diversity is essential requisite for promotion of scientific and technological innovations. It is possible to open a new perspective of science and technology by the collaboration and discussion with various stakeholders having different specialties and values, irrespective of gender and nationality.

JST is, by promoting advances in diversity in its all activities in science and technology, undertaking possible problems of our future society, contributing to the strengthening of industrial competing power of Japan as well as to the enrichment of spiritual happiness of people. Our activities in this field accord with the “Sustainable Development Goals (SDGs)” agenda of the United Nations, in which goals relevant to diversity advancement are shown, including gender equality, contributing to efforts on our domestic problems but also to those on problems common to various countries.

Currently, the activity of woman is being positioned at the core of the Growth Strategy of the Japanese Government, being started as “the largest potential of Japan” in the strategy paper. Expanding the participation of woman researchers in research projects is substantially important for advancing research and development, as they are a party of various researchers supporting science and technology innovations. JST is expecting that woman researchers would take this opportunity, positively and will apply to our Strategic Basic Research Programs, actively. JST is undertaking the improvement of our “Childbirth, Child-raising, Nursing Care Support System”, to constantly, based on the voice of the system users, creating environments enabling a researcher on leave to return his/her research, for example.

The call for and review of research proposals will be conducted also from a viewpoint of advancing diversity. Our dear researchers, we cordially invite you to the call for research proposals of the Strategic Basic Research Programs.

President, Japan Science and Technology Agency (JST)

### **We Are Waiting for Your Application!**

JST is promoting diversity in research, based on our perspective that the diversity is for understanding of other researchers having ideas different from yours, and for creation of new values by combining your and their ideas. The diversity thus has potentials to give solutions not only to the domestic problems but also to problems common in all nations across the world. Therefore, JST is undertaking the societal problem of the globe such as the Sustainable Development Goals (SDGs), through the promotion of diversity in research, collaborating with foreign institutions.

JST is promoting the diversity by ensuring the activities of women researchers, of course young researchers, and foreign researchers having foreign citizenship. To ensure that each researcher is fully able to exercise his/her skills, JST is providing continual supports for childbirth, childcare, and homecare of elderly relatives, and also endeavoring to maintaining a balanced membership composition in committees and alike. JST especially welcomes the application of women researches to our program, from whom we cannot have so many research proposals in previous years, to realize environments where various kinds of researcher can work, cooperating and competing with each other. Through these activities, JST is pursuing the creation of new values.

We are sincerely waiting for your active applications, especially those from woman researchers.

Director of the Office for Diversity and Inclusion  
Department of Developing Human Resources for R&D Programs  
Japan Science and Technology Agency (JST)

JST is implementing supportive measures to assist researchers to balance between their research work and life events (childbirth, childcare, care giving, etc.) with the aim of enabling researchers to continue their R&D work without interrupting their careers due to a life event (gender equality, expenses assistance that can be used to advance R&D being conducted by the researcher in question or to reduce his or her financial burden) or temporarily suspend their careers, enabling them to resume their R&D activities as soon as it becomes possible for them to do so. JST also presents role models for female scientists. For details, please refer to the websites below.

Activities to promote diversity in CREST and PRESTO

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

Guidelines for operating research funds in the event of a life event for the principal investigator, etc.

<https://www.jst.go.jp/kisoken/crest/nadeshiko/index.html> (In Japanese)

Childbirth / child-rearing / long-term care support system

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

PRESTO startup support system

Furthermore, we accept applications for the research environment preparation cost at the time of selection or during a research period so that the PRESTO researchers can continue their research autonomously. Details will be announced after the selection.

### 1.2.3 Toward the Promotion of Fair Research

#### **Toward the Promotion of Fair Research**

Recent incidents involving misconduct and dishonesty in research activities have resulted in an alarming situation that threatens the relationship of trust between science and society, and hinders the healthy development of scientific technologies. To prevent misconduct in research activities, there must be a function of autonomous self-purification in the scientific community. Each researcher must strictly adhere to strict discipline and work to create new knowledge and inventions that are useful for society, based on high moral standards that meet the expectations of society.

As a funding agency for research, the Japan Science and Technology Agency (JST) considers research misconduct to be a grave issue and makes every effort to prevent it in cooperation with relevant organizations, with the goal of regaining public trust.

1. JST believes that honesty in research activities is extremely important for Japan, which seeks to develop itself through science and technology.
2. JST supports honest and responsible research activities.
3. JST strictly condemns any misconduct in research activities.
4. JST will promote education in research ethics and reform its research funding programs in cooperation with relevant organizations, in order to prevent misconduct.

We must develop a healthy scientific culture based on social trust, so as to build a society filled with hopes and dreams for a bright future. We therefore request the continued understanding and cooperation of the research community and related institutions.

President, Japan Science and Technology Agency (JST)

## **Chapter 2 CREST Program**

### **2.1 CREST**

#### **2.1.1 CREST Overview**

Key points and characteristics of CREST are described as follows.

- a. CREST is a network-type research (team type) for the purpose of promoting unique fundamental research at an internationally high level for overcoming important problems facing Japan and producing creative, conspicuous, and innovative technology seeds (new technology seeds) to contribute highly to the science and technology innovation, which will renovate the society and economy. Under the management principles in the Research Area selected by the Research Supervisor, the best teams led by top-level researchers in Japan, also selected by the Research Supervisor, conduct research to achieve the Strategic Objectives and train the young researchers participating in a team while advancing research.
- b. The Research Supervisor manages a network type research institute with lead joint researchers from industrial, academic, or government institutions. The Research Supervisor manages a Research Area as a research institute. The Research Supervisor, in his/her role as director of a research institute, enlists the cooperation of Research Area Advisors and others in managing his/her Research Area through the following activities.
  - Specification of a management direction for his/her Research Area
  - Research projects selection
  - Refinement and approval of research plans (including research costs and assembly of the research team)
  - Participate in Research Area meetings at which Research Directors report on their research progress and have their results discussed, visits to labs where research is being performed, and have other opportunities to communicate with Research Directors and provide them with advice and guidance on their efforts.
  - Research project evaluation
  - Other necessary activities
- c. A Research Director can bring multiple researchers together in a team that is optimal for pursuing the Research Director's proposed research initiative. A Research Director advances research that will contribute to the overall purposes of the Research Area, while bearing full responsibility for the research project he/she is leading.

#### **2.1.2 CREST Research Team Organization**

A Research Director can assign multiple researchers to organize an optimal research team.

- a. The person proposing a research project, i.e. the Research Director, is able to organize a research team – the Research Director's Group – consisting of individuals from only his/her research lab, and when pursuing a research initiative that requires it, a research team can include a group ("joint research group") of researchers or other personnel from research labs or research institutions other than his/her research lab.

- b. Among researchers comprising a research team, those representing a "joint research group" are referred to as "Lead Joint Researchers."
- c. When necessary for the pursuit of research, researcher staff, research assistants, and other personnel may be employed within the research budget and allowed to participate as members of the research team.
  - ※ For more details on research team organization requirements, please refer to "2.2.6 Proposal Submission Requirements."

### **2.1.3 CREST Flow from Research proposal to Selection**

#### **(1) Call and Selection of Proposals**

JST calls for research proposals for individual Research Areas specified among the Strategic Objectives designated by the national government. Selection of proposals is made by the Research Supervisor, with the cooperation of Research Area Advisors and others, for individual Research Areas.

- ※ For more details, please refer to "2.2 Call and Selection of Proposals" and "5.1 Common Issues in the Call and Selection of Proposals".

#### **(2) Research Plan Preparation**

Once a research proposal has been selected, the Research Director prepares an overall research plan covering the entire period of the research project. The Research Director also prepares annual research plans for each year of the project.

Research plans cover budgets and research team composition.

- ※ For more details, please refer to "5.2.1 Research Plan Preparation."

#### **(3) Collaborative Research Agreement**

Once a research proposal has been accepted, JST will enter into Collaborative Research Agreement with the research institutions with which the Research Director and Lead Joint Researchers are affiliated.

- ※ For more details, please refer to "5.2.2 Collaborative Research Agreement"

## **2.2 Call and Selection of Proposals**

### **2.2.1 Eligible Research Proposals**

- (1) Research proposals are called for the 10 Research Areas mentioned in the section, “(1) Research Areas calling for Proposals” in “Overview of the Call for Research Application”.
- (2) Carefully read the “Research Area Outline” for each of the Research Areas mentioned in “Chapter 6 Policy of Research Areas Calling for Proposals” and the “Research Supervisor’s Policy on Calls for Application, Selection and Management of the Research Area” before proposing a research proposal appropriate for one of the Research Areas.
- (3) Be certain to confirm important common items described in “Chapter 5 Common Issues in the CREST, PRESTO, and ACT-X Programs.”

### **2.2.2 Submission Period**

**Tuesday, April 12<sup>th</sup> to 12:00 (noon, Japan time) on Tuesday, June 7<sup>th</sup>, 2022(No exceptions).**

For information on schedules for calls for proposals, etc., please refer to "(2) Call and Selection Schedule" in “Overview of the Call for Research Application”.

### **2.2.3 Research Period**

The research period will be five and a half years or less, starting in October 2022 and ending in March 2028 (i.e. end of 6<sup>th</sup> fiscal year) or earlier.

※ Actual research periods depend on research project plans. For more details, please refer to “5.2 Common Issues in Post-selection: Procedure of Research Work”.

### **2.2.4 Research Budgets**

The budget for one research team basically ranges from 150 million yen to 500 million yen (for entire research periods up to five and a half years). In some cases, the Research Areas may have independently established budget ranges, so be certain to refer to “Chapter 6 Policy of Research Areas Calling for Proposals” for details. In addition, JST, under Collaborative Research Agreement, pays research institutions funds up to 30% of the research budget (direct cost) to cover overhead (indirect cost).

※ Proposed research budgets are examined in the selection process. Actual research budgets are determined through examination and approval of research project planning. For more details, please refer to “5.2 Common Issues in Post-selection: Procedure of Research Work”.

### 2.2.5 Number of Research Projects

Three to eight research projects shall be selected for each Research Area. (The number for any particular Research Area will vary depending on research intent, conditions with regard to research proposals, and budget limitations.)

### 2.2.6 Proposal Submission Requirements

Proposal submission requirements are as presented below in items (1), (2) and (3).

Please ensure you understand these requirements for your submission.

- ※ In principle, if the determination is made that a submission does not meet the requirements by the time of selection, the research proposal will either not be accepted or not be selected.
- ※ If a research proposal is selected, the research project must maintain its qualified status as per the submission requirements for the entire duration of the period of research. If the research project fails to meet the requirements during the research period, the research project will in principle be completely or partially suspended (i.e. be terminated early).

When submitting a proposal, please understand the following the points (1) through (3) below, and described in “Chapter 8 Key Points in Submitting Proposals” and “Chapter 9 Limitations on Multiple Applications within the Strategic Basic Research Programs”.

#### (1) Requirements for Research Project Applicants

a. 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.)

※ The following types of individuals may also submit research project proposals.

- Researchers who have foreign citizenship, but who are affiliated with a domestic Japanese research institution.
- Researchers who are not currently affiliated with a research institution, or are affiliated with an overseas research institution, and, if selected as a Research Director, will be able to organize and pursue research as a researcher affiliated with a domestic Japanese research institution. (Nationality will not be considered.)

※ This also covers those affiliated with private sector companies and other non-university research institutions.

b. 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.



※ For more details, please refer to “5.2.6 Responsibilities of the Research Director, Lead Joint Researchers and Individual Researchers following Approval.”

c. 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.

※ For details, refer to “8.31 Enrolling in and Completing the Educational Program on Research Integrity.”

d. The applicant must pledge to the following four items upon submission.

- Understand and comply with the “Guidelines for Responding to Misconduct in Research” (decided by the Minister of Education, Culture, Sports, Science and Technology on August 26, 2014).
- Understand and comply with the “Guidelines for the Management and Audit of Public Research Funds in Research Institutions (Practice Standards)” (decided by the Minister of Education, Culture, Sports, Science and Technology on February 15, 2007; revised February 1, 2021).
- If the research proposal is selected, the Research Participants (Research Director, Lead Joint Researchers, Researches to proceed the research, Engineers, Research Assistants, Students and etc.) must not engage in misconduct in their research (fabrication, falsification, and plagiarism) nor in inappropriate and unlawful use of research funds.
- No misconduct in research occurred as part of past research achievements mentioned in the submitted research proposal.

※ The pledges above will be confirmed in the submission process through e-Rad.

## (2) Requirements for Organizing a Research Project

The following requirements must be met. Please refer to item (1) d. in “5.1.3 Selection Perspective”.

- a. A research team is optimally organized for pursuing the research initiatives of the research project applicant, who will be the Research Director.
- b. 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.

If it is recognized that it is essential for a research institute overseas to participate in a research as a joint research group (a researcher belonging to the research institution overseas participates in the research as a joint researcher) to fulfill the concept of the research, the research cost of the research group can be funded by JST. If you want to compose a research team involving a research institute overseas (which requires approval by the research supervisor), describe the reasons that the joint researcher belonging to a research institute overseas is required in your research proposal (CREST - Form 4-2). Further, even in a proposal that assumes that JST funds the research cost, separately describe a plan for cooperation with the group in the proposal (CREST - Form 4-2) in case where a contract is not concluded.

In addition, the research institutions overseas must, in principle, enter a contract with JST based on the terms and conditions presented by JST. In some cases, the Agreement text may be adjusted for those items for which a rational reason is recognized, considering the special characteristics of the research or the like. However, the period of adjustment shall in principle be up to three months from the time JST begins negotiations. In addition, please understand that the researcher themselves may be required to make explanations to the manager in charge of the Agreement at the overseas research institution.

Please fill-in (CREST - Form 11) the contact information about the responsible person at the research institution overseas who is in charge of contracts. Additionally, submit the Form of Consent by the date of your interview, to check if the main terms and conditions of the contract are accepted.

#### Prior Confirmation

[https://www.jst.go.jp/kisoken/boshuu/teian/koubo/2022\\_prior\\_confirmation\\_en.docx](https://www.jst.go.jp/kisoken/boshuu/teian/koubo/2022_prior_confirmation_en.docx)

See also "5.2.7 Responsibilities of Research Institutions". It will be necessary to share the information about intellectual property rights created by CREST, including the research institution overseas. If a research contract is not concluded within the period of adjustment, and the plan for cooperation is not foreseeing, we may cancel our selection.

※For the template of the research contract for organizations overseas, access the following website.

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

### (3) Research Institution Requirements

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. Research Institutes that cannot accomplish the tasks described in “5.2.7 Responsibilities of Research Institutions” will not be enjoined to implement research;

thus, when applying, prior consent of the Research Institution at which the implementation of research is planned must definitively be obtained.

## **Chapter 3 PRESTO Program**

### **3.1 PRESTO**

#### **3.1.1 PRESTO Overview**

Key points and characteristics of PRESTO are described as follows.

- a. PRESTO is a network-type research (individual type) for promoting the unique and challenging fundamental research with leading purposes estimated to develop into an internationally high level for overcoming important problems facing Japan and producing creative and innovative technology seeds (new technology seeds) to be a source for the science and technology innovation, which will renovate the society and economy as a world-wide precursor. Under the management principles in the Research Area selected by the Research Supervisor, the young researchers selected by the Research Supervisor form a network with researchers in different Research Areas to promote a challenging individual-type research that is only accomplished by such young researchers.

- b. The Research Supervisor manages individual researchers and oversees the Research Area in a research institute.

The Research Supervisor, in his/her role as director of a research institute, enlists the cooperation of Research Area Advisors and others in managing his/her Research Areas through the following activities.

- Specification of a management direction for his/her Research Area
- Research project selection
- Refinement and approval of research plans (including research costs)
- Holding Research Area meetings at which Individual Researchers report on their research progress and have their results discussed, visit to labs where the research is being performed, and has other opportunities to communicate with Individual Researchers and provide them with advice and guidance on their efforts.
- Research project evaluation
- Other activities necessary to support research activities in various ways

- c. Individual Researchers, in pursuing the research initiatives they have proposed, and taking responsibility for implementing their own research projects, pursue research that will contribute to the overall purposes of the Research Area.

#### **3.1.2 PRESTO Research Organization**

- a. The researcher will pursue his/her research as an individual (alone). (However, if necessary, a research assistant may be appointed and paid for within the research budget.)
- b. JST conducts activities necessary for research such as improvement of research environments, research-related public relations and outreach activities.
- c. Researchers are requested to conduct research at their affiliated institutes in principle. It is possible to perform research work outside of their affiliated research institute and for this case, JST will conclude a contract with the institute which expends the research budget (individual researchers are requested to prepare place to conduct

research with permission of both the researcher's affiliated institution and the research performing institution concerning these matters as prerequisite).

- d. If researchers with no affiliation could find out a host institution and prepare research environment to conduct their research, JST will employ them as a "PRESTO-Researcher (JST employed)" and permit to perform research activity at the host institution (only Japan Domestic Research Institute) after strict review process of JST. These researchers are requested to conclude a pre-permission with host institution that they are employed by JST as "PRESTO-Researcher (JST employed)" and the host institution is required to conclude job assignment contract with JST.

If the applicant is a member of CREST/ERATO research (except Research Director, Lead Joint Researcher), they are permitted to continue their CREST/ERATO/ACCEL research after review of JST.

It is requested to refer to "3.2.7 Researcher Appointment Types" for detail condition.

### **3.1.3 PRESTO Flow from Research proposal to Selection**

#### **(1) Call and Selection of Proposals**

JST calls for research proposals for Individual Research areas specified in the Strategic Objectives designated by the national government. Selection of proposals is made by the Research Supervisor, with the cooperation of Research Area Advisors and others, for individual Research Areas.

※ For more details, please refer to "3.2 Call and Selection of Proposals", "5.1 Common Issues in the Call and Selection of Proposals".

#### **(2) Research Plan Preparation**

Once a proposal has been selected, the researcher prepares an overall research plan covering the entire period of the research project. The researcher also prepares annual research plans for each year of the project. Research plans cover budgets and research approach.

※ For more details, please refer to "5.2.1 Research Plan Preparation."

#### **(3) Collaborative Research Agreement**

In advancing a research project, JST will enter into a Collaborative Research Agreement with the research institution

where the researcher will pursue research work.

※ For more details, please refer to "5.2.2 Collaborative Research Agreement".

## **3.2 Call and Selection of Proposals**

### **3.2.1 Eligible Research Proposals**

- (1) Research proposals are called for the 6 Research Areas mentioned in the section, “(1) Research Areas calling for Proposals” in “Overview of the Call for Research Application”.
- (2) Carefully read the “Research Area Outline” for each of the Research Areas mentioned in “Research Supervisor’s Policy on Calls for Application, Selection and Management of the Research Area” of “Chapter 6 Policy of Research Areas Calling for Proposals” before proposing research appropriate for one of the Research Areas.
- (3) It is requested to confirm important common items described in “Chapter 5 Common Issues in the CREST, PRESTO, and ACT-X Programs.”

### **3.2.2 Submission Period**

**Tuesday, April 12<sup>th</sup> to 12:00 (noon, Japan time) on Tuesday, May 31<sup>st</sup>, 2022 (No exceptions).**

For information on schedules for briefings, calls for proposals, etc., please refer to "(2) Call and Selection Schedule" in “Overview of the Call for Research Application”.

### **3.2.3 Research Period**

The research period will be three and a half years or less, starting in October 2022 and ending in March 2026(i.e. at end of fourth fiscal year) or earlier.

※ Actual research periods depend on research project plans. For more details, please refer to “5.2 Common Issues in Post-selection: Procedure of Research Work.”

### **3.2.4 Research Budgets**

The budget for one research project basically ranges from 30 million yen to 40 million yen (for entire research periods up to three and a half years, refer to Chapter 6 for detail budget information). In addition, JST, under Collaborative Research Agreement, pays research institutions funds up to 30% of research budget (direct cost) to cover overhead cost (indirect cost).

※ Proposed research budgets are examined in part of the selection process. Actual research budgets are determined through examination and approval of research project planning. For more details, please refer to “5.2 Common Issues in Post-selection: Procedure of Research Work.”

### **3.2.5 Number of Research Projects**

Approximately, 10 research proposals are planned to be selected for each Research Area.

※ The number of proposals selected may vary depending upon budgetary and other factors.

### **3.2.6 Proposal Submission Requirements**

Requirements for those submitting proposals are discussed below.

Please ensure you understand these requirements for your submission.

- In principle, if the determination is made that a submission will not fulfill the requirements by the time of selection, the research proposal will either not be accepted or not be selected.
- If a research proposal is selected, the Research Project must maintain its qualified status as per the submission requirements for the entire duration of the period of research. If the Research Project fails to meet the requirements during the research period, the Research Project will in principle be completely or partially suspended (i.e. be terminated early).

When submitting a proposal, please proceed it with following the points (1) through (3) below and description in “Chapter 8 Key Points in Submitting Proposals” and “Chapter 9 Limitations on Multiple Applications within the Strategic Basic Research Programs.”

#### (1) Requirements for Research Project Applicants

- a. A research project applicant must be a person himself/herself who is going to be an Individual Researcher.
- b. A research project applicant must be a proposer of the subject research initiative and be the researcher who will independently perform research work in pursuit of the research initiative.
  - ※ A researcher who can adequately undertake individual research in accordance with the purpose of PRESTO research qualifies as an applicant even if the researcher is affiliated with a laboratory of a business firm.
- c. Research project applicants must hold Japanese citizenship or be a foreign researcher who will pursue research work within Japan.

##### - Researchers holding Japanese citizenship:

For proposals to perform research work at an overseas research institution, it must be possible for the subject research institution to enter into a Collaborative Research Agreement with JST, and, when JST specifies expenditure guidelines, it must be possible to properly undertake expenditures in accordance with the specified expenditure guidelines. For more details, please refer to the next item (3) and the Q&A section at the end of this volume.

##### - Foreign researchers who will pursue research work within Japan:

Once selected, it will be necessary to perform the proposed research work at a domestic Japanese research institution and it must be possible to perform the proposed research work at a domestic Japanese research institution through the conclusion of PRESTO research. It will also be required that administrative tasks be handled in the Japanese language (or that the researcher’s working environment allow for this.)

- ※ Japanese researchers who will perform their research work at an overseas research institution and foreign researchers who will perform their research work at a domestic Japanese research institution needs to pay attention to the items below;
  - Visas, visa renewals, visa changes, etc. should be arranged by each researcher. Failure of a researcher to properly meet visa requirements may result in the rejection of a research proposal or the suspension of his/her research project.
  - In the event that an Individual Researcher is subject to the export restriction due to the Foreign Exchange and Foreign Trade Act, measures will be taken including the non-adoption of his/her research proposal or the cancellation of the research project etc.
- d. The researcher is a person who can take responsibility for his/her PRESTO research project throughout the entire research period overseeing it to its completion.
  - ※ For more details, please refer to “5.2.6 Responsibilities of Research Director, Lead Joint Researchers, and Individual Researchers following Approval”.
- e. The applicant must either: Have already completed the educational program for research integrity at his/her affiliated research institution; or completed the JST-provided educational program by the application deadline.
  - ※ For more details, please refer to “8.31 Enrolling in and Completing the Educational Program for Research Integrity”.
- f. The applicant must pledge following four items upon submission.
  - Understand and comply with “Guidelines for Responding to Misconduct in Research” (decided by the Minister of Education, Culture, Sports, Science and Technology on August 26, 2014).
  - Understand and comply with “Guidelines on Management and Audit of the Public Research Expenses in Research Institutions (Implementation standards)” (decided by the Minister of Education, Culture, Sports, Science and Technology on February 15, 2007; revised February 1, 2021).
  - If the research proposal is accepted, the Individual Researcher must not engage in misconduct in their research (fabrication, manipulation, and plagiarism) nor in inappropriate usage of research funds.
  - The research project applicant must not have engaged in misconduct in the past to achieve the research results that are mentioned in the submitted research proposal.
  - ※ The above verification will be part of the e-Rad Submission Information Entry screen.

(2) Requirements for Research Institutions Conducting PRESTO Research

- a. Research institutions conducting PRESTO research (research institutes with which the selected Individual Researchers are affiliated or the research institutions with which Individual Researchers (JST employed) are



pursuing their projects) must fully recognize that the research funds are public funding, ensure compliance with related law, and make efforts to implement the research effectively. Research institutes that cannot accomplish the tasks described in “5.2.7 Responsibilities of Research Institutions” will not be enjoined to implement research; thus, when applying, a prior consent of the research institution at which the implementation of research is planned shall definitively be obtained. (As for “PRESTO-Researcher JST employed”, your host institution will be requested to conclude job assignment contract with JST. A pre-permission of your host institution is required concerning this matter. When you are going to ask for an approval in advance, fill in a separate form, "PRESTO-Researcher (JST employed)," and submit it from e-Rad when you submit your application form. Please also refer to “3.2.7 Researcher Appointment Types”.)

### (3) Requirements for Performing Research Work at an Overseas Research Institution

#### a. Need to be a joint appointment researcher

**From the viewpoint of safety and health management, Exclusive appointment researchers are limited only from domestic research institutions, and not from overseas research institutions.**

#### b. Reason for carrying out research in overseas research institution (PRESTO-Form 7)

In the case that research is carried out at an overseas research institution etc., you are requested to complete Form 7 in the research proposal, stating the reasons why you wish to carry out the research overseas. In the case that approval of the Research Supervisor cannot be obtained during the screening period, Measures will be taken including the non-adoption of the research proposal or the cancellation of the research project etc. (These measures may be taken even after the approval of research proposal according to the decision of the Research Supervisor or JST.)

1. The necessity in realizing the research concept of the researchers
2. The necessity of using the overseas research institution in question

#### c. The research contract forms stipulated by JST

In principle, research institutes shall conclude research contracts with content proposed by JST. The research institutions overseas must, in principle, enter a contract with JST based on the terms and conditions presented by JST. The period of adjustment is limited to three months from the start of negotiations by JST (In some cases, the terms of the contract may be adjusted for items with rational reason, taking into consideration the characteristics of the research plan). Researcher may be required to provide explanations of the contract to the person in charge of the contract at the overseas research institution.

For that purpose, describe the contact information about the manager at the department or division of the research institution overseas in charge of contracts and submit another form\* (see the below), by the date of your interview, that states whether an approval has been made in advance. If a research contract is not made and

the plan for cooperation is not foreseeing, we may cancel our adoption. When it is difficult to conclude the contract within the adjustment period after adoption, we will cancel the negotiations.

\*another form (Manager's approval in advance)

[https://www.jst.go.jp/kisoken/boshuu/teian/koubo/2022\\_prior\\_confirmation\\_en.docx](https://www.jst.go.jp/kisoken/boshuu/teian/koubo/2022_prior_confirmation_en.docx)

Regarding this matter, please submit a letter of prior consent by person in charge of contract in the foreign institute based on JST format (provided later) to JST before interview phase.

※ Please refer following URL for a format of research contract with foreign institutes.

<https://www.jst.go.jp/kisoken/boshuu/teian/top/ryoiki.html>

Please also refer to “5.2.7 Responsibilities of Research Institutions” for the detail of conclusion of Collaborative Research Agreement.

### 3.2.7 Researcher Appointment Types

PRESTO Researchers conduct their respective PRESTO projects in either type a or b as below.

a. Type a appointment type is for Individual Researchers conducting their PRESTO research at their affiliated institutions, (at new research institution or at new company if the affiliation changes at the start of PRESTO research). It is also possible to conduct PRESTO research at other research institutions, which is different from the affiliated institution. JST concludes PRESTO contract with the institution where researchers use PRESTO research fund (in this case, researchers need to prepare research environment for PRESTO research and conclude agreement with the institution).

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

b. Type b appointment type is for Individual Researchers who are not affiliated with either a research institution or a company, or who must resign their current positions to conduct research. In this appointment, JST employs individuals as “exclusive appointment PRESTO researchers”. JST and the research institutions receiving the Individual Researchers conclude a job assignment contract as of the start date of their employment, as a general rule. In addition, JST and the research institutions conclude a contract Collaborative Research Agreement based on the description in “5.2.2 Collaborative Research Agreement”.

**From the viewpoint of safety and health management, Exclusive appointment researchers are limited only from domestic research institutions, and not from overseas research institutions.**

Under certain conditions, exclusive appointment PRESTO researcher is able to use some of their efforts pursuing PRESTO research for self-motivated research activities and/or activities that will improve their research and

management capabilities, while using funds from PRESTO for personnel expenses. Please see the following for more information.

○"Self-motivated Research Activities by Young Researchers Employed with Competitive Research Funds (contact)" (April 10, 2020)

<https://www.jst.go.jp/osirase/2020/pdf/20200414.pdf>

○Measures for Strategic Basic Research Programs (CREST, PRESTO, ACCEL, ACT-X) related to the "Implementation Guidelines for Self-motivated Research Activities by Young Researchers Employed with Competitive Research Funds" (April 14, 2020)

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

To become an exclusive appointment researcher, it is mandatory to pass a JST examination into the necessity of the exclusive appointment and to conclude a contract of employment between the researcher and JST. The examination is carried out by the JST Department of Innovation Research, based on the results of the interview with JST after the presentation/interview review session; the applicant does not need to attend the examination.

The salary amount paid to exclusive appointment researchers by JST is determined based on the job assignment contract.

#### **Note: JST examination into the necessity of the exclusive appointment**

The JST examination is conducted based on the following "Terms and Conditions for Exclusive Appointment Research," points (1) through (6). An individual who wishes to benefit from an exclusive appointment is requested to obtain confirmation and permission of the receiving research institution, especially with respect to (2). JST also provides confirmation and permission at the interview-based selection session. An individual who requests to continue his/her another program research in addition to the subject PRESTO research, is requested to submit the "Application for Side Engagement Work" within the period specified by JST prior to the interview session. The application form can be downloaded from the following website:

[https://www.jst.go.jp/kisoken/boshuu/teian/koubo/2022supplementarydocument\\_presto\\_tagyoumu.xlsx](https://www.jst.go.jp/kisoken/boshuu/teian/koubo/2022supplementarydocument_presto_tagyoumu.xlsx)

#### **【Terms and Conditions for Exclusive Appointment Researchers】**

- (1) Exclusive Appointment Researchers must be fully recognized by JST that to conduct their PRESTO research, they have no choice but resigning their current full-time position and have no next position.
- (2) It must be possible that research institutes receiving Exclusive Appointment Researchers conclude a Collaborative Research Agreement as well as job assignment contract with JST, to begin with their PRESTO research, and that they are assigned to a position eligible to execute their research budget at the institutes.

- (3) Following the aim of the contract of employment in Exclusive Appointment, Exclusive Appointment Researchers are obliged to conduct their PRESTO research at a working effort of over 80% (Refer to (4) for detailed conditions when conducting "other work" other than individual research with an effort of 20% or less remaining).
- (4) If an Exclusive Appointment Researcher wishes to conduct research, other than the work specified in the Researcher's employment contract with funding by a Grant in Aid for Scientific Research or etc., he/she must meet all of the following three conditions.
- ① Being a voluntary research activity, etc. desired by the Exclusive Appointment Researcher
  - ② Research activities that contribute to the promotion of individual research, and are approved by the receiving institution and JST (specifically, after making the necessary notifications to the receiving institution and obtaining approval, and apply to JST and get approval)
  - ③ Within the range that does not hinder the promotion of individual research (up to one day a week for other work, and 80% or more of effort for personal research in all work).
- (5) Exclusive Appointment Researchers are requested to understand that their appointment by JST is temporary and to make any efforts to find a permanent position for them at research institutes, and if they are employed at a research institute, they are obliged to change their appointment from Exclusive to Joint appointment.
- (6) Travel expenses for Exclusive Appointment Researchers to carry out individual research (PRESTO) should be paid from PRESTO research expenses. On the other hand, travel expenses incurred in connection with other work (including research participation in CREST / ERATO) should be paid from the research expenses of each other work.

### **3.2.8 PRESTO startup support system**

With the aim of encouraging PRESTO researchers to become independent and to further develop their qualities as a researcher, we provide additional support for PRESTO research to build the research environment, when PRESTO researchers start their research independently at start of PRESTO research or during PRESTO research term. Researchers at overseas research institutions also apply for this support if they need to improve their research environment to conduct PRESTO research at domestic research institution. Details on how to apply and conditions for support will be announced after adoption.

## Chapter 4 ACT-X Program

### 4.1 ACT-X

#### 4.1.1 ACT-X Overview

Key points and characteristics of ACT-X are described as follows.

- a. ACT-X is a network-type research (individual research) for finding and developing superior young researchers who can find solutions to important problems facing Japan. Based on management of the Research Area defined by the supervisor, we pursue researchers who have unique and stimulating ideas. We give aid to studies that aim for the creation of new values leading to innovations in science and technology. With advice and guidance from the Research Supervisor and area advisor, young researchers advance their research studies according to their unique ideas. As they communicate and form networks with researchers from different fields in and out of their Research Area, young researchers try to establish themselves in the field.

- b. For our program this fiscal year, we invite individual researchers who meet the following criteria

Researchers who have held a doctoral degree for less than eight years as of April 1, 2022

\*Researchers who earned their bachelor's degrees\* less than 13 years ago (as of April 1, 2022) if they have not acquired doctoral degrees.

\*This includes researchers who satisfy the described terms and conditions when the period of maternity or paternity leave taken after acquiring the degree is excluded.

Graduate school students are also invited to our program regardless of the terms and conditions described above. We are expecting proactive applications from graduate school students and young researchers employed by companies.

- c. For the independent realization of the research, individual researchers take responsibility for the implementation of their research challenges and advancing their research to contribute to the common objectives of the Research Area. If a student who does not have the authority to execute contract research funds and cannot become a party to the Collaborative Research Agreement under the regulations of the institution (research location institution), the supervisor will be responsible for the contract. For more information, refer to "4.2.6 Proposal Submission Requirements (1) Requirements for Research Project Applicants" On the other hand, if a non-student who does not have the authority to execute contract research funds under the regulations of the institution (research location institution), first coordinate with the supervisor and the institution (research location institution) so that he or she have the authority to execute research and become a party to the Collaborative Research Agreement.
- d. The Research Supervisor oversees individual researchers, while Research Area advisors are assigned to each of the researchers to play the role of a mentor; thus, Research Areas are managed in a "network-type research institute." A Research Supervisor plays the role of head of this research institute and manages the Research Area by the following means with help from area advisors and others:
  - Formulates principles of management in the Research Area
  - Selects the research challenges
  - Arrangement and approval for research plans (including plans for research budgets)

- Hosts Research Area meetings for each individual researcher to report on and discuss the progress of the research; gives advice and/or guidance to individual researchers by visiting places of research implementation and/or other venues for exchanging views
- Evaluates research challenges
- Gives a variety of support to research activities and/or provides any other necessary resources

#### **4.1.2 ACT-X Research Organization**

- a. The researcher will pursue his/her research as an individual (alone). (However, if necessary, a research assistant may be appointed and paid for within the research budget.)
- b. JST conducts activities necessary for research including preparation of research environments, research-related public relations and outreach activities, and support for patent applications.
- c. Individual researchers are requested to conduct research at their affiliated institutes in principle. It is possible to perform research work outside of their affiliated research institute and for this case, JST will conclude contract with the institute which expends the research budget (individual researchers are requested to prepare place to conduct research with permission of both the researcher's affiliated institution and the research performing institution concerning these matters as prerequisite).
- d. The program is open to student researchers in master's and doctoral education programs. For more details, please see "4.2.6 Proposal Submission Requirements" in the Application Guidelines.

#### **4.1.3 ACT-X Flow from Research proposal to Selection**

##### **(1) Call and Selection of Proposals**

JST calls for research proposals for individual Research Areas specified in the Strategic Objectives designated by the national government. Selection of proposals is made by the Research Supervisor, with the cooperation of Research Area Advisors and others, for individual Research Areas.

Note: For more details, please refer to "4.2 Call and Selection of Proposals", "5.1 Common Issues in the Call and Selection of Proposals".

##### **(2) Research Plan Preparation**

Once a proposal has been selected, the researcher prepares an overall research plan covering the entire period of the research project. The researcher also prepares annual research plans for each year of the project. Research plans cover budgets and research approach.

Note: For more details, please refer to "5.2.1 Research Plan Preparation."

##### **(3) Collaborative Research Agreement**

In advancing a research project, JST will enter into a Collaborative Research Agreement with the research institution where the researcher will pursue his/her research work.

Note: For more details, please refer to "5.2.2 Collaborative Research Agreement".

## **4.2 Call and Selection of Proposals**

### **4.2.1 Eligible Research Proposals**

- (1) Research proposals are called for the 4 Research Area mentioned in the section, “(1) Research Areas calling for Proposals” in “Overview of the Call for Research Application”.
- (2) Carefully check the “Overview” and “Research Supervisor’s Policy on Calls for Proposals, Selection and Management of the Research Area” mentioned in “Chapter 6 Policy of Research Areas Calling for Proposals” for individual Research Area before proposing your research appropriate for one of the Research Areas.
- (3) Be certain to confirm important common items described in “Chapter 5 Common Issues in the CREST, PRESTO, and ACT-X Programs.”

### **4.2.2 Submission Period**

**Tuesday, April 12<sup>th</sup> to 12:00 (noon, Japan time) on Tuesday, May 31<sup>st</sup>, 2022 (No exceptions).**

For information on schedules for briefings, calls for proposals, etc., please refer to “(2) Call and Selection Schedule” in “Overview of the Call for Research Application”.

### **4.2.3 Research and Development Period**

The research period is, in principle, two years and six months from October 2022 to ending in March 2025(research can be continued at the end of the fiscal year of the third year).

This period is a standard ACT-X research period; and for the successful applicant’s requests, additional form of support called the "acceleration phase" may be added, which will continue for one year. The general standard regarding the number of research challenges for which an eligible candidate may receive acceleration phase support is defined in each Research Area (see also Chapter 6). We give precedence to research challenges from which we can expect further achievements by providing continuous support. Successful applicants must determine whether they challenge for this acceleration phase until the evaluation of their research progress, which is conducted about two years after the start of research. A new contract will be signed for the acceleration phase, which is effective on the day following the termination date of the research. It is for a maximum of one year.

Note: Actual research periods are determined after a detailed examination and approval of the plan for the research challenge. For more information, see “5.2 Common Issues in Post-selection: Procedure of Research Work”.

\* If you apply for PRESTO or PRIME<sup>1</sup> during the course of ACT-X research and your application is selected, you can conduct PRESTO or PRIME (called Early graduation). If you apply for PRESTO or PRIME\* during the course of ACT-X research, please notify the Research Supervisor and JST.

\* You cannot apply for PRESTO or PRIME at the same time as applying for ACT-X. Please refer to “Chapter 9 Limitations on Multiple Applications within the Strategic Basic Research Programs.”

#### **4.2.4 Research Budgets**

The budget for a research project is, in principle, several million yen for the research period of two years and six months or shorter (for direct expenditures). Details of the budgets (including budgets for support during the acceleration phase, if applicable) are defined differently based on the Research Area (see also Chapter 6).

According to the contract for consigned research, in addition to the research budget (for direct expenditures), JST provides the research institution with aid for indirect expenditures up to, in principle, 30% of the direct expenditures as the budget for consigned research.

Note: The research budget requested is examined in the course of our selection process. Actual research budgets are determined after a detailed examination and approval of the plan for a research challenge. For more information, see “5.2 Common Issues in Post-selection: Procedure of Research Work”.

#### **4.2.5 Number of Research Projects**

This solicitation round is projected to select a maximum of approximately 30 projects.

※ The number of proposals selection may vary depending upon budgetary and other factors.

#### **4.2.6 Proposal Submission Requirements**

Requirements for those submitting proposals are discussed below.

Please make sure that you understand these requirements for your submission.

- ※ In principle, if the determination is made that a submission does not meet the requirements by the time of selection, the research proposal will either not be accepted or not be selected.
- ※ Once a research proposal is selected, the Research Project shall maintain its qualified status as per the submission requirements for the entire duration of the period of research. If the Research Project fails to meet the requirements during the research period, the Research Project will in principle be completely or partially suspended (i.e. be terminated early).

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<sup>1</sup> This is an Advanced Research and Development Program for Medical Innovation with the Strategic Basic Research Programs carried out by the Japan Agency for Medical Research and Development (AMED). PRIME (solo type) is a program in which Research and Development Directors promote research on their own.



When submitting a proposal, please proceed it with followings, and the description in “Chapter 8 Key Points in Submitting Proposals” and “Chapter 9 Limitations on Multiple Applications within the Strategic Basic Research Programs”.

(1) Requirements for Research Project Applicants

- a. The applicant and individual researcher must be the same person.
- b. Each applicant must satisfy the following conditions:

Researchers who have held a doctoral degree for less than eight years\* as of April 1, 2022.

- Researchers who earned their bachelor’s degrees less than 13 years ago\* (as of April 1, 2022) if they have not acquired doctoral degrees.
- (\*) These include researchers who satisfy the described terms and conditions when the period of maternity or paternity leave taken after acquiring the degree is excluded.

Graduate school students are also invited to our program regardless of the terms and conditions described above. See also Chapter 9, “Limitations on Multiple Applications within the Strategic Basic Research Programs”.

- c. 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 affiliated with corporations and other entities, so long as they are deemed fully capable of conducting individual research in accordance with the ACT-X policy.
- d. Applications by students in master’s and doctorate programs will be required to submit via e-Rad, of a memorandum of confirmation on requirements. More specifically, in this memorandum, academic supervisors will be held responsible for the following items:

- The applying student’s affiliated academic institution is capable of entering into a Collaborative Research Agreement with JST as described in the Application Guidelines.
- The student applicant will, as “research practitioner” in the Collaborative Research Agreement, be the main person to conduct contract research.
- The applying student’s academic supervisor will, as “research implementation manager” in the Collaborative Research Agreement, supervise the project and be held responsible for its terms and conditions.
- The student applicant’s academic institution will agree to the necessity of an agreement between the institution and the student, governing intellectual property that will likely emerge as products of the research project.

\*”The memorandum of confirmation” form can be downloaded from the “How to apply” section of the webpage below. Both, the student applicant and his/her academic supervisor are required to sign and upload the document via e-Rad. <https://www.jst.go.jp/kisoken/boshuu/teian/top/ryoiki.html>

\* If the researchers have already selected by or are applying for research funds of an institution other than JST, please ask each institution about the eligibility of the duplication with ACT-X.

e. If a non-student who does not have the authority to execute contract research funds under the regulations of the institution (research location institution), first coordinate with the supervisor and the institution (research location institution) so that he or she have the authority to execute research and become a party to the Collaborative Research Agreement. As a result, if you are unable to have the authority to execute, both you and the supervisor must sign and submit a Memorandum of Confirmation through e-Rad indicating that you have confirmed the following items. The supervisor will be responsible for the following items in the Memorandum of Confirmation.

- A Collaborative Research Agreement specified in the application guidelines must be concluded between the institution (research location institution) and JST.
- The research applicant must conduct the contract research as the “Researcher in charge” in the Collaborative Research Agreement.
- The supervisor must take responsibility for the Collaborative Research Agreement as the “Research Leader” who oversees the contract research.
- The affiliated institution agrees that the researcher and the institution will negotiate intellectual property rights resulting from research.

\*”The memorandum of confirmation” form can be downloaded from the “How to apply” section of the webpage below. Both, the student applicant and his/her academic supervisor are required to confirm and upload the document via e-Rad.

<https://www.jst.go.jp/kisoken/boshuu/teian/top/ryoiki.html>

\*If you have already used or are applying for a non-JST institution, please ask each institution about the eligibility of duplication with ACT-X and the non-JST institution.

※After the selection, even if the institution (research location institution) does not have executive authority, a position in the institution (research location institution) is required to conclude a Collaborative Research Agreement. If a position is not granted, a Collaborative Research Agreement cannot be concluded and ACT-X research may not be conducted.

f. An individual researcher must have participated in a study at a research institute in Japan as of the date that his or her proposal is adopted, and he or she must be able to continue research in Japan until the ACT-X research is completed. Please note the following:

- If a graduate school student is to graduate in the 2.5-year period of the ACT-X research, to apply for our program, he or she must make the best effort to satisfy the terms and conditions above in order to continue the ACT-X research after graduation.
- Individual researchers can be of any nationality; however, it is required that they are able to manage clerical processes in Japanese (or be in an environment in which they are able to do so).
- In the ACT-X program, in principle, Japanese is used in Research Area meetings and for other processes after a proposal is adopted. Therefore, you need to be able to communicate to an extent in Japanese.

- A researcher who is not a Japanese national and is engaged in a study at a research institute in Japan must know the following:

- \*The researcher must acquire a visa, extend the period of stay, renew the residency status, and follow any other necessary procedures independently as necessary. If the researcher fails to satisfy the requirements in relation to his or her residency status, we cannot adopt his or her proposal for research and will cancel the research challenge (or take similar measures).

- \*If the Foreign Exchange and Foreign Trade Act is applicable to an ACT-X research study and bans the export depending on the status, etc., of an individual researcher, we cannot adopt his or her proposed research and will cancel the research challenge (or take similar measures).

g. The researcher must be personally responsible for the ACT-X research challenge throughout the research period.

- \* For more details, please refer to “5.2.7 Responsibilities of Research Director, Lead Joint Researchers, and Individual Researchers following Approval”.

h. The applicant must either: Have already completed the educational program for research integrity at his/her affiliated research institution; or have completed the JST-provided educational program by the application deadline.

- \* For more details, please refer to “8.31 Enrolling in and Completing the Educational Program on Research Integrity”.

i. The applicant must pledge following four items upon submission.

- Understand and comply with “Guidelines for Responding to Misconduct in Research” (decided by the Minister of Education, Culture, Sports, Science and Technology on August 26, 2014).
- Understand and comply with “Guidelines on Management and Audit of the Public Research Expenses in Research Institutions (Implementation standards)” (decided by the Minister of Education, Culture, Sports, Science and Technology on February 15, 2007; revised February 1, 2021).
- If the research proposal is accepted, the Individual Researcher must not engage in misconduct in their research (fabrication, manipulation, and plagiarism) nor in inappropriate usage of research funds.
- The research project applicant must not have engaged in misconduct in the past to achieve the research results that are mentioned in the submitted research proposal.

- \*The above verification will be part of the e-Rad Submission Information Entry screen.

## (2) Requirements for Research Institutions

a. Research institutions (with which the selected Individual Researchers are affiliated) or research location institution must fully recognize that the research funds are public funding, ensure compliance with related law, and make efforts to implement the research effectively. Research institutes that cannot accomplish the tasks described in “5.2.7 Responsibilities of Research Institutions” will not be enjoined to implement research; thus, when applying, a prior consent of the research institution at which the implementation of research is planned shall definitively be obtained.

#### **4.2.7 Additional Expense Support as Research Assistant (RA) for ACT-X Student (Doctor / Master) Researcher**

Only when a student (doctor / master) makes a research proposal at ACT-X, JST can support additional expenses as RAs according to the time of the student engaged in ACT-X research. This is an add-on expenses to the expense for the research proposal. After you are selected, please consult with your supervisor and decide whether to apply or not for this additional support, then submit the confirmation form described in "4.2.6 Proposal Submission Requirements."

In order to receive this additional support, the affiliated institution must have applicable regulations for RA expenditures based on engagement time, and the supervisor must be responsible for the execution and submit the form agreeing to the following: (The details of the form will be informed when the application is selected)

- If the position of the student changes during the academic year, contact JST immediately.
- Prepare and maintain evidence documents based on the Collaborative Research Agreement administration manual and the regulations of the affiliated institution, and submit a specified report within 60 days after the end of the additional support period.
- If the balance is 10% or less of the additional support, it can be diverted to the budget of the main task, but if it exceeds, the balance shall be refunded in full. Also, even the balance is 10% or less of the additional support, and if the balance is not diverted to the budget of the main task, it shall be refunded in full.
- Share the details of the application for additional support to the student, the contract and get the confirmation about the application detail from accounting staff at the institution.

JST will decide whether or not to approve additional support applications (it may not be approved).

If the application for additional support is approved, the relevant indirect costs in addition to commissioned research expenses will be added and paid to the student's institution (research location institution, that is, the institution of the supervisor). (Engagement time is at most 1000 hours per year due to school work. If the institution's prescribed hourly unit price is 2,000 yen, it is about 2 million yen per year and the equivalent consumption tax equivalent and indirect expenses).

Please note the following three matters.

- \* Please do not include this additional support amount in the research expenses in the proposal to ACT-X.

(If it is selected, we will inform you about this additional support again, accept the additional support application, and decide whether it is acceptable).

- \* This additional support is to additionally support the student's own expenses as RA when a student makes a research proposal to ACT-X and is selected. It does not provide additional support for RA expenses for assistants etc. under the applicant. Please consider within. If you need RA expenses or rewards for assistants who provide research assistance, please consider within the research expenses applied for in the research proposal.

\* Only if the ACT-X researcher is a student, we will provide additional support for his / her own RA expenses. If the ACT-X researcher is a non-student including a specially-appointed assistant professor, we will not be able to support their labor costs. If the ACT-X researcher is a non-student, refer to "5.2.3 Research Costs".

(Reference)

The Integrated Innovation Strategy 2021, p. 13 (Cabinet decision of June 18, 2021)

“Improvement of the situation facing researchers, such as young researchers, including the decline in students entering doctoral programs (18.7% in 1981, 16.7% in 2000, 9.4% in 2020), the unstable employment of young researchers, and the decline in research time spent by researchers.”

[https://www8.cao.go.jp/cstp/tougosenryaku/togo2021\\_honbun.pdf](https://www8.cao.go.jp/cstp/tougosenryaku/togo2021_honbun.pdf)

The Comprehensive Package for Strengthening Research Capabilities and Supporting Young Researchers (January 23, 2020, Council for Science, Technology and Innovation) p.12

“Training and securing excellent doctoral students and researchers through strategic management that maximizes various financial resources.”

<https://www8.cao.go.jp/cstp/package/wakate/wakatepackage.pdf>

## Chapter 5 Common Issues in the CREST, PRESTO, and ACT-X Programs

### 5.1 Common Issues in the Call and Selection of Proposals

#### 5.1.1 Conflicts of Interest Involving Research Project Applicants and the Research Supervisor

Research Projects Applicants, hereafter referred as “applicants”, to the Strategic Basic Research Programs of JST cannot have conflicts of interest with the Research Supervisor of the Research Area to which they submit their Research Proposals. Applicants, who have any possibility to have conflicts of interests concerning item *a* to *c* described as follows, or any unsure matters, please download the Enquiry Form from the following web site, and fill and send it to the e-mail address indicated below.

URL of the Enquiry Form download:

[https://www.jst.go.jp/kisoken/boshuu/teian/koubo/JST\\_COI\\_inquiry\\_\(NAME\)\\_EN.docx](https://www.jst.go.jp/kisoken/boshuu/teian/koubo/JST_COI_inquiry_(NAME)_EN.docx)

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

※ Please identify your email title as “[Conflict of Interest] [CREST/PRESTO/ACT-X (Choose one), Name of the Research Supervisor] [Your name and affiliation]

- 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 and experiment 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.

(Existence of close cooperation will be judged by the fact that, for example, the research project applicant and the Research Supervisor are working together on the same research project, are performing different parts of the same research project, or are co-authors of a research paper. If you have any questions, please contact JST.)

- ※ For Research Areas in which Deputy Research Supervisors have been established, the same provisions shall apply. The same provision shall also apply to the Program Supervisor of CREST "Research on multi-sensing biosystems and development of adaptive technologies" area, and PRESTO "Multisensory Integration in Biological Systems" area. (This provision does not apply to the Assistant Supervisor.)
- ※ For enquiries submitted by May 10, 2022, JST will answer about whether there are any conflicts of interests between the enquirers and the Research Supervisor in question by the deadline of Research Proposal submission. For inquiries submitted after that date, there may be cases that JST cannot answer by the deadline. If a conflict of interest is found between an applicant and the Research Supervisor after the deadline of Research Proposal Submission, there may be cases that the acceptance of his/her Research Proposals is cancelled.

Please make use of the following Pre-submission Check Sheets to examine whether there are any conflicts of interests between you and the Research Supervisor under consideration before submitting your Research Proposal.

- ※ (CREST- Attachment) Pre-Submission Check Sheet “Conflict of interests with Research Supervisor.
- ※ (PRESTO- Attachment) Pre-Submission Check Sheet “Conflict of interests with Research Supervisor.
- ※ (ACT-X- Attachment) Pre-Submission Check Sheet “Conflict of interests with Research Supervisor.

### 5.1.2 Selection Method

For the schedule of Research Proposal Selection, please refer to “(2) Call and Selection Schedule” in the “Overview of the Call for Research Application” section of this document.

#### (1) Selection Process

The Research Supervisor of each CREST, PRESTO, and ACT-X Research Area conducts the document- and interview-based selections of Research Proposals submitted by applicants to his/her Research Area, with assistance of Research Area Advisors. External reviewers from outside of the Research Area may also enlist for the selections if necessary.

There may be cases which additional “preliminary selection” of the Research Proposals before the document-based selection would be conducted, considering the total number of submitted Research Proposals and other factors. In the preliminary selection, each submitted Research Proposal is reviewed from the view whether Research Proposals are suitable for the CREST or PRESTO program and also for the subject Research Area, whether the proposal will contribute to the achievement their objectives. In the case of a preliminary selection of Research Proposals being conducted in a Research Area, the document-based selection of Research Proposals, is conducted only for those which have cleared the preliminary selection. Whether a preliminary selection of Research Proposals is conducted in each area is not announced to applicants.

Another investigation of Research Proposals may be performed, separately, during the document- and interview-based selection if necessary. In addition, applicants to CREST Research Directors, CREST Lead Joint Researchers, and PRESTO/ACT-X Individual Researchers, are requested to submit financial statements if they are affiliated with profit-making institutions.

Names of Research Advisors of new Research Areas established in this fiscal year will be announced in the following website as soon as the names become available.

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

#### (2) Conditions for those with conflict of interest

We take the management of conflicts of interest based on the provisions of JST from the viewpoint of a fair and transparent evaluation and the distribution of research funds.

## ① Persons Involved in the Selection Process

To ensure fair and transparent evaluations, the following persons and parties who have conflicts of interest with an ‘applicant’ (CREST Research Director or PRESTO/ACT-X Individual Researcher). In CREST, in some cases, mainly concerning Lead Joint Researchers, the following persons or parties who have conflicts of interest may be excluded from the selection process. If you have any suspicion about conflicts of interest between you and persons and parties involved in the selection process of your Research Proposal, please describe it specifically in the Notice section of the application forms (CREST: Form 11, PREST: Form 7, Act-X: Form 7).

- a. Persons, who are relatives of research project applicants:
- b. Persons or parties who are affiliated with the same department, specialty, or research laboratory at a university, a national institute, or a national experiment institution, or a company with which research project applicants are affiliated. Here, “same department, specialty, or research laboratory” means a group one rank above a laboratory, a research team, or another group which is the smallest research unit.
- c. Persons, who are conducting a close collaboration in a research work with research project applicants. (Examples are persons, who are conducting a joint research project or have co-authored a paper with research project applicants, a researcher pursuing the same research objectives as research project applicants, or a Research Participant or a Lead Joint Researcher of the proposal of research project applicants, and others, being recognized those practically affiliated with a research group with which research project applicants are affiliated.)
- d. Persons in a close teacher-student relationship, or in a direct employer-employee relationship.
- e. Persons in relationships of direct competition with research project applicants.
- f. Persons in other relationships judged by JST to representing conflicts of interest with research project applicants.

## ② Conflict of Interest with Research Director

It will be judged as a conflict of interest with Research Director when a Research Director appoints Joint research group that is related to Research Director (organizations etc. established based on R&D achievements by the research representative etc.) and allocate research fund of JST to these institutes. Unambiguously, Research Director’s affiliated institution would be in charge to manage the conflict of interest of Research Director, additionally, JST is in charge of allocating public research fund where equitability and transparency of decision making is required. Therefore, management for conflict of interest between Research Director and his/her related institution would be conducted in the light of necessity, rationality, affordability in the decision-making process to secure the accountability.

“An organization that is related to the Research Director” refers to any of the organizations that fall under the following categories. Items “a” and “b” are applicable not only to the Research Directors but also to the spouse



and the relatives in the first degree of the Research Director (hereinafter referred to as “the Research Director etc.”).

a. An organization established based on R&D achievement of the Research Director etc.

(Including the case in which the Research Director etc. is not directly involved in the business management but is merely given a title such as technical consultant and the case in which the Research Director etc. has stocks.)

b. An organization in which the Research Director etc. is a director (including a CTO but excluding a technical consultant)

c. An organization whose Research Director has stocks

d. An organization whose Research Director is rewarded for implementation

For a research proposal in which a researcher who belongs to the related organization of the Research Director, is assigned as a Lead Joint Researcher, it will be strictly judged from the viewpoint of requirement, rationality, and relevance.

In this case, declare that a researcher who belongs to the related organization of the Research Director, is included as a Lead Joint Researcher in the “special remarks (CREST: Form 11)”.

Additional documents may be requested in order to judge conflicts of interest with the Lead Joint Researcher.

### ③ Conflict of Interest with JST

It is regarded as conflicts of interest on the side of JST (conflicts of interest as an organization) to distribute, in the CREST, PRESTO, or ACT-X program, a research fund to a company JST has invested in (hereinafter "invested company"). Therefore, to avoid any doubt of any third party, JST clarifies it to avoid the conflict of interests between JST and the invested companies.

With respect to the proposals made by a researcher who belongs to an invested company of JST, we assess the necessity, rationality, and adequacy of the applicable invested company.

For that purpose, if a researcher who belongs to an invested company of JST is regarded as a proposer, fill in the "special remarks (CREST: Form 11; PRESTO: Form 7; ACT-X: Form 7)" to declare that a researcher who belongs to the applicable invested company is included in the proposers.

This management is taken to guarantee the fairness and transparency of the process on the side of JST. It is not disadvantageous to have accepted funds from JST in the process of the adoption in the CREST, PRESTO, or ACT-X program. You are asked to be cooperative in JST's management of conflicts of interest.

※Please refer to the website below for information on JST's portfolio companies.

Note: Companies that have terminated their investment are not subject to conflict of interest management and you do not need to report.

Support Program for the Creation of New Businesses with Equity Participation (SUCCESS) Investment Results

<https://www.jst.go.jp/entre/en/result.html>

※The base date for declaration is the date of the start of application call. Please report on companies whose investment from JST has been publicly announced. When the companies have already received an offer of investment but have not yet made a public announcement, declaration is not required for confidentiality reasons within JST.

Please refer to the following website for JST's announcement of investment.

Support Program for New Business Creation with Equity Participation (SUCCESS) What's New

<https://www.jst.go.jp/entre/news.html>

### (3) Interview-Based Selections and Notification of Selection Results

a. Research project applicants, whose research proposals have cleared the document-based selection, and are nominated for the interview-based selection, are notified of their success by email. The notice also provides the information on the overview of the interview-based selection, its schedule, supplemental documents requested to be additionally submitted (the notification will be sent by email, not in writing, to the email address registered in the e-Rad system so please make sure the email address is accessible). In the interview-based selection, the applicants may be requested to submit a financial statement if they or their Lead Joint Researcher are affiliated with a profit-making institute. Persons, who are regrettably not succeed in the document-based selection, will be informed the result in writing in one week after the document-based selection session as a standard.

The schedule of the interview-based selection will be announced at the following website as soon as it becomes available.

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

b. In the interview-based selection session, each applicant is requested to give a presentation explaining the idea and scope of his/her research proposal. Japanese is the official language of the session in principle, however if impossible, English can be used as an alternative for the purpose in the CREST, PRESTO and ACT-X interview-based selection session.

c. Applicants rejected in either the document- or interview-based selection will be informed their results in writing after the end of selection.

d. Applicants, whose research proposals are selected for adoption, will be notified of their success and be informed of their selection in writing and provided with the procedure of starting their research.

\* JST will contact applicants, whose Research Proposals are likely to be selected with high possibility as a result of the interview-based selection, to confirm the availability of conditions necessary for concluding a Collaborative Research Agreement between their affiliated research institute and JST, by Tuesday, August 30, 2022 (by e-mail or phone).

### 5.1.3 Selection Perspective

#### (1) Selection Standards (Preliminary Evaluation Standards)

Common selection standards for CREST, PRESTO and ACT-X are described in the following table. (All the standards described in a. through d. or a. through e. must be met.)

CREST	PRESTO	ACT-X
<i>a.</i> Contributes to the achievement of a Strategic Objective.		
<i>b.</i> Consistent with the Research Area purpose (Refer to Supplement 1., 2.)		
<i>c.</i> Basic research that is unique, highly appreciated internationally, and expected to produce outstanding results (Refer to Supplement 3.) that contribute greatly to scientific and technological innovation.	<i>c.</i> Basic research that is unique, challenging, internationally expected to be developed to an advanced level, and expected to produce groundbreaking results (Refer to supplement 3.) that lead to scientific and technological innovation.	<i>c.</i> Proposals that are original, challenging, innovative, and expected to attain high-quality basic researches by international standards over the coming decades and generate new values necessary for scientific and technological innovations.
<i>d.</i> 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 will be Lead Joint Researchers, they are essential for to the pursuit of the research project, and a collaboration framework sufficient for enabling significant contributions	<i>d.</i> The research project applicant can be expected to contribute to the overall development of the subject PRESTO or ACT-X Research Area and to the ongoing development of relevant 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 on mutual inspire.	
	<i>e.</i> Meets all the following conditions  - The originality of the research project is based on the applicant's own idea. - Some clues for realizing the research project objective have already been obtained	<i>e.</i> Meets all the following conditions  - The originality of the research project is based on the applicant's own idea. -Costs of the research project is suitable in size as that of Individual based Research.

<p>toward the achievement of research objectives is provided</p> <p>-Research budget planning is necessary and sufficient for pursuing the research project.</p> <p>-The research institutions with which the research project applicant and Lead Joint Researchers are affiliated have R&amp;D capabilities and other technical foundations in the subject research field.</p>	<p>-Costs of the research project is suitable in size as that of Individual based Research.</p>	
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#### Supplement

1. Regarding item *b*. “Research Area purpose,” please refer to the “Overview” and the “Research Supervisor’s Policy on Calls for Application, Selection, and Management of the Research Area” of individual Research Areas in “Chapter 6 Policy of Research Areas Calling for Proposals.” Contained therein are discussions of selection perspectives and policies, management directions, etc. for each Research Areas.
2. Whether the research project fits with a desired research project portfolio to optimize the entire Research Area under the policies and directions discussed above is another selection perspective.
3. The “results” sought for Strategic Basic Research Programs are new technologies.  
“New technologies” are scientific and technological R&D results that are viewed as significant for the nation’s economy but have not yet entered commercialization development (have not undergone commercial-scale testing nor used in commercial production).  
※ “New technologies” and “commercialization development” are terms used (as rendered in Japanese) in the Act on the Japan Science and Technology Agency, National Research and Development Agency.

(2) Whether research budgets are characterized by “unreasonable duplication” or “excessive concentration” is an important selection criterion. For more details, please refer to “8.1 Measures against Unreasonable Duplication and Excessive Concentration.”

#### 5.1.4 About AIP Project and AIP Network Laboratory

AIP project (Advance Integrated Intelligence Platform Project) stated from FY2016, aim to build a “super smart society” that will lead the world in establishing base technologies to collect, process, and control large amounts of data in an intellectual, integrated, and secure manner when responding to various situations and demands. The project also aims to establish technologies that improve the efficiency of existing services and the creation of new services that are applicable to various sectors of the real society. This project greatly improves productivity and economic growth that contributes to making a people-friendly society a reality.

For the promotion of AIP project, RIKEN has established the “Center for Advanced Intelligence Project (※)” as a core research and development facility for innovative artificial intelligence. JST undertakes “AIP network

laboratory” which is a program to support researchers to develop new pathways to innovation by promoting collaboration among the AIP Research Areas of Strategic Basic Research Programs.

※AIP network laboratory <https://www.jst.go.jp/kisoken/aip/en/index.html>

#### **5.1.5 Feasibility Study of Specific Research Proposal (for CREST or PRESTO Programs)**

- (1) In the case of a research proposal that is rejected but is expected to be more accurately evaluated by the review committee in the next fiscal year if additional data is provided within a short period of time given limited financial support, the Research Supervisor may request a Feasibility Study for the proposal to the applicant, in addition to and apart from the regular accepted proposals process.
- (2) The applicant may conduct his/her Feasibility Study only after agreeing to the condition to re-submit the proposal that is the subject of the Study in the next fiscal year to the same Research Area that was the target of the current year’s submission. The re-submitted proposal is treated along with other research proposals without preference.
- (3) A Feasibility Study of Specific Project Investigation cannot be applied for directly.
- (4) In case of a project included in the research in specific projects, the names and other information will **be posted on our website** in the same manner as the other adopted projects. Further, the successful applicants are supposed to participate in, and finish, specified units in the "APRIN (ex-CITI Japan) e-learning program." (Excluding those who have finished the specified units in the "APRIN (ex-CITI Japan) e-learning program at the organization they belong to or at the JST office.)

#### **5.1.6 Japan-France joint call for proposal with French ANR in Strategic Basic Research Program “CREST”**

In December 2017, the Japan Science and Technology Agency (JST) and the French National Research Agency (Agence Nationale de la Recherche; “ANR”) concluded a Framework Agreement to foster Japan-France collaboration in scientific research. Based on this agreement, the JST will support Japan-France joint research projects by Japanese and French researchers within the framework of the JST-CREST program.

In the call for proposals of CREST in FY2022, in addition to regular research proposals in 2 Research Areas described in the call for research proposals of the existing research areas, JST also calls joint research proposals by Japan-France joint research groups.

For details, please refer to the pages of the Research Areas calling for Japan-France joint proposals from the item “Invitation for Japan-France Joint Research Proposals” at the Call for Research Proposals website shown below.

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

## **5.2 Common Issues in Post-selection: Procedure of Research Work**

### **5.2.1 Research Plan Preparation**

- a. Once the proposal is selected, the CREST Research Director or Individual Researcher and PRESTO Individual Researchers are requested to design an overall research plan covering the entire period of their research. The CREST standard research period is five and a half years, but the duration can differ depending on the Research Area. The research period for PRESTO is three and a half years and that for ACT-X is two and a half years. The research plan describes the research budget, and, in the case of CREST, the team composition and structure. The proposed budgets are examined throughout all review processes. The actual budget of a selected proposal is determined by the Research Supervisor following the Supervisor's examination and confirmation at the stage of the research plan design.
  - b. Research plans become official once they are examined and approved by the Research Supervisor. The Research Supervisor will offer advice and coordination assistance on the research plan, and provide instructions when necessary, based on information the Research Supervisor gains through, for example, the project selection process, discussions with Research Directors or Individual Researchers, regular progress updates, and the results of research evaluations.
  - c. The Research Supervisor, in approving research project plans to achieve objectives, including the achievement of the overall objectives of a Research Area, may merge or link research projects, or take other coordinative actions.
- ※ Research organizations and budgets set forth in research plans may be revised during the research project period in response to overall Strategic Basic Research Program budget conditions, Research Area management actions taken by the Research Supervisor, or factors like results of research evaluations.

### 5.2.2 Collaborative Research Agreement

- a. Once a research project is selected, JST, in principle, will enter into concluding a Collaborative Research Agreement with the research institutions with which the Research Director, Lead Joint Researcher, and Individual Researcher are affiliated.
  - b. If it is not possible to conclude Collaborative Research Agreement with these research institutions, or not possible to put in place the management and audit systems required in connection with the use of public funds, or if the related research institutions are conspicuously financially unstable, it may be impossible to pursue research at the research institutions in question. For more details, please refer to "5.2.7 Responsibilities of Research Institutions."
  - c. In principle, patents and other intellectual property rights resulting from research shall, in accordance with Collaborative Research Agreement contract terms, reside with research institutions under the condition that the research institutions abide by the items provided in Article 17 (Japanese version of the Bayh-Dole Act) of the Industrial Technology Enhancement Act. However, this rule does not apply to foreign research institutions.
- ※ The latest sample of research agreement is available from the following website.

<https://www.jst.go.jp/contract/download/2022/2022kisokens201keiya.pdf>

[Important Note]

When an Individual Researcher is employed by JST as part of an exclusive appointment, the standard Collaborative Research Agreement as well as job assignment contract is concluded between JST and the research institution receiving the researcher.

\* Regarding appointment type of PRESTO individual Researchers, please refer to "3.2.7 Researcher Appointment Types".

### 5.2.3 Research Costs

JST pays the costs of a contract research, to the research institution that have concluded a contract of agreement with JST. The costs consist of the research cost (the direct cost) and the indirect cost that is 30% of the direct cost in principle. As for some items of expenditure, JST has implemented handling rules and guidelines specific to the Strategic Basic Research Programs, based on the Collaborative Research Agreement, official administration manuals, and the “Cross-ministerial Expenses Handling Partitioned Table”. There may be cases where the treatment is different between universities and others (universities, public research institutes, non-profit making incorporated associations, and others identified by JST) and private companies other than universities. Please refer to the official administration manual of the latest version and others for the details.

Documents for Research Contract of Strategic Basic Research programs.

- Universities, etc.: <https://www.jst.go.jp/contract/kisoken/2022/kisokena.html>

- Companies, etc.: <https://www.jst.go.jp/contract/kisoken/2022/kisokenc.html>

#### (1) Research Budget (Direct Costs)

Research budget (direct costs) are those that are directly related to and required for pursuing the subject research.

Research costs include:

- a. Commodities: Costs for purchasing new facilities \*1, equipment, consumable supplies, etc.
- b. Travel Expenses: Expenses for travel by the Research Director, Lead Joint Researchers, and other Research Participants (not Research Director nor Lead Joint Researcher) listed on the research plan and Individual Researchers.
- c. Personnel Expenses: Salaries for Research Participants (not Research Director, Lead Joint Researchers, nor Individual Researchers (\*2)) and honorariums.
- d. Other Expenses: Costs of the presentation of research results (research paper submission fees, etc.), costs for leasing and transferring of equipment, etc(\*2).

\*1 The purchase of new research equipment and apparatuses shall be proceeded according to the “Research Equipment and Apparatus Sharing Systems for Research Organization Units” (hereinafter referred to as “apparatus sharing systems”), which shall operate on the premises of “Introduction of New Research Equipment and Apparatuses Operating Integrally with Research Organization Management” (Advanced Research Fundamentals Working Group, Scholarship Commission, November 2015). Please refer to “8.12 Promotion on Effective Use of Research Facilities and Equipment”.

NOTE: The following are examples of items not handled as research costs (direct cost).

- Costs for items not consistent with the research objectives.
- Costs that are considered to be more appropriately handled as overhead costs (indirect cost).
- Costs that JST judges that use is not appropriate in the settlement of commissioned research expenses. (\* )



\* : JST has established rules and guidelines specific to this project for some items, based on commissioned research contracts, administrative manuals, and the cross-ministerial expenses handling table, etc. Also, handling may differ between universities, etc. (universities, public research institutes, public interest corporations, etc. accepted by JST) and companies, etc. (mainly research institutes other than universities, etc., such as private enterprises). For detail, refer to JST official administration manuals on the abovementioned URL.

\*2 In principle, in a university, etc., the person serving as the Principal Investigator (hereinafter referred to as the "PI") of a project receiving JST competitive research funds can use the funds for personnel expenses and/or the costs of someone carrying out duties other than research (buyout costs), as long as certain requirements are met. The necessary requirements are set out below; please check these.

○ "Review of the Possibility of the Use of Direct Costs for Someone to Carry Out Duties Other Than Research (Introduction of Buyout System) and for Principal Investigator (PI) Personnel Expenses (contact)" (September 17, 2020)

<https://www.jst.go.jp/osirase/2020/pdf/20200917.pdf>

○ "Measures for Strategic Basic Research Programs (CREST, PRESTO, ACCEL, ACT-X) related to a use of Direct Cost for agency expenses for jobs other than research activity (Buyout System)" (September 18, 2020)

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

○ "Measures for Strategic Basic Research Programs (CREST, PRESTO, ACCEL, ACT-X) Related to the "Use of Direct Costs for Principal Investigator (PI) Personnel Expenses"" (December 1, 2020)

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

NOTE: In hiring research staffs, please give a consideration of supporting their career paths (CREST case only) and consider "Improvement of Treatment of Doctoral Course (later stage) Students." For more details, please refer to "5.2.6 Responsibilities of Research Directors, Lead Joint Researchers, and Individual Researchers following Approval" and "8.13 Career Paths for Young Research Staff with Doctoral Qualifications (for CREST)" and "8.15 Support for Diverse Career Paths for Young Researchers (for CREST)".

NOTE: The PRESTO and ACT-X Individual Researcher can register up to five research assistants (engineer / research assistant employed by a research institution or non-employment-related undergraduate and graduate students) as persons responsible for research assistance work (experiments, data acquisition, analysis, etc. based on the instructions of individual researchers), and personnel expenses and rewards can be recorded according to the regulations of the research institution.

Hiring and employment of an individual, who conducts the research proactively in the same way is not permitted.

## (2) Overhead (Indirect) Costs

Overhead (indirect) costs are costs required for the management, etc. of research institutions pursuing research; they are in principle capped at 30% of direct costs. According to “Common Guidance for the Execution of Indirect Expenses of the Competitive Fund” (agreed upon by the coordination committees of relevant ministries and agencies in April 20, 2001, and revised on October 1, 2021), a policy on use, etc. shall be created and shall be systematically and properly executed to ensure that use of indirect expense be transparent.

### (3) Multiple-year Contract and Carryover

From the perspective of the effective and efficient use of research expenses to maximize research results and prevent unauthorized use, to be capable of carrying over research expenses and procurement contracts in subsequent financial years, JST has made into multiple-year contracts available. Regarding the carry over, universities and profit-making companies are treated differently. In addition, there may be cases where concluding a multi-year contract and making a carryover of research expenses are impossible at some institutions because their official administration systems are unsuitable for the purpose. However, please note that the carryover procedure is not applicable in case of single-year contracts such as contracts with foreign research institutes.

## 5.2.4 Project Evaluations

- (1) In CREST, the Research Supervisor shall familiarize himself/herself with research project progress and results, and, with the cooperation of Research Area Advisors and others, he/she is going to conducting interim and ex-post research project evaluations. For a project with a research term of five and a half years, the interim evaluation of a research project is going to be conducted at around three years after the beginning of the project, and the ex-post evaluation immediately after or before the conclusion of research activities, considering the nature and progress stage of the research project.
- (2) In PRESTO, the Research Supervisor conducts the ex-post evaluation of completed research projects of his/her Research Area, collaborating with Research Area Advisors, as soon as possible after the completion, or at a proper time before the completion, considering the nature and progress stage of the completed or completing research projects.
- (3) In ACT-X, the Research Supervisor conducts the ex-post evaluation of completed research projects of his/her Research Area, collaborating with Research Area Advisors, as soon as possible after the completion, or at a proper time before the completion, considering the nature and progress stage of the completed or completing research projects. Also, the Research Supervisor conducts a progress evaluation of research projects for the researchers of which are requesting an ACT-X acceleration phase research for a maximum of one years, additionally, at a time of approximately two year after the beginning of the research projects, to determine research projects which will receive the additional supports.

- (4) Additional research project evaluations may be conducted when they are determined to be necessary by the Research Supervisor.
- (5) In CREST, the Research Supervisor will request the research plan revision of research projects, and make research resource reallocations between the projects, including increases or decreases of their research budgets, changes of the research team organization, based on the result of the interim and additional evaluation of the research projects. Occasionally, the Research Supervisor also takes measures such as a merger of or a reorganization between different research projects, or a termination of a research project, on the basis of the result.
- (6) At a certain time after the completion of a research projects, JST will conduct a follow-up investigation on the research project, examining matters on the development and application of the research result and the activity of researchers participated in the research project. On the basis of the follow-up investigation, external experts assigned by JST will then conduct a following-up evaluation of the research project.

#### **5.2.5 Research Area Evaluation**

Apart from the research project evaluations mentioned in “5.2.4 Project Evaluations,” Research Area Evaluation will be conducted to evaluate Research Areas and the Research Supervisors. The Research Area evaluations include interim and post-completion evaluations. The evaluations focus on matters on the status of progress of a Research Area toward the achievement of the relevant Strategic Objective and the status of management of the Research Area.

#### **5.2.6 Responsibilities of Research Director, Lead Joint Researchers, and Individual Researchers following Approval**

- (1) CREST Research Directors, Lead Joint Researchers, and PRESTO/ACT-X Individual Researchers are obliged to conduct their research, honestly and effectively, fully understanding that their research is funded by precious tax revenues collected from citizens.
- (2) These persons must agree with fulfilling the following duties presented to them at JST briefing and other and submit an agreement to JST, after their research projects are selected.
  - a. Comply with application guidelines and other requirements.
  - b. Understand that JST research budgets are funded by tax revenues from citizens and do not become involved in any research misconduct, including fabrication, falsification, and plagiarism, and/or the improper use of the research fund.
  - c. Ensure that all the researchers and others participating in the research project are informed of the JST-designated Educational Program on Research Integrity (eAPRIN (ex-CITI Japan)) and let them to enroll in and complete the program. For details, refer to “8.31 Enrolling in and Completing the Educational Program on Research Integrity”.

Note that failure to complete the Educational Program on Research Integrity in c. would result in the suspension of the research budget until the completion has been confirmed by JST.

(3) The Research Director, the Lead Joint Researchers, and other Research Participants of CREST, Individual Researchers, and research assistants of PRESTO and ACT-X, and the academic advisor in cases where a student or other person who is not a party to the Collaborative Research Agreement and does not have operating authority for research budget due to the regulations of their affiliated institution (institution conducting research) is an Individual Researcher (see“4.2.6 Proposal Submission Requirements”), are required to complete the Educational Program on Research Integrity (eAPRIN (ex-CITI Japan)) designated by JST to prevent research misconduct (fabrication, falsification, and/or plagiarism). For details, refer to “8.31 Enrolling in and Completing the Educational Program on Research Integrity”.

(4) Pursuing and Managing Research

a. (CREST)The Research Director is held responsible for the whole research team, with responsibilities that include the preparation and implementation of his/her research plan.

b. (PRESTO and ACT-X) Individual Researchers are responsible for arranging research conducting locations and environments necessary for pursuing their research. If serious weaknesses in these are found, the research project may be cancelled.

c. Research Directors and Individual Researchers are responsible for submitting research reports and other required documents to JST and their Research Supervisors as well as for materials preparation required for the evaluation of their research project. They also are responsible for submitting a research report describing the progress of their research to the Research Supervisor on his/her request as well as for regularly submitting a semiannual report to him/her.

d. Conflict of Interest Issues between the Research Supervisor and Researcher

Research Supervisor is responsible not only for the selection of research proposals but also for advancing the research and evaluating the achievements. Therefore, to perform the advancement and evaluation properly, the Research Supervisor of a research project cannot have a conflict of interest with a CREST Research Director or PRESTO/ACT-X Individual Researcher of the Research Area. Thus, the CREST Research Directors and PRESTO/ACT-X Individual Researchers are continuously requested not to be involved in conflicts of interest with their Research Supervisor as described in “5.1.1 Conflicts of Interest Involving Research Project Applicants and the Research Supervisor. If a conflict of interest is recognized by JST between a Research Director or an Individual Researcher and his/her Research Supervisor, unless a reasonable explanation is given, JST may take measures to suspend his/her research.

- (5) CREST Research Directors, together with research institutions, shall appropriately manage (expenditure planning, monitoring, etc.) overall research budgets for research teams. Lead Joint Researchers, together with research institutions, shall appropriately manage (expenditure planning, monitoring, etc.) research budgets for their own research team. PRESTO and ACT-X Individual Researchers shall be responsible for matters including oversight of the expenditure and management of funds, performance of administrative procedures, management of research assistants, and matters related to travel. In case an ACT-X Individual Researcher is a person who is not a party to the Collaborative Research Agreement and does not have operating authority for research budget due to the regulations of their affiliated institution (institution conducting research), the Researcher's academic advisor or other related person is asked to bear responsibility as the "research implementation manager" in the Collaborative Research Agreement with JST (see "4.2.6 Proposal Submission Requirements)."<sup>2</sup> For example, if the student engages in misconduct or the like, the responsibility for that act shall be borne not only by the student, but also by the academic advisor, etc.
- (6) CREST Research Directors and Lead Joint Researchers must be mindful of research and working environments and conditions for their own group's Research Participants, and especially research staff and others whose employment is being funded by CREST research funds.
- (7) In the research project selection interview, research project applicants will be asked about plans<sup>2</sup> for supporting the development of varied domestic and international career paths for research staff who have recently completed doctoral programs and will be employed with research budget funds. It is recommended that CREST Research Directors and Lead Joint Researchers actively support this. In addition, in interim and post-completion evaluations, questions will be asked regarding the status of career path assistance efforts and the post-completion career paths of the research staffs who are the subject of career path assistance efforts. Responses to these questions will be positively evaluated.
- ※ Please refer to the details in "8.16 Career Paths for Young Research Staff with Doctoral Qualifications (for CREST)".
- (8) PRESTO and ACT-X Individual Researchers are obliged to participate in Research Area meetings with the Research Supervisor and Research Area Advisors (twice annually) and engage in activities such as reporting on research results. PRESTO and ACT-X values active discussion and interaction at Research Area meetings with Research Supervisors and Research Area Advisors, as well as the networking of younger researchers through competition and mutual inspiration, to promote researcher cooperation in the future. In ACT-X, the Research Supervisor determines the Area Advisor in charge of each individual researcher considering the whole picture, and provides advice and guidance on the content of and approach to individual research through site visits and other occasions.

## (9) Handling of Research Results

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<sup>2</sup> Part of the activities in these plans can be included in research efforts.

- a. Given that research results are obtained with national government funding, it is requested that research results be actively reported both domestically and internationally, with due consideration for the acquisition of intellectual property rights.
  - b. When reporting on research results through research papers or other media, please acknowledge that the research results were obtained by the Strategic Basic Research Programs (CREST, PRESTO, ACT-X).
  - c. Research team members may be requested to participate in domestic and international workshops and symposia sponsored by JST and to report on research results there.
  - d. It is requested that an active effort be made to secure intellectual property rights. In principle, intellectual property rights are to be applied, in accordance with Collaborative Research Agreement contract terms, by the research institutions with which researchers are affiliated.
- (10) Researchers are requested to actively engage citizens in discussions of science and technology to promote citizens' understanding and support of science and technology. Especially in CREST, efforts on the engagement of citizens will be positively evaluated at both interim and post-completion evaluations of research project  
 ※Please refer to the guideline details in “8.20 Dialogue and Collaboration with Public Stakeholders.”
- (11) Researchers shall abide by Collaborative Research Agreement entered by JST and research institutions, and shall abide by JST's various rules.
- (12) It should be noted that JST will provide research project names, names of researchers, research budget information, and other required information to the Cross-ministerial R&D Management System (e-Rad) and the Government Research and Development Database. Research Directors and others, therefore, are going to be requested to provide these types of information in this respect. (“8.28 Handling of Information Provided in Research Proposals, etc.”)
- (13) Researchers are requested to working together with JST, for conducting Research evaluations, JST accounting examinations, accounting audits by the national government, and other similar activities.
- (14) Researchers are requested to providing various types of information, responding to interviews, etc., for the follow-up evaluation that will be performed sometime after the completion of research project.

### **5.2.7 Responsibilities of Research Institutions**

Research Institutions must fully recognize that the research funds are public funding and ensure compliance with related law, and make efforts to implement the research effectively. Research institutions that cannot accomplish the tasks described below will not be enjoined to implement research. Researchers are requested to obtain a consent of pursuing the tasks from their research institutions where their research is going to be implemented before the research implementation.

- (1) For Domestic Institutions

- a. Research institutions are obliged to conclude a Collaborative Research Agreement with contents proposed by JST, as a standard, also they are obliged to properly implement a research, in accordance with the Collaborative Research Agreement, administration process manual, and research plan approved by the Research Supervisor and JST. In the case that they cannot conclude a research contract with JST, and in the case that they are judged by JST that they cannot properly implement a research, an implementation of a research at the institutions shall not be admitted.

※ The latest sample of research contract agreement is available to the following website.

<https://www.jst.go.jp/contract/download/2022/2022kisokens201keiya.pdf>

- b. Research institutions with an autonomous institutional management and audit system for public research budgets are obligated to properly execute the contract research funds in accordance with the “Guidelines for the Management and Audit of Public Research Funds in Research Institutions (Practice Standards)” (decided by the Minister of Education, Culture, Sports, Science and Technology on February 15, 2007; revised on Feb. 18, 2014). in addition to reporting the status of their management and audit system for public research budgets to the Ministry of Education, Culture, Sports, Science and Technology, research institutions are also obligated to be corporative in various investigations into their system implementation and other related matters (8.25 Consideration on “Guidelines for the Management and Audit of Public Research Funds in Research Institutions (Practice Standards)”).

[https://www.mext.go.jp/a\\_menu/kansa/houkoku/1343904.htm](https://www.mext.go.jp/a_menu/kansa/houkoku/1343904.htm)

- c. In accordance with the “Guidelines for Responding to Misconduct in Research” (August 26, 2014, adopted by the Minister of Education, Culture, Sports, Science and Technology), research institutions are obliged to implement regulations and systems necessary for preventing research misconducts, and are responsible for operating the regulations and systems effective in actual situations. Also, research institutions are responsible for responding to various investigations relating to the construction of administration based on the guideline (8.26 Consideration on “Guidelines for Responding to Misconduct in Research”).

[https://www.mext.go.jp/b\\_menu/houdou/26/08/1351568.htm](https://www.mext.go.jp/b_menu/houdou/26/08/1351568.htm)

- d. Research institutions are responsible for ensuring that associated researchers fully recognize the contents of the above guideline described in a., b. and c. and making them trained with educational materials related to research ethics provided by JST.
- e. Research institutions shall expend and manage research expenses properly in accordance with the regulations of the research organization while keeping reasonable flexibilities in the expenditure operation; as for expense items subjected to the administrative process manual, and etc., provided by JST, stating special regulation rules of expense in the Strategic Basic Research Programs. (Research institutions receiving Grants-in-Aid for Scientific Research expenses can handle their expense in conformity with the handling rule of the Grant-in-Aid for Scientific Research expenses, as for items not described in the administrative process manual).
- f. Research institutions need to conclude contracts with researchers who are going to participate in the Research and are to be an inventor of intellectual properties with regard to the Research, to ensure the properties be transferred from the researchers to the institutions. In particular, when a person who is not subject to the service invention regulations of a research institution such as a student who is not in an employment

relationship with the research institution is a research participant, it is necessary to take appropriate action, such as concluding an contract with the student in advance to ensure that intellectual property rights pertaining to the invention (including conception) made by the student in the course of conducting the research belong to the research institution, except in cases where it is clear that the said student cannot become the inventor. Regarding the conditions of compensation for transfer of intellectual property rights, those concerned are asked to act in a way that is not unfavorable to the student who is the inventor.

In addition, when the intellectual property is transferred to and exclusive licenses to use the property are granted to other persons or parties, etc., a prior approval of JST is needed in principle, and when the application, registration, implementation, and renunciation of the property rights are going to be conducted, a priori report to JST is needed. Regarding the intellectual property produced through conducting the contract research of JST by research institutions, the institutions are obliged to notify and make necessary applications to JST that are relevant to Article 17 of the Industrial Technology Enhancement ACT, even after the completion of the contract research.

- g. Research institutions are responsible for responding to accounting investigations by JST and account audits by the government.
- h. Research institutions are obliged to obey measures pertaining to the change of terms of payment as well as accept the decrease of payments decided by JST, based on JST investigations on their administrative management systems, financial conditions, etc.

In addition, if the project evaluation at the end of the JST mid- and long-term target period calls for the dissolution or contraction of the JST, or changes in the state of budgetary measures in the country, the contract period, in the case of contract cancellation and contract research expenses reduction measures may be taken. In addition, based on the results of the mid-term evaluation of research subjects, it may take measures such as increase or decrease of commissioned research expenses, change of contract period, cancellation of research, etc., and when JST judges that the continuation of research is not appropriate. Even during the term of the contract, JST may take measures such as cancellation of the contract. Research institutes need to follow these measures.

- i. When research institutions are national or municipal organizations, such institutions concluding research contracts are definitively obliged to implement necessary budgetary measures before entering research contracts for which they are responsible. (In case it becomes apparent that the non-fulfillment of necessary measures has not been taken, after the concluding the contract, JST will take measures to release the research contact and rescind the research funds.)
- j. As a part of the effort to prevent misconduct in research and development activities, JST has required researchers, who take parts of newly selected research projects and who also are affiliated with a research institution, to enroll in and complete the educational program on research integrity (The procedures required for enrollment will be handled by JST). Research institutions are responsible to supervise, without fail, their enrollment in and completion of the program by the relevant persons.

In the case that the relevant researchers of the institution fail to complete the educational program as stipulated despite repeated reminders by JST, JST will halt, partially or entirely, the payment of contract



research fund. In line with this, the research institution is to halt all use of the research funds and not to restart the use until further notice from JST is given.

- k. Research institutions are obliged to take necessary measures, such as concluding research contracts with other institutions participating in the Research, regarding the handling of intellectual property rights and non-disclosure agreements, not to creating problems in implementing the Research and utilizing the Research achievement.
- l. Research institutes are requested to execute appropriate measures to fulfill their accountability, paying full attention to economics, efficiency, effectiveness, legitimacy, and accuracy, since the state funds shall be used as a source of funding for entrusted research expenses. In addition, research institutes need to make sure to work on planned execution and be careful not to procure for the purpose of budget reduction at the end of the research period or at the end of the fiscal year.

## (2) For Overseas Institutions

- a. In principle, research institutions are required to conclude research contracts with the content presented by JST (In some cases, the text of contractual items may be adjusted when a rational reason is recognized, considering the special characteristics of the research or the like). Further, research institutions are responsible for properly implementing the Research in accordance with the research contract and research plan. When a contract cannot be concluded between the research institution and JST, or when it is judged by JST that the research at the research institution will not be properly implemented, the implementation of the research at the research institution shall not be admitted.

※ The latest sample of research contract agreement is available to the following website.

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

- b. Research institutions are responsible for properly disbursing and managing research expenses for which they are responsible based on the research contract, guiding principles, etc. When JST designates guiding principles, etc. separately, they are responsible for creating and reporting expense details (for domestic organizations, this corresponds to accounting books) in English. Research institutions shall respond to various investigations related to implementation status per JST request in the period of the contract.
- c. Intellectual property rights resulting from research shall be transferred to JST or shared equally with JST. In the case of equal sharing, it is obligatory to bear the expenses necessary for application and maintenance of intellectual property rights equally with JST. (Japanese version of the Baugh-Dole Act) is not applicable to non-Japanese institutions.) Pursuant to this, inventions, etc. with the potential to become intellectual property rights must be reported promptly to JST (within 10 business days).

※ From the viewpoint of Security Export Control, JST may not conclude joint Collaborative Research Agreement with such institutions as announced in the “Foreign User List<sup>3</sup>” (or “End User List”) by Japanese Ministry of Economy, Trade and Industry (METI).

※ ACT-X cannot conduct ACT-X research in overseas institutions.

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<sup>3</sup> METI has issued the “Foreign User List” with the aim of strengthening the effectiveness of a catch-all control on goods related to weapons of mass destruction. <https://www.meti.go.jp/policy/anpo/englishpage.html>

## Chapter 6 Policy of Research Areas Calling for Proposals

As for Research Areas calling for Research Proposals in fiscal year 2019, please refer to “(1) Research Areas calling for Proposals” in the section “Overview of the Call for Research Application” of this document.

Details including “Abstract of Research Area” and “Research Supervisor’s Policy on call and selection of Research Proposals and Management of Research Area” of each Research Area of the Strategic Basic Research Programs are given in the following website.

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

※Please click the name of Research Area which you are going to apply.

## Chapter 7 Strategic Objectives

As for the titles of Strategic Objectives relevant to Research Areas calling for Research Proposals, please refer to section “(1) Research Areas calling for Proposals” in the section “Overview of the Call for Research Application” of this document.

Details of the Strategic Objective of each Research Area are given in the following website.

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

※Please click the name of Research Area which you are going to apply.

## Chapter 8 Key Points in Submitting Proposals

### 8.1 Measures against Unreasonable Duplication and Excessive Concentration

#### ○ Measures against “Unreasonable Duplication”

If a given Research Project by a given researcher (i.e. the name and content of the research is the same, and the research is receiving competitive research funding) is unnecessarily receiving multiple competitive research funding programs or other research funds (all current research funds for individual research subjects, such as subsidies, grants, joint research funds, contract research funds, etc., including those from overseas (\*)), and any of the following applies, research projects may be rejected, canceled or reduced (hereinafter referred to as "rejection of research projects") depending on the degree in this program. In the case that a duplicate application is made for research funds at the same time for research project that is essentially the same (including cases where they overlap to a considerable extent; the same as hereinafter), and they are selected more than once.

- In the case that there are applications for multiple competitive research funds and other research funds at the same time for research projects that are substantially the same (including cases where they overlap to a considerable extent; the same applies hereinafter), and they are adopted more than once.
- In the case that there are multiple applications for research projects that are substantially the same as the competitive research funds or other research funds that have already been selected and funded.
- In the case that there is an overlap in intended application of research funding between multiple research projects.
- Other cases equivalent to the above.

At the application stage for this program there are no limitations regarding the submission of proposals to other competitive research funding programs or other research funds. If a research project is selected by another competitive research funding program or other research funds, report this promptly to JST at the contact address given at the end of this document (rp-info@jst.go.jp). If there is any omission in this report, there is a possibility that the research theme will be rejected in this program.

\* Excludes basic expenses or internal funds that are allocated within the institution to which the company belongs, commercial activities stipulated by the Commercial Code, and financing through direct or indirect financing.

#### ○ Measures against “Excessive Concentration”

Even if the content of the research proposed for this program differs from the content of another research being carried out under another competitive research funding program or other research funds, if that the overall research funding allocated to the same researcher or research group (hereinafter referred to as “researchers”) in relevant fiscal year exceeds an amount that can be utilized effectively and efficiently and can be used within the research period, and in this program, research projects may be rejected in accordance with the degree of the following cases.

In the case that an excessive amount of research funding is being received in light of the capabilities of the researchers and the research methods being used, etc.

- In the case that an excessive amount of research funding is being received in light of the capabilities of the researchers and the research methods being used, etc.
- In the case that an excessive amount of research funding is being received, compared with the amount of effort (percentage of the researchers' overall working time\* that is required for carrying out the said research project\*) allocated to the research project.
- In the case that highly expensive research equipment is purchased unnecessarily.
- Other cases equivalent to the above.

For this reason, if you submit proposals to other competitive research funding programs, after submitting your application to this program, and the research project is selected by another competitive funding program, or if any information provided on your application changes, please report this promptly to JST at the contact address given at the end of this document. If reporting is omitted, the approval decision for the research project may be revoked.

\*The total work time of a researcher includes the time not only for research activities but also for teaching activities, management assignments, and other activities substantially equivalent to work.

#### ○ How to eliminate Unreasonable Duplication and Excessive Concentration

To eliminate unreasonable duplication and excessive concentration of competitive research funds, ensure transparency in research activities, and ensure appropriate efforts, applicants shall provide the following information at the time of application.

- (i) Providing information on the current application / acceptance status of other competitive research funds including other ministries and other research funds, and all current affiliated institutions / positions.

At the time of application, regarding the principal investigator / principal collaborator, the current application / acceptance status of other competitive research funds including other ministries and other research funds (system name, research subject, implementation period, budget amount, effort, etc.) (Hereinafter referred to as "information on research funds") and information on all current affiliated institutions / positions (including side jobs, participation in foreign recruitment programs, honorary professors without employment contracts, etc.) (hereinafter referred to as "information") Please enter "information about your institution / position") in the application documents and the research and development management system common to all ministries (hereinafter referred to as "e-Rad"). If the application documents or e-Rad contain false statements, the research project may be rejected.

Of the information on research expenses, information on joint research with which confidentiality agreements have been signed will be handled as follows in consideration of individual circumstances so that activities such as industry-academia collaboration will not be shrunk

- Only the information necessary to confirm whether the submitted research project does not result in unreasonable duplication or excessive concentration of research funds and can appropriately secure the effort related to the execution of the research project (in principle, information of the joint research such as only the name of the partner institution, the amount of research funds accepted, and information related to effort) will be requested.
- However, if it is difficult to submit due to unavoidable circumstances such as when it is difficult to submit based on the contents of the confidentiality agreement that has already been concluded, it is possible to submit the application without entering the name of the partner institution and the amount of research expenses accepted. Even in that case, JST may make inquiries to the institution to which we belong if necessary.
- In addition to the affiliated institution, information may be shared between distribution institutions and related ministries and agencies, but even in that case, it will be shared only by those who have a duty of confidentiality.

When concluding a non-disclosure agreement, etc. in the future, please consider assuming that you may submit only the necessary information when applying for competitive research funds. However, if both contracting parties agree on the scope of information to be kept confidential and its legitimate reason (such as when it is considered to be extremely important in corporate strategy and highly confidential), the confidential information will be submitted. Please note that it is possible to make a contract that does not assume.

(ii) Provision of other information necessary to ensure transparency in all research activities in which one is involved.

To ensure transparency in all research activities in which you are involved, including information on research expenses, information on affiliated institutions and job titles, and support for facilities and equipment other than donations and funds (\*). JST requests a pledge that we are properly reporting the information necessary for the research to the institution to which we belong based on the relevant regulations. If it is found that an appropriate report has not been made in violation of the pledge, the research project may be rejected.

Regarding information on the acceptance status of facilities / equipment, etc. that are not used for the research project of the application but are used for the research that is separately engaged, can the research project be sufficiently carried out without unreasonable duplication or excessive concentration. From the viewpoint of confirming, in addition to the pledge, JST may ask the affiliated institution to submit the status of grasping and managing the information.

\* Includes cases where articles such as research facilities, machines, and equipment are supplied and services are provided even in the manner of free of charge.

○ Information on Proposal Contents Provided to Eliminate Unreasonable Duplications and Excessive Concentration

In order to eliminate unreasonable duplication and excessive concentration, to the extent necessary the information of some proposals (or selected projects/programs) may in some cases be provided through the Cross-ministerial R&D Management System (e-Rad) to other departments in charge of competitive funds, including other government ministries. Furthermore, when it is required that checks be made for duplicate project applications under other funding programs, the information may be provided in a manner alike.

## **8.2 Ensuring research integrity against new risks associated with internationalization and openness of research activities**

In order to promote the creation of science and technology and innovation in Japan, it is necessary to continue to strongly promote international joint research with various partners, with open science as the main principle. At the same time, in recent years, new risks associated with the internationalization and openness of research activities may impair the values that form the basis of the research environment, such as openness and transparency, and researchers unintentionally fall into conflicts of interest and responsibilities. Dangers have been pointed out, and under these circumstances, building an internationally reliable research environment as Japan will promote necessary international cooperation and exchanges while preserving the values that form the basis of the research environment. Is indispensable for.

Therefore, universities, research institutes, etc. have stated that "the policy for ensuring research integrity against new risks associated with the internationalization and openness of research activities (decided by the Integrated Innovation Strategy Promotion Council on April 27, 2021). Based on this, establish rules and management systems related to conflicts of interest and responsibilities, and autonomously ensure the soundness and fairness (research integrity) of research at researchers, universities, research institutes, etc. Is important.

From this point of view, we are confirming whether we can appropriately secure efforts while eliminating unreasonable duplication and excessive concentration of competitive research funds and ensuring transparency in research activities. We may make inquiries to the institution to which we belong, as necessary, regarding the status of maintenance of regulations and the status of grasping and managing information.

## **8.3 The State of Acceptance of Applications for Other Competitive Research Funds Including Other Governmental Bodies**

○ If you are receiving Grants-in-Aid for Scientific Research or other competitive research funding operated by the national government or independent administrative agencies (including national research and development agencies), or other research grants (including funding for which applications have been submitted), please provide information of this funding in the research proposal in the prescribed format (CREST Form 9, PRESTO Form 5, ACT-X Form 5).

Based on information on the content of the research proposal and effort (research time allocation rate), if either unreasonable duplication or excessive concentration of competitive research funding has formed, the research proposal may not be selected, or selection may be withdrawn, or research funding may be reduced. Furthermore, the research proposal may also not be selected, or selection may be withdrawn, or research funding may also be reduced in the case that the information provided in the research proposal is found to be false.

- In order to eliminate an unreasonable duplication or an excessive concentration of competitive funding if a researcher is receiving other competitive research funding operated by the national government or independent administrative agencies (including national research and development agencies), or other research grants, or if researcher has been selected for such funding, the researcher may not submit proposals to this program for research with the same project name or content.
  
- If an applicant is scheduled to receive 100 million yen or more from research funding under other programs or research grants, etc. in FY2022 or FY2023, in view of the purpose of eliminating unreasonable duplication and excessive concentration, as a general rule, final selection of the research project and its budget amounts are decided in an integrated manner. In the case that the applicant is scheduled to receive a total of 100 million yen or more from multiple funding systems/grants, he/she is given a consideration individually in the selection process.  
Although not relevant for research projects at the application stage, the research proposal may be removed from the selection process of this program or the selection decision of the proposal withdrawn, depending on its outcome of selection for other competitive funding or research grants.



## 8.4 Measures against Inappropriate Usage of Research Funds

Inappropriate use and reception (referred to as “inappropriate usage” hereinafter) of research budgets related to implemented issues are strictly treated as described below.

### ○ Measures Taken in the Case that Inappropriate Usage of Research Expenses are Found

#### (i) Measures to Cancel Contracts

The Collaborative Research Agreement contract is cancelled or altered if issues of inappropriate usage are found, and a request is made for refunding all or part of the entrusted funds. Contracts for the following year and subsequent years may not be concluded.

#### (ii) Measures to Restrict Application and Participation Eligibility<sup>4</sup>

Restriction measures set out in the table below, depending on the levels of inappropriate usage, are taken against the application and participation eligibility of researchers<sup>5</sup> (including researchers who conspired, referred to as (“researchers who conspired to inappropriate usage”)) who exercised inappropriate usage of research expenses of this project or those whose involvement in inappropriate usage is not proven but who violated due care of a prudent manager. Or, they are otherwise reprimanded.

Furthermore, the outlines of pertinent inappropriate usage (names of researchers who exercised inappropriate usage, project names, affiliations, research issues, amounts of budget, fiscal year of research, contents of inappropriate usage, contents of measures taken) are provided to persons in charge of competitive research funds including of other ministries, who may restrict application and participation of the researchers in other systems for competitive funds of the prefectures.

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	
1. A researcher who committed a misconduct or a researcher who was in conspiracy with a person who committed a misconduct *1	1. Use of a research budget to make a private profit	10 years	
	2. Other than 1.	① Impact of the misconduct on the society is substantial and maliciousness of the misconduct is judged to be high	5 years
		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
2. A researched who used a fabrication and other dishonest means to receive a competitive research fund or etc. and a researcher who was		5 years	

<sup>4</sup> “Application and participation” refer to the proposal, subscription, and application of a new project; participation in research as a new joint researcher; and participation in an ongoing research project as a research director or a joint researcher.

<sup>5</sup> “Researchers who violate due care” refer to those whose involvement in inappropriate usage is not proven but who violated the duty of due care of product manager they should exercise.

in conspiracy with the person who committed this misconduct		
3. 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 *2		1 to 2 years (in maximum) in accordance with the degree of failure of fulfilling his/her duty of due care of prudent manager

A strict warning is issued under any of the following conditions without restricting application or eligibility for participation.

- \*1: In case of item 1, the influence over the society is minor, the malignancy of the act is minor, and the amount of unjustifiable use is small.
- \*2: In case of item 3, the influence over the society, as well as the malignancy of the act, is minor.
- \*3: In principle, the application restriction period will be calculated from the following the fiscal year in which the research funds are refunded after the unauthorized use is recognized. Also ineligible in the fiscal year in which inappropriate usage of research funds are identified.

### (iii) About Public Announcement of a Case of Inappropriate Usage

Among those who are involved in an inappropriate usage of the program’s research funds or those who failed to fulfill their duty of due care of prudent manager, regarding those researchers whose eligibility of application to or participation in this program is restricted, information of the outline of their misconduct (name of researcher, name of program, name of affiliated institution, fiscal year of research, details of misconduct, details of measures taken) will be disclosed in principle by JST. At the same time, information of outline of their misconduct will be disclosed in principle by MEXT.

Furthermore, according to the “Guidelines for the Management and Audit of Public Research Funds in Research Institutions (Practice Standards),” once misconduct is determined as the outcome of an investigation of an institute, it will be the responsibility of the research institution to announce the results of the investigation; hence, we request that each institution deal with the matter appropriately, following the “Guidelines”.

- \* Please refer to the following URL for the outline of the fraudulent cases currently announced on the website of MEXT.

[https://www.mext.go.jp/a\\_menu/kansa/houkoku/1364929.htm](https://www.mext.go.jp/a_menu/kansa/houkoku/1364929.htm)

## 8.5 Measures taken for Researchers whose Application and Participation Eligibilities are Restricted in Another Competitive Research Fund System

Researchers on whom restriction is imposed for the reason of inappropriate usage of research expenses in another competitive research fund system<sup>6</sup> are not eligible to apply to or participate in this program while their qualifications are restricted for application in the competitive research fund system.

“Other competitive fund systems” include those systems that newly start a call for proposals in public 2022 fiscal year and those that finished before the 2021 fiscal year and before.

<sup>6</sup> Also refer to <https://www8.cao.go.jp/cstp/compefund/>  
Research proposal funding system will be published soon.

## 8.6 Majors taken to the Violation of Related Guidelines

Violation of the guidelines provided in this chapter or any other inappropriate behavior may result in withdrawal of approval for the research project or cancellation of the research; return of all or part of the project's research funding, and measures taken to publicize the facts of the matter.

Violation of related laws or guidelines, etc., in conducting research may result in penalties and sanctions being applied to persons and organizations that committed the violation, and the suspension or cancellation of research funding.

## 8.7 Carryover of Research Expenses

Making a carryover of research expenses until the end of next fiscal year for a maximum, for multi-year contracts that continue until the next year, may be permitted according to the delay of the progress in the project occurs and is difficult to conclude within the fiscal year due to unavoidable conditions difficult to determine in advance the research or study method of the experimental research, such as weather-related conditions, obtaining rare materials and others etc.

## 8.8 Cross-ministerial Expenses Handing Partitioned Table

The expense items of competitive research costs specific to the Strategic Basic Research Programs are determined on the basis of "Cross-ministerial Expenses Handing Partitioned Table." As for research expenditure, refer to the "Cross-ministerial Expenses Handing Partitioned Table" as well as JST official administration manual on the website (<https://www.jst.go.jp/contract/index2.htm>).

Currently, in response to the "6th Science and Technology / Innovation Basic Plan", the "Integrated Innovation Strategy 2020" and the "Comprehensive Package for Strengthening Research Capabilities and Supporting Young Researchers", the system for competitive research funding is being improved. Based on this, in this project, it is possible to spend personnel expenses of the research representative of the project (hereinafter referred to as "PI") expenses related to agency work other than research (buyout expenses) from direct expenses. And, when spending expenses (buyout expenses) related to agency work other than research and PI personnel expenses, the following requirements need and paperwork procedure to be checked.

- "Review of the Possibility of the Use of Direct Costs for Someone to Carry Out Duties Other Than Research (Introduction of Buyout System) and for Principal Investigator (PI) Personnel Expenses (contact)" (September 17, 2020)  
<https://www.jst.go.jp/osirase/2020/pdf/20200917.pdf>
- "Measures for Strategic Basic Research Programs (CREST, PRESTO, ACCEL, ACT-X) related to a use of Direct Cost for agency expenses for jobs other than research activity (Buyout System)" (September 18, 2020)  
[https://www.jst.go.jp/kisoken/crest/manual/buyout\\_houshin.pdf](https://www.jst.go.jp/kisoken/crest/manual/buyout_houshin.pdf)

- “Measures for Strategic Basic Research Programs (CREST, PRESTO, ACCEL, ACT-X) Related to the "Use of Direct Costs for Principal Investigator (PI) Personnel Expenses"” (December 1, 2020)  
[https://www.jst.go.jp/kisoken/crest/manual/pi\\_houshin.pdf](https://www.jst.go.jp/kisoken/crest/manual/pi_houshin.pdf)

### **8.9 Exchange of Direct Costs between Expense Items**

Direct costs of different expense items can be exchanged under certain condition. Exchange are allowed without approval from JST when the amount of direct costs to be exchanged does not exceed 50% or 5 million JPY of the total direct costs.

Note that you are not allowed to exchange direct cost and overhead (indirect) cost.

### **8.10 Securing Research Period until the end of Fiscal Year**

In order to enable researchers to continue their research work until the end of a fiscal year, statements below should be followed in every JST competitive research funds.

(1) The research institutes and researchers must submit the notification of the completion as a work product of the project in a prompt manner when a project is finished. JST makes inspections on the completion of the project and the achievements of the research.

(2) Submit the accounting report by May 31.

(3) Submit the report on the research achievements by May 31.

Each research institute should make efforts to organize necessary systems at the institute based on the fact that the purpose of those practices is to secure the research period that continues at the end of a fiscal year.

### **8.11 Storage of Receipts and Report of Actual Usage of Overhead Costs (Indirect Costs)**

Institutions who received overhead costs are required to manage the costs appropriately and store the receipts as evidence for the appropriate use of overhead costs for five years counted from the next fiscal year from which the project ended.

Institutions which received overhead costs are required to report the actual use of overhead costs via e-Rad before June 30 of the next fiscal year. (If a research institute has acquired two or more competitive research funds, report all indirect costs accompanied by such competitive research funds.)

How to use e-Rad system is described on user manual of e-Rad is provided on the website

([https://www.e-rad.go.jp/manual/for\\_organ.html](https://www.e-rad.go.jp/manual/for_organ.html)).

FAQs are also provided on the website (<https://qa.e-rad.go.jp/>).

### **8.12 Promotion on Effective Use of Research Facilities and Equipment**

According to “Reform on Competitive Research Funds for Sustainable Creation of Research Achievements (Midterm Summary)” (Examination Meeting on the Reform of Competitive Funds, June 24, 2015), it is considered

appropriate that facilities/equipment which are comparatively large in scale and have high general applicability should in principle be shared, under the assumption that the original research objectives are sufficiently accomplished.

In addition, the "Comprehensive Package for Enhancing Research Capability and Supporting Young Researchers" (January 23, 2020, Council for Science, Technology and Innovation) and the "6th Science and Technology Innovation Basic Plan" (Cabinet decision on March 26, 2021) request the promotion on the maintenance and sharing of research equipment and facilities, to establish a system for introducing, updating and utilizing research equipment (core facility), and to formulate and publish a sharing policy.

Based on the above, for research facilities/equipment which are purchased by this program, and particularly for large scale, general purpose items, positive efforts for sharing should be made, including sharing within the scope that does hinder the progress of the applicable Research Project, use of research facilities and equipment purchased with other research funds, and purchase and sharing by combining multiple research funds, within the scope of the management conditions of other research funds and in accordance with the sharing system in the affiliated institution or organization. Please note that it is necessary to strike a balance between management as shared equipment/facilities and accomplishment of the research purpose of the applicable Research Project.

Moreover, participants are asked to promote the sharing of research facilities and equipment beyond the framework of individual research organizations and institutes by positively cooperating with the "Inter-University Network for Common Utilization of Research Equipment," which was implemented for the purpose of the mutual use of facilities in the National Institutes of Natural Sciences, and the sharing system constructed thanks to the "Equipment Support Center Maintenance Business New Shared System Introduction Support Program" and the "New Shared System Introduction Core Facility Construction Support Program" in each university.

- "Reform on the Competitive Research Funds for Sustainable Creation of Research Achievements (Midterm Summary)" (Examination Meeting on the Reform of Competitive Funds, June 24, 2015), in Japanese.  
[https://www.mext.go.jp/b\\_menu/shingi/chousa/shinkou/039/gaiyou/1359306.htm](https://www.mext.go.jp/b_menu/shingi/chousa/shinkou/039/gaiyou/1359306.htm)
- "6th Science and Technology / Innovation Basic Plan" (March 26, 2021, Cabinet decision) in Japanese.  
<https://www8.cao.go.jp/cstp/kihonkeikaku/6honbun.pdf>
- Unification of usage rule of competitive research funds (March 5, 2021), in Japanese.  
[https://www8.cao.go.jp/cstp/compefund/toitsu\\_rule\\_r30305.pdf](https://www8.cao.go.jp/cstp/compefund/toitsu_rule_r30305.pdf)
- "The Purchase of Shared Facilities Using Multiple Research Fund Systems (Use of Combined Total)" (September 10, 2020, Agreement between the institutions allocating funds and the relevant supervising government bodies)  
[https://www.mext.go.jp/content/20200910-mxt\\_sinkou02-100001873.pdf](https://www.mext.go.jp/content/20200910-mxt_sinkou02-100001873.pdf)
- Inter-University Network for Common Utilization of Research Equipment, in Japanese.  
<https://chem-eqnet.ims.ac.jp/>
- New shared system introduction support program, Core Facility Construction Support Program, in Japanese

### 8.13 Improvement of Treatment of Doctoral Student Participants

In the "Science and Technology / Innovation Basic Plan" (decided by the Cabinet on March 26, 2021), financial support for graduate students, especially doctoral students (second semester), in order to attract excellent students and working people from inside and outside of Japan. The aim is to triple the number of doctoral students who receive living expenses equivalent to the conventional amount (equivalent to about 30% of students enrolled in the doctoral program receiving living expenses equivalent). Set as a numerical target, "RA, etc. in each business and university, etc., in order to promote salary payment at an appropriate level as a research assistant (RA) to doctoral students from competitive research expenses and joint research expenses. We will formulate rules for the expenditure of RA expenses related to employment and rewards, and will implement them sequentially from FY2021. " There is a need to expand employment and improve treatment of doctoral students as research assistant (RA) in universities and research institutions.

Moreover, in relation to doctoral students, the "Guidelines for the Employment and Training of Postdoctoral Researchers" (December 3, 2020, Committee on Human Resources, Council for Science and Technology) note that "while they are students, they also possess aspects of researchers, and so it is a key obligation of universities that train researchers to guarantee their treatment and maintain an environment in which they can carry out research activities"; "it is particularly important to treat them based on appropriate evaluations of their contributions, including paying them according to the hours they have worked under appropriate work management by determining compensation commensurate with the nature and content of their duties"; and "in your application for competitive research funds, there is a need to include the costs required if you are employing an RA in a university, and you should review the university's rules to ensure that you can pay your RA(s) an appropriate level of compensation."

Based on the above, in these programs, please actively employ doctoral students who are necessary for the execution of your research as RAs and TAs, and pay them according to the hours they have worked under appropriate work management by setting a unit price commensurate with the nature and content of their duties, while aiming for the salary level to be equivalent to the cost of living. In addition, when applying for these programs, please apply with a financial plan that also takes into account the costs of the above-mentioned doctoral students.

- With regard to the salary level equivalent to living expenses (around 1.8–2.4 million yen per year), the "6th Science and Technology /Innovation Basic Plan" assumes that 1.8 million yen per year is an amount equivalent to living expenses; it also references payments to excellent doctoral students—doctoral course students (DC) who are paid research subsidies so they can give their undivided attention to their research without feeling financial unease—and gives 1.8–2.4 million yen per year as an indicative range for the amount needed to live.
- With regard to the treatment of doctoral students who have been hired to carry out a research project, the "Guidelines for the Employment and Training of Postdoctoral Researchers" state that "the standard pay for a

specially-appointed assistant professor employed with competitive research funds is considered to be around 2,000 yen to 2,500 yen per hour<sup>7</sup>, taking average amounts of pay into account."

- The specific amount and period of payment will be determined by the research institution. There is no restriction on the amount of payment above or below the level mentioned above.
- When employing students as RAs, etc., please pay attention so they do not work excessive hours, and consider the balance between work time and the doctoral students' own research and study time.

#### **8.14 Securing Independent and Stable Research Environments for Young Researchers**

The "Research Ability Improvement Reform 2019" (23 April 2019, Ministry of Education, Culture, Sports, Science and Technology) and the "Development of science, technology and innovation policy towards knowledge-based value creation: Becoming a world leader country with the realization of Society 5.0; Final Report" (March 26, 2020, Special Committee on General Policy, Council for Science and Technology) point out the importance of ensuring a period of employment of around five years or more for fixed-term posts for specially-appointed teaching staff and postdoctoral researchers, as short-term employment periods can be a major obstruction to career development.

In addition, regarding national universities and inter-university research institute corporations, the Guidelines for Human Resource Payroll Management Reform in National Universities: Towards the Construction of an Appealing Human Resource Payroll Management that will Contribute to Enhancing Education and Research Abilities (February 25, 2019, Ministry of Education, Culture, Sports, Science and Technology) state that "in order to realize both perspectives of training and stable employment for young teaching staff, it is desirable to promote an institutional system that incorporates the perspective of training researchers while maintaining mobility; for example, ensuring a fixed period of employment of around 5–10 years by making use of expenses that can be used with a high degree of freedom, such as indirect costs or donations, even if there is a fixed period of employment."

Based on the above, if you are employing young researchers such as specially-appointed teaching staff or postdoctoral researchers in these programs, please confirm who is responsible for human resources and accounting in your department, and endeavor to guarantee the research period as the length of their term of employment; please try to ensure as much as possible that the term of employment is fixed (around five years or more) by making use of indirect costs, basic costs, donations, etc. from external funds.

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<sup>7</sup> The standard pay for a specially-appointed assistant professor employed with competitive research funds is considered to be around 2,000 yen to 2,500 yen per hour, taking average amounts of pay into account. (Calculated based on the median monthly salary (between 400,000 and 450,000 Yen) of specially-appointed assistant professors according to the Survey on Instructor Employment at Research Universities (Preliminary Report) published August 2020 divided by the number of working hours per day (between 7 hours 45 minutes and 8 hours) for actual days worked (between 19 and 20 days), excepting weekends and holidays, and multiplying by 0.8 in light of their status as doctoral students.)

### 8.15 Self-motivated Research Activities by Young Researchers Employed to Carry Out Projects

With regard to young researchers employed in these programs, based on the "Implementation Guidelines for Self-motivated Research Activities by Young Researchers Employed with Competitive Research Funds" (Revised on December 18, 2020, Agreement of the Liaison Meeting of Related Government bodies on Competitive Research Funds), if the Principal Investigator, etc. judges that it will not hinder the progress of a project but help it, and permission is obtained from the research institution with which they are affiliated, researchers may use some of their efforts working on these programs for self-motivated research activities and/or activities that will improve their research and management capabilities, while using program funds for personnel expenses. Please see the following for more information.

- "Self-motivated Research Activities by Young Researchers Employed to Carry Out Projects (contact)" (April 10, 2020)  
<https://www.jst.go.jp/osirase/2020/pdf/20200414.pdf>
- Measures for Strategic Basic Research Programs (CREST, PRESTO, ACCEL, ACT-X) related to the "Implementation Guidelines for Self-motivated Research Activities by Young Researchers Employed with Competitive Research Funds" (April 14, 2020)  
[https://www.jst.go.jp/kisoken/crest/manual/senjukanwa\\_houshin.pdf](https://www.jst.go.jp/kisoken/crest/manual/senjukanwa_houshin.pdf)

### 8.16 Support for Diverse Career Paths for Young Researchers (for CREST)

The "Basic Policy of the Ministry of Education, Culture, Sports, Science and Technology for Supporting Diverse Career Paths for Young Researchers with Doctoral Qualifications Employed with Public Research Funds" (December 20, 2011, Council for Science and Technology, Committee on Human Resources) calls for "active efforts to support public research institutions and Research Directors that employ young researchers with doctoral qualification with public research funds, with the aim of securing diverse career paths in Japan and other countries for young researchers with doctoral qualifications. Also, the "6th Science and Technology Innovation Basic Plan" (Cabinet decision of March 26, 2021) also sets targets regarding the "expansion of career paths and mobility to industry." Furthermore, the "Guideline for the Employment and Training of Postdoctoral (December 3, 2020, the Committee on Human Resources, Council for Science and Technology Policy) states that "it is essential that doctorate human resources with high level specialization and advanced research skills should help drive innovation by contributing in a wide range of positions, including at venture companies and global corporations, and accordingly, initiatives are needed for the diversification of career paths after the completion of the postdoctoral period."

Based on this, when a project is selected in this call for research applications and young researchers such as specially appointed faculty members and postdoctoral personnel are to be employed with public research funds (competitive research funds or other project research funds, or public invitation-type education research funds for universities), the institution concerned should make active efforts to support those researchers in securing diverse career paths.



Institutions should also consider using indirect funds in these efforts.

See also “5.2.6 Responsibilities of the Research Director, Lead Joint Researchers and Individual Researchers following Approval.”

### **8.17 Securing management personnel such as URA**

In the "6th Science and Technology Innovation Basic Plan" (Cabinet decision on March 26, 2021), it is pointed out the importance that quality assurance and treatment improvement as professionals so that management personnel such as URA becomes attractive jobs. In addition, the "Comprehensive Package for Strengthening Research Capabilities and Supporting Young Researchers" (January 23, 2020, Science Technology and Innovation Conference) also showed the need to establish career paths for management personnel, URAs, engineers, etc.

Based on these, when management personnel such as URA employed by research institutes or newly hired are engaged in the management of research programs of this project, the research institute is not limited to this project, but other management personnel. Please try to secure a fixed term (about 5 years or more) as much as possible by utilizing indirect expenses of external funds, basic expenses, donations, etc.

### **8.18 Security Export Control (Measures against Leakage of Technology internationally)**

Many advanced technologies are studied at research institutions. Particularly at universities, there is a heightened risk of leakage of advanced technologies and research-related materials/equipment or misuse in development/manufacture of weapons of mass destruction owing to the increased number of international students and foreign researchers due to internationalization. For this reason, an organizational response by the research institution is required when a research institution conducts research activities, including the relevant contract research, so that research results with potential military applications are not passed to groups or individuals considering activities of concern, such as terrorist groups and developers of weapons of mass destruction.

In Japan, for the purpose of maintaining international peace and security, export controls (\*) are imposed based on the Foreign Exchange and Foreign Trade Act (Act No. 228 of 1949; hereinafter, “Foreign Exchange Act”). Accordingly, when attempting to export (provide) goods or technologies controlled under the Foreign Exchange Act, in principle, a license from the Minister of Economy, Trade and Industry (METI) is necessary. All those participating in this program must comply with the Foreign Exchange Act and all other laws, ordinances, guidelines, notifications, etc. of the national government. In addition to legal action and penalties, distribution of research funds may be stopped and the decision to allocate research funds may be cancelled if research is conducted in violation of the relevant laws, ordinances, guidelines, etc.

\* 1 Currently, Japan's security export control system is mainly based on international agreements, etc. (1) Freight with certain specifications and functions among the items listed in Appendix 1 of the Export Trade Control Order and Appendix 1 of the Foreign Exchange Order ( A system (list regulation) that requires the permission of the Minister of Economy, Trade and Industry when trying to export (provide) technology) and (2) when trying to export (provide) cargo (technology) that does not fall under the list regulation, military It consists of two systems

(catch-all control) that require the permission of the Minister of Economy, Trade and Industry when there is a risk of diversion (use requirements / consumer requirements or inform requirements).

Not only the export of cargo but also the provision of technology is subject to the regulation of the Foreign Exchange Law. When providing list regulated technology to non-residents (including residents who fall under a specific type (\* 2) after May 1, 2022), or when providing it in a foreign country, prior to the provision. Permission required. To provide technology, we provide technical information such as design drawings, specifications, manuals, samples, and prototypes on storage media such as paper, mail, CD, DVD, and USB memory, as well as technical guidance and skills. It also includes the provision of work knowledge through training and technical support at seminars. Acceptance of foreign students from abroad and activities such as joint research may include many exchanges of technologies that may be subject to the regulations of the Foreign Exchange Law. Please note that the technology acquired through this project may also be subject to regulation when it is intended to be exported (provided).

\* 2 Refers to the type of resident who is strongly influenced by non-residents, and it is permitted based on the provisions of Article 25, Paragraph 1 of the Foreign Exchange and Foreign Trade Law and Article 17, Paragraph 2 of the Foreign Exchange Ordinance. Transactions or acts that provide technology that requires "1. (3) Refers to the specific types specified in (1) to (3).

In addition, based on the Foreign Exchange Law, it is necessary to establish a security trade management system when exporting list-regulated cargo or providing list-regulated technology to foreign countries (\* 3). Therefore, by the time the contract is concluded, it will be confirmed whether or not the project plans to export cargo and technology that are subject to the export restrictions of the Foreign Exchange Law, and if there is an intention to export, it will be confirmed whether or not there is a management system. It may be. If you are willing to export and do not have a management system, we request that you establish a system by the earlier of export or the end of this project. The confirmation status may be reported to the Ministry of Economy, Trade and Industry at the request of the Ministry of Economy, Trade and Industry. In addition, if it is found that the technology acquired through this project violates the regulations related to the Foreign Exchange Law, the contract may be canceled in whole or in part.

\* 3 Exporters, etc. are obliged to comply with the "Exporter Compliance Standards" stipulated in Article 55-10, Paragraph 1 of the Foreign Exchange Law. In addition, the security trade management system here is based on the management system in the "Exporter Compliance Standards", and by appropriately exporting list-regulated cargo or providing list-regulated technology to foreign countries. The internal control system of an organization to prevent illegal exports.

Details of security trade management are available on the websites of the Ministry of Economy, Trade and Industry. See below for details.

- Ministry of Economy, Trade and Industry: Security Trade Management (general)

<https://www.meti.go.jp/policy/anpo/>

- Ministry of Economy, Trade and Industry: Deemed export control (\* 2 related page above)

<https://www.meti.go.jp/policy/anpo/anpo07.html>

- Ministry of Economy, Trade and Industry: Guidance on sensitive technology management related to security trade (for universities and research institutes)

[https://www.meti.go.jp/policy/anpo/law\\_document/tutatu/t07sonota/t07sonota\\_jishukanri03.pdf](https://www.meti.go.jp/policy/anpo/law_document/tutatu/t07sonota/t07sonota_jishukanri03.pdf)

- Ministry of Economy, Trade and Industry: Model Security Trade Management Regulations Manual for Universities and Research Institutes

<https://www.meti.go.jp/policy/anpo/daigaku/manual.pdf>

- Center for Information on Security Trade Information

<https://www.cistec.or.jp/export/jisyukanri/modelcp/modelcp.html>

- Ministry of Economy, Trade and Industry: Security Trade Guidance (Introduction)

<https://www.meti.go.jp/policy/anpo/guidance.html>

### **8.19 Strict Adherence to United Nations Security Council Resolution No. 2321**

In response to the nuclear test and repeated launching of ballistic missiles by North Korea in September 2016, The United Nations Security Council (hereinafter referred to as “Security Council”), adopted Security Council Resolution No. 2321 on October 30, 2016, that substantially increased and strengthened sanctions against North Korea. Accordingly, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) issued the Request for Strict Adherence to United Nations Security Council Resolution No. 2321 (2016 MEXT document No. 98) on February 17, 2017.

“Scientific and technical cooperation” in the section 11 in the main text of the Resolution is not limited to technologies regulated under the Foreign Exchange and Foreign Trade Act, but includes all cooperation with the exception of medical exchange. Accordingly, it is important to remember that the research institution must adhere to this Resolution in all research activities, including the relevant commissioned research.

See the following link for more information on Security Council Resolution No. 2321.

Ministry of Foreign Affairs of Japan: United Nations Security Council Resolution No. 2321, Japanese translation (Ministry of Foreign Affairs Notice No. 463 (issued on December 9, 2016))

<https://www.mofa.go.jp/mofaj/files/000211409.pdf>

## 8.20 Dialogue and Collaboration with Public Stakeholders

In "Promotion of" Science and Technology Dialogue with the People "(Basic Initiative Policy)" (decided by the Minister of State for Science and Technology Policy and a member of the Diet on June 19, 2010), the excellent results of science and technology are constantly being achieved. In order to create and further develop Japan's science and technology, it is essential to return the results of science and technology to the people, gain the understanding and support of the people, and promote science and technology together. It has been. If the research results are selected for this open call and receive an annual allocation of 30 million yen or more per year, public lectures on research results, symposiums, continuous distribution of research results on the Internet, and various stakeholders We ask that you actively engage in "scientific and technical dialogue with the people" such as round table conferences that involve the public.

- Promotion of "Science / Technology Dialogue with the People" (Basic Initiative Policy)

[https://www8.cao.go.jp/cstp/stsonota/taiwa/taiwa\\_honbun.pdf](https://www8.cao.go.jp/cstp/stsonota/taiwa/taiwa_honbun.pdf)

## 8.21 Open Access and Research Data Management

In April 2017, JST announced the basic policy regarding the handling of research results for the promotion of open science. This policy stipulates the basic concept of making research results papers open access and storing, managing, and disclosing research data in the research activities of this project.

As a general rule, researchers participating in this project are requested to publish their research papers through institutional repositories and publications premised on open access in 12 months after publication. In addition, based on the data policy of the research institution, researchers create a data management plan that describes the policy and plan regarding the storage / management, disclosure / non-disclosure of research data generated as a result of research activities. Please submit it to JST and carry out the research activities after storing, managing, and disclosing the research data based on this plan. This plan can be changed during the course of conducting research.

See below for more information.

- JST's basic policy regarding the handling of research results for the promotion of open science

<https://www.jst.go.jp/all/about/houshin.html#houshin04>

- JST Basic Policy Operation Guidelines for Handling Research Results to Promote Open Science

[https://www.jst.go.jp/pr/intro/openscience/guideline\\_openscience.pdf](https://www.jst.go.jp/pr/intro/openscience/guideline_openscience.pdf)

In addition, JST analyzes statistical data such as the number of data modules, data types, disclosure types, storage locations, etc. for the purpose of grasping the contents of the description, supporting researchers, and reflecting (revising) in the basic policy. JST assumes that the analyzed statistical data will be disclosed, but will not disclose individual personal data or data whose names are known.

\* For life science data, please refer to "8.22 Data Disclosure from NBDC".

## 8.22 Data disclosure from NBDC

The National Bioscience Database Center (NBDC) of JST has proceeded the Integration of Life Science Database Project (<https://biosciencedbc.jp/>) to promote the integrated use of databases in the life sciences field created by various research institutions and others.

Additionally, in "Progress and Future Direction of the Integration of Life Science Database Project" (January 17, 2013), NBDC has also worked for the object projects that receive provision of data and databases are to be expanded.

Based on these points, program participants are asked to cooperate in disclosure of the following types of data and databases obtained from this program.

No.	Type of Data	Place of Disclosure	URL
1.	Overview of databases constructed for disclosure	Integbio Database Catalog	<a href="https://integbio.jp/dbcatalog/?lang=en">https://integbio.jp/dbcatalog/?lang=en</a>
2.	Copies of data in connection with results published in paper presentation, etc. or copies of databases constructed for disclosure	Life Science Database Archive	<a href="https://dbarchive.biosciencedbc.jp/index-e.html">https://dbarchive.biosciencedbc.jp/index-e.html</a>
3.	Of items in 2, data related to human beings	NDBC Human Database	<a href="https://humandbs.biosciencedbc.jp/en/">https://humandbs.biosciencedbc.jp/en/</a>

< Contact >

Department of NBDC Program  
Japan Science and Technology Agency  
TEL: +81-3-5214-8491  
e-mail: [nbdc-kikaku@jst.go.jp](mailto:nbdc-kikaku@jst.go.jp)

## 8.23 Research Support Service Partnership Certification System (A-PRAS)

"Development of Science and Technology Innovation Policy for Knowledge-Intensive Value Creation-Toward a World-Leading Country by Realizing Society 5.0-Final Summary" (March 26, 2020, Science and Technology Council Comprehensive Policy Special) In the committee), "Based on the fact that startups that have strong feelings and passion for research support and return of research results to society, which were carried out by the government as a public business, are beginning to appear. Therefore, it is necessary to form a new public-private partnership system."  
"

Under such circumstances, the Ministry of Education, Culture, Sports, Science and Technology established the "Research Support Service Partnership Certification System (A-PRAS)" in the first year of Reiwa. This system improves the research environment for researchers by accrediting research support services provided by private

businesses that meet certain requirements as "research support service partnerships" by the Minister of Education, Culture, Sports, Science and Technology, and science in Japan. With the aim of accelerating the promotion of technology and the creation of innovation, and supporting the development of various efforts related to research support services, nine services have been certified by the second year of the Ordinance.

Details of each certified service can be found on the following Ministry of Education, Culture, Sports, Science and Technology web page. Please use all means.

[https://www.mext.go.jp/a\\_menu/kagaku/kihon/1422215\\_00001.htm](https://www.mext.go.jp/a_menu/kagaku/kihon/1422215_00001.htm)

- "Development of Science and Technology Innovation Policy for Knowledge-Intensive Value Creation-Toward a World-Leading Country by Realizing Society 5.0-Final Summary" (March 26, 2nd year of Reiwa Science and Technology Council Comprehensive Policy Special Committee)

[https://www.mext.go.jp/b\\_menu/shingi/gijyutu/gijyutu22/houkoku/1422095\\_00001.htm](https://www.mext.go.jp/b_menu/shingi/gijyutu/gijyutu22/houkoku/1422095_00001.htm)

#### **8.24 Reform of Competitive Research Funds**

At the present time, the government has received the "6th Science and Technology Innovation Basic Plan" and "Integrated Innovation Strategy 2021" and is holding discussions about improving systems related to competitive research funds so as to enable the more efficient and effective use of research funds. If, within the period of this call for submissions, policies common to all competitive research fund projects are announced regarding the improvement of funding systems and the use of funds, you will be notified about these policies when they apply to submissions for these programs and the use of program funds.

#### **8.25 Consideration on “Guidelines for the Management and Audit of Public Research Funds in Research Institutions (Practice Standards)”**

- (1) Implementation of Management and Audit Systems Based on the “Guidelines for the Management and Audit of Public Research Funds in Research Institutions (Practice Standards)”

In implementing the program, research institutions must stringently observe the “Guidelines for the Management and Audit of Public Research Funds in Research Institutions (Practice Standards)” (decided by the Minister of Education, Culture, Sports, Science and Technology on February 15, 2007; revised on February 1, 2021).<sup>8</sup> There is a need for research institutions, having implemented a system for managing and auditing public research funds, to take responsibility for making every effort to properly disburse the contract research funds in line with the aforementioned guidelines. If the Ministry of Education, Culture, Sports, Science and Technology (MEXT) decides that the system of a research institution for managing and auditing is insufficient, based on an investigation according to the said

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<sup>8</sup> Please refer to the following URL for the details of the “Guidelines for the Management and Audit of Public Research Funds in Research Institutions (Practice Standards).”  
[https://www.mext.go.jp/a\\_menu/kansa/houkoku/1343904.htm](https://www.mext.go.jp/a_menu/kansa/houkoku/1343904.htm)

guidelines, measures such as reduction of indirect costs of competitive research funding could be taken on the said institution.

(2) Submission of the “Self-evaluation Checklist for Implementation of Proper Systems” based on the “Guidelines for the Management and Audit of Public Research Funds in Research Institutions (Practice Standards)”

In concluding a contract for this project, the research organization<sup>9</sup> must prepare for a management and auditing system for research expenses based on the said guidelines and submit a “Self-evaluation Checklist for Implementation of Proper Systems” (“checklist,” hereinafter), which is a report on the situation (research undertaking is not approved unless the checklist is submitted).

Accordingly, starting on April 1, 2022, you must review the content of the following website, download the FY2022 version of the checklist from the Cross-Ministerial Research and Development Management System (e-Rad), fill it out, and submit it (upload it) via e-RAD to the Competitive Research Fund Coordination Office, Research Environment Division, Science and Technology Policy Bureau, Ministry of Education, Culture, Sports, Science and Technology (MEXT).

Please note that contracts for research institutions that have submitted the FY2021 version of the checklist will be approved irrespective of the above, but you must also submit the FY2022 version of the checklist by December 1, 2022.

On the other hand, institutions that are not receiving competitive funds from the MEXT or administrative agencies under the jurisdiction of the MEXT do not have to submit a checklist.

See the website of the MEXT below for details of the method for checklist submission.

[https://www.mext.go.jp/a\\_menu/kansa/houkoku/1324571.htm](https://www.mext.go.jp/a_menu/kansa/houkoku/1324571.htm)

\* Note: A perfect environment for using e-Rad is necessary for checklist submission. Also be aware that registering a research institution with e-Rad normally takes about two weeks. See the URL below in addition to the URL given above for details of the procedures related to the use of e-Rad.

<https://www.e-rad.go.jp/organ/index.html>

Since the said guidelines encourage the “promotion of issuing and sharing information,” please proactively publish and disseminate information regarding their misconduct prevention initiatives via their websites.

## **8.26 Consideration on “Guidelines for Responding to Misconduct in Research”**

(1) Administrative System based on the “Guidelines for Responding to Misconduct in Research”

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<sup>9</sup> In the case of “CREST,” the research organizations include not only those with which a Research Director is affiliated but also those with which Lead Joint Researchers are affiliated to whom research expenses are distributed.

In applying to this funding program and conducting research activities, research institutions are required to adhere to the “Guidelines for Responding to Misconduct in Research” (decided by the Minister of Education, Culture, Sports, Science and Technology (MEXT) on August 26, 2014, hereinafter referred to as the “guidelines”<sup>10</sup>).

In the case that the Ministry of Education, Culture, Sports, Science and Technology finds defects in the approach of organizations as a result of a survey of the situation, based on the guidelines, the Ministry may take measures including reduction of indirect expenses of the whole competitive fund for the pertinent organization. The “whole competitive research fund” includes all financing distributed by the MEXT and independent administrative agencies under the jurisdiction of the MEXT

## (2) Submission of the “Self-evaluation Checklist” Based on the “Guidelines for Responding to Misconduct in Research”

When concluding a contract for this program, research organizations<sup>11</sup> must submit “a checklist related to the approach, based on ‘Guidelines for responding to misconduct in research’ (hereinafter, “checklist of inappropriate research conduct”). (Research undertaking is not approved unless a checklist of inappropriate research conduct is submitted).

Accordingly, starting on April 1, 2022, you must review the content of the following website, download the FY2022 version of the Research Misconduct Checklist from the Cross-Ministerial Research and Development Management System (e-Rad), fill it out, and submit it (upload it) via e-RAD to the Research Integrity Promotion Office, Research Environment Division, Science and Technology Policy Bureau, Ministry of Education, Culture, Sports, Science and Technology (MEXT).

Please note that contracts for research institutions that have submitted the FY2021 version of the Research Misconduct Checklist will be approved irrespective of the above, but you must also submit the FY2022 version of the checklist by September 30, 2022.

Institutions that are not receiving competitive funds from the MEXT or administrative agencies under the jurisdiction of the MEXT do not have to submit a Research Misconduct Checklist.

See the website of the MEXT below for details of the method for Research Misconduct Checklist submission.

[https://www.mext.go.jp/a\\_menu/jinzai/fusei/1420301\\_00001.htm](https://www.mext.go.jp/a_menu/jinzai/fusei/1420301_00001.htm)

\*Note: A perfect environment for using e-Rad is necessary for Research Misconduct Checklist submission. Also be aware that registering a research institution with e-Rad normally takes approximately two weeks. See the URL below in addition to the URL given above for details of the procedures related to the use of e-Rad.

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<sup>10</sup> Refer to the following webpage for the “Guidelines for Responding to Misconduct in Research” (in Japanese)

[https://www.mext.go.jp/a\\_menu/jinzai/fusei/index.htm](https://www.mext.go.jp/a_menu/jinzai/fusei/index.htm)

<sup>11</sup> In the case of “CREST,” the research organizations include not only those with which Research Director is affiliated but also those of Lead Joint Researchers to whom research expenses are distributed. However, if the institute does not receive funding from MEXT or MEXT affiliated organization, the institute do not need to submit the checklist.



(3) Measures Taken for Misconduct in Research Activities Based on the “Guidelines for Responding to Misconduct in Research”

Misconduct in research activities in this program is treated strictly as described below.

(i) Measures to Cancel the Contract

In the case of specific misconduct (fabrication, falsification, and plagiarism) is identified of research of the program, the Collaborative Research Agreement is cancelled or altered and a refund of all or part of the entrusted expenses is requested. Furthermore, there may be cases in which no agreement is concluded in the following years.

(ii) Measures to Restrict Application and Participation Eligibility

Measures given in the table below, depending on the level of inappropriateness and responsibility of specific misconduct, to restrict application to and participation in this project are imposed upon researchers involved in certain misconduct in research papers or reports of this project and those whose involvement has not been established but who are found responsible to an extent for the violation of the duty of due care as a distinct manager of pertinent papers and reports. Furthermore, in the case that such restriction measures are taken on qualification for application and participation, information is provided to pertinent sections of competitive research fund systems (referred to as “competitive research fund system related to the Ministry of Education, Culture, Sport, Science and Technology” hereinafter) distributed by the Ministry of Education, Culture, Sport, Science and Technology and independent administrative agencies of the ministry and to pertinent sections of competitive research fund systems (referred to as “competitive research fund systems related to other ministries” hereinafter) distributed by other ministries and their independent administrative agencies, which may similarly restrict qualification for application and participation in competitive fund systems related to the Ministry of Education, Culture, Sport, Science and Technology and to other ministries.

Classification of person ineligible to apply to competitive research funds, being involved in specific research misconduct		Degree of maliciousness in specific research misconduct	Ineligible period of application. <sup>12</sup>	
Person who was involved in a research misconduct	1 . Especially malicious person, who, from the beginning of research, had an intention to commit a specific research misconduct		10 years	
	2. The author of a research paper, which is a product of a research where a specific research misconduct was committed	The authors of the paper, who are responsible for the whole content of it. Namely, they are the supervisor and the representative author of the paper or others who are identified to be equivalently responsible for the paper.	The misconduct has a substantial impact on the development of relevant research fields and on the society, or the maliciousness of the deed is judged to be high.	5-7 years
			The misconduct has a small impact on the development of relevant research fields and on the society, or the maliciousness of the deed is judged to be low	3-5 years
		The authors of the paper other than those described above.		2-3 years
	Persons who conducted a specific research misconduct other than those of 1 and 2.			2-3 years
Person who has not been involved in a specific research misconduct but is a responsible author of a paper relevant to a research where a specific research misconduct was committed, being the supervisor or representative author of the paper, or a person, who is identified to be equivalently responsible for the paper.	The misconduct has a substantial impact on the development of relevant research fields and on the society, or the maliciousness of the deed is judged to be high.		2-3 years	
	The misconduct has a small impact on the development of relevant research fields and on the society, or the maliciousness of the deed is judged to be low		1-2 years	

<sup>12</sup> In general, the ineligible period is calculated from the year following the year in which it was determined that there was a specific misconduct activity. Participation qualifications is also restricted for the relevant fiscal year in which specific misconduct activities are recognized. d

(iii) Measures Taken to Researchers whose Qualification is Restricted for Application to and Participation in the Competitive Fund System and Base Expenses

Qualification is restricted for application to and participation in this project for researchers whose qualification is restricted for application to and participation to competitive research fund related to MEXT; management grants to national university corporations, inter-university research institute corporations and independent administrative agencies under MEXT; base expenses including private school subsidies; or competitive fund systems related to other ministries during the period the restriction is in effect.

(iv) Public Announcement of Misconduct

In principle, JST makes a public announcement with regard to the outline of specific misconduct in research activities of this project (name of researcher, project name, affiliation, research year, contents of misconduct, and measures taken). The Ministry of Education, Culture, Sports, Science and Technology also makes a public announcement concerning the contents of the pertinent misconduct (name of misconduct, kind of misconduct, research field of misconduct, name of expense account of misconduct, outline of misconduct, measures taken by research organization, measures taken by fund distributor, and so on).

The said guidelines state that a research organization announces the survey result immediately. Each organization is requested to handle the case accordingly.

[https://www.mext.go.jp/a\\_menu/jinzai/fusei/1360483.htm](https://www.mext.go.jp/a_menu/jinzai/fusei/1360483.htm)

### **8.27 Duty to Complete Education on Research Ethics and Compliance**

Researchers who participate in the project of this research program shall receive training on research ethics education for the prevention of misconduct in research activities as per the “Guidelines for Responding to Misconduct in Research” and on compliance education as per the “Guidelines for the Management and Audit of Public Research Funds in Research Institutions.”

During the process of concluding a Collaborative Research Agreement after the selection of a proposed research project, it is necessary for all researchers participating in the research project, including the Research Director and Individual Researchers, to receive training on research ethics education and compliance education and submit a document to confirm their understanding of the contents of the training.

### **8.28 Handling of Information Provided in Research Proposals, etc.**

- Information in the documents for application will be used for review during the selection process. JST may use information in selected research proposals to advance research. Furthermore, information necessary for statistics or trend analysis of R&D described in “Form 2 (CREST Form2-1, PRESTO Form2-1, ACT-X Form 2)” will be utilized by JST as an anonymized data. To protect the interests of applicants, and from the viewpoint of the “Act on the Protection of Personal Information Held by Independent Administrative Agencies” and other related laws,

the research proposals submitted by applicants are not disclosed or used for any purpose other than the review purpose. Confidential information of research proposal shall be strictly maintained.

Law Concerning Protection of Personal Information Held by Independent Administrative Institutions

[https://elaws.e-gov.go.jp/search/elawsSearch/elaws\\_search/lsg0500/detail?lawId=415AC0000000059](https://elaws.e-gov.go.jp/search/elawsSearch/elaws_search/lsg0500/detail?lawId=415AC0000000059)

- Within the range necessary to eliminate duplication and excess, some information contained in applications, etc. may be provided to departments with responsibility for other competitive research funds, etc., including other government ministries and agencies.
- To the extent necessary to confirm the duplicate applications described in “Chapter 9 Limitations on Multiple Applications within the Strategic Basic Research Programs” Some information may be provided.

○ Handling of Information on the e-Rad system

Information of individual projects that have been selected for adoption (name of funding program, name of research project, name of affiliated research institution, name of Research Director, budget amount, implementation period, and research project summary) shall be deemed to be “information that is scheduled to be made public” as prescribed under Article 5, Paragraph 1, Item (a) of the “Act on Access to Information Held by Independent Administrative Agencies” (Act No. 140 of 2001). This information will be announced on the web page of this program as appropriate after selection.

○ Provision of the e-Rad system to the Cabinet Office

The "6th Science, Technology and Innovation Basic Plan" (decided by the Cabinet on March 26, 3rd year of the Ordinance) states that EBPM for policy making based on objective evidence will be thoroughly implemented in science and technology and innovation administration. The information registered in the common research and development management system (e-Rad) of the ministries and agencies is used for appropriate evaluation of research and development with national funds, effective and efficient comprehensive strategy, planning of resource allocation policy, etc.

Information on research achievements and accounting and use of indirect expenses related to the competitive research fund for selected projects shall be input in e-Rad every year. The information necessary for macroscopic analysis, including information on research achievements and accounting performance, will be provided to the Cabinet Office.

### **8.29 Registration of researcher information to researchmap**

JST Strategic Basic Research Programs (CREST, PRESTO, ACT-X) plan to utilize a database operated by JST for researcher information (researchmap). Researchmap is 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 such as research plans and result reports submission, including distribution of various files and event notices. Since registration in researchmap of Researchers, Research Directors and Lead Joint Researchers whose proposals have been selected for interview is mandatory for this purpose, those who have not yet registered are recommended to register as soon as possible until interview selection.

The information in researchmap is utilized effectively for surveying national academic or science and technology plans, as well as for statistical purposes. Registration at researchmap and updating of achievement information are requested.

(※1) Researchmap (<https://researchmap.jp/?lang=english>) is one of the largest researcher information databases in Japan, and registered achievement information can also be disclosed. In addition, researchmap is linked with e-Rad and faculty databases of many universities, and the registered information can be used in other systems, so the same achievements can be registered many times in various application forms and databases. It also leads to efficiency, such as eliminating the need to do it.

(※2) R3 (R Cube) is an electronic application system for research plans and results reports that is used by researchers selected for the Strategic Basic Research Program.

For new registrations, method to confirm your registration status, method to login or to reissue your password, please see the Quick-start Guide for Registration and login to the following website:

[https://researchmap.jp/outline/rr\\_manual/quickguide.pdf](https://researchmap.jp/outline/rr_manual/quickguide.pdf) (in Japanese)

<https://researchmap.jp/public/account/?lang=en> (in English, for new registration only)

For methods to register or update of your achievement information or to output your information on researchmap, refer to the following website (in Japanese):

<https://researchmap.jp/public/FAQ-1/>

When the first usage of R3 (R-Cube) after selection, you need to agree to the R3 Terms of Service and R3 Privacy Policy.

- R3 Terms of Service    <https://r3.jst.go.jp/termsAndConditions.html>
- R3 privacy policy    <https://r3.jst.go.jp/privacyPolicy.html>

### 8.30 Patent Applications by JST

In case a research institution does not acquire rights to an invention, JST may acquire those rights in some cases. Therefore, if a research institution does not foresee acquiring rights to an invention, the researcher should notify JST promptly, providing information concerning the said invention, etc. in any appropriate format. (The above “information concerning the said invention” means information necessary for JST to determine whether an application for intellectual property rights is possible or not, for example, a copy of the notification of invention used in the research institution.)

JST will conduct a study based on the received notice, and if JST judges, based on the results, that an application for the said invention, etc. is possible, a separate “Patent Rights Transfer Agreement” will be concluded between the research institution and JST.

### **8.31 Enrolling in and Completing the Educational Program on Research Integrity**

The research project applicant must complete the Educational Program on 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 (For the CREST program, enrollment in and completion of the research integrity educational program by the time of application is not a prerequisite for Lead Joint Researcher applicants).

To enroll in the Educational Program on Research Integrity and to submit a declaration of completion, follow either procedure (1) or (2) below. For application instructions using e-Rad, refer the e-Rad user manual.

(1) For applicants who have completed an equivalent program at their institution

Applicants, who have already completed an e-learning program or educational seminar on various aspects of research integrity e-learning program at the institution by the time of their application, are requested to make the declaration of it on the e-Rad application information input screen at the time of application submission.

(2) For applicants who have not completed an equivalent program at their institution (including applicants at institutions who do not have such a program)

a. Applicants who have in the past completed eAPRIN (ex-CITI Japan) in a JST program.

Applicants who have in the past completed eAPRIN (ex-CITI Japan) in a JST program by the time of their application are requested to make the completion declaration of it on the e-Rad application information input screen at the time of application submission.

b. For other applicants for whom a. above does not apply.

Applicants who find it difficult to enroll in the educational program for research integrity because their institution does not offer such a program or for other reasons may enroll in and take a digest version of eAPRIN (ex-CITI Japan) offered through JST. Please attend from the URL below.

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

No cost is needed for completing the program, which will take one to two hours to complete. Once enrolled, applicants are expected to complete the program without delay and then to declare the completion of the program and to also enter the number of the completion confirmation sheet (7 figures number + ARD) in the e-Rad application information input screen.

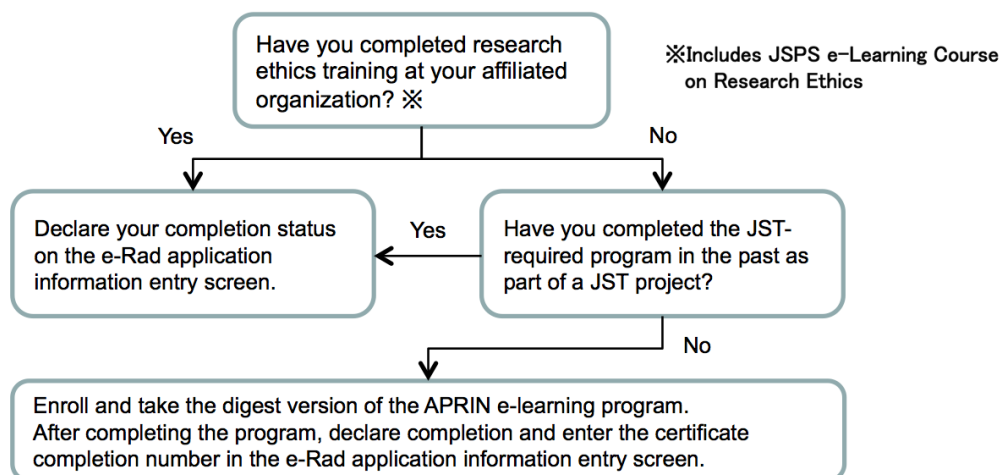
\* If the course completion date is before August 2019, the number will start from Ref #.

■ Contact for consultation on the Educational Program on Research Integrity  
Japan Science and Technology Agency  
Department of Audit and Legal Affairs, Research Integrity Division  
Email: rcr-kousyu@jst.go.jp

■ Contact for consultation on the call for application  
Japan Science and Technology Agency  
Department of Innovation Research  
Email: rp-info@jst.go.jp

\* Include the program name, research applicant name, and project name in the body of email.

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



JST requires researchers of CREST, PRESTO, and ACT-X research projects to enroll in and complete designated units<sup>13</sup> of the eAPRIN (ex-CITI Japan) e-learning program. All researchers of an accepted proposal, including CREST Lead Joint Researchers, are required to complete the designated units of the eAPRIN (ex-CITI Japan) e-learning program (excluding those who have already completed the seven designated modules at their institution or in another JST program).

### 8.32 Measures for Protecting Civil Rights and Complying with Laws and Regulations

In the case that, in implementing a research initiative, the initiative involves a research requiring the consent/cooperation of other parties, research requiring particular care in handling personal information, research requiring bioethical or safety measures to be taken, and other researches requiring procedures subjected to laws and regulations, be sure to carry out the necessary procedures, such as obtaining the approval of an external and internal ethics committee of a research institution. If research activities are conducted overseas or collaborative research activities with institutions overseas are conducted, please confirm the regulations and laws in advance, and adhere to them.

With regard to life science-related research in particular, there are cases in which the main law prescribed by each ministry are being revised, and there are also cases in which different laws are being applied, depending on the content of experiments. Please confirm the latest laws and ordinances related to your research. Note that undertaking research that violates the related law, ordinances, and/or guidelines prescribed by the government and ministries, may result in the suspension of research funding or the cancellation of funding.

For MEXT activities on bioethics and bio-hazard protection, visit the following website (in Japanese):

<sup>13</sup> Please refer to the following website for JST designated units.  
<https://www.jst.go.jp/researchintegrity/shiryo/e-learning.pdf>



<https://www.lifescience.mext.go.jp/bioethics/index.html>

In the case that the research plan includes research or surveys that require consent/cooperation of other parties and/or social consensus, be sure to take appropriate measures for protecting civil rights and interests prior to applying to this program.

### **8.33 The use of JREC-IN Portal**

The database of research human resources (JREC-IN <https://jrecin.jst.go.jp/>) is the largest website supporting research human resources in Japan. It is free to browse this service containing information on human resources, including researchers, their supporters, and engineers involved in research.

At present, the database holds more than 19,000 pieces of information on needed human resources from universities, public research organizations, and private business firms, in addition to more than 130,000 registered users. Furthermore, use of the Portal's web job application functionality enables the simplification of application documentation management while reducing the burden on job applicants. Use JREC-IN Portal to look for research human resources (postdoctoral, researchers, and so on) with high levels of knowledge to promote research projects.

Furthermore, JREC-IN Portal collaborates with researchmap. It may be reach by logging in with a researchmap ID and password. It functions for the preparation of resumes; achievement lists can use the information registered in researchmap to prepare these documents.

### **8.34 Results of JST's Development of Systems and Technology for Advanced Measurement and Analysis Program**

- JST implements a wide variety of research and development programs ranging from basic research to industry-academia collaborations and so on, and a great deal of these research results have already been put into practical use.
- Among these, the development of systems and technology for an advanced measurement and analysis program, which seeks to build and develop a basic research and development platform, has resulted in the practical use of many research and development tools.
- It would be a pleasure to know if a researcher notices a research and development tool that can be newly examined for the promotion of research and development.

Visit the Advanced Measurement website (<https://www.jst.go.jp/sentan/en/index.html>) for details.

**研究成果展開事業**  
【先端計測分析技術・機器開発プログラム】

JST 国立研究開発法人 科学技術振興機構  
文字サイズ変更 大 中 小  
サイト内検索 [検索]

▶ サイトマップ ▶ 交通アクセス ▶ リンク集 ▶ 新着情報 ▶ お問い合わせ ▶ ENGLISH

プログラムの概要 | 採択課題 | **開発成果DB** | 開発成果の活用・普及促進 | 公募案内 | 評価結果

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**開発成果の活用・普及促進**

本プログラムは、最先端の研究・ものづくり現場でのニーズに応えるため、将来の創造的・革新的な研究開発に資する先端計測分析技術・機器及びその周辺システムの研究開発を推進します。

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クイック検索(新しい検索)

詳細検索

開発課題名で検索:  
チームリーダー名で検索:  
メーカー名で検索:  
分野で検索:  ライフ計測  材料計測  環境計測  放射線計測  
製品化している:  製品化している  製品化していない

この条件で検索

開発成果の一覧

成果名	開発課題名	分野	製品
放射線分析用無鉛鉛筆線検出器	放射線環境検出器の開発	放射線計測	
超超導液体抽出/超超導液体クロマトグラフシステム(Nexera UC)	微量分析用超超導液体抽出分離装置の開発	ライフ計測	
放射線分析用半肉環線検出器(フレック状、従適原)	放射線環境検出器の開発	放射線計測	
高分解能定量型プローブ顕微鏡SPM-8000FH	大気中・液中で動作する原子分解能分析顕微鏡	材料計測	
青色カルシウムプローブ(CaTM-2™/CaTM-2™ AM)	次世代型蛍光プローブの創製を目指した新規蛍光団の開発	環境計測	

**開発成果**

開発成果のご案内

先端計測分析技術・機器開発プログラムでは、幅広い分野から実用的に利用できる成果を輩出しています。実用化された成果を「成果集」として公開しています。最新の成果集については「開発成果DB(データベース)」を御覧ください。

また、これまで開発してきた成果のうち、また実用化に近づいた、将来有望な成果を「成果集」として公開しています。最新の成果集については、こちらを御覧ください。

開発成果 成果集PDF  
これまでの開発の成果がPDFでご覧いただけます(マウスオーバーすると詳細が表示されます)。

成果集  
成果集  
成果集

成果集 PDF

放射線計測領域 成果集  
先端計測分析技術で被災地復興に貢献する  
Contributing through Innovation

成果集 2015  
これまで開発してきた将来有望な成果を「成果集」として公開しています。最新の成果集はこちらをご覧ください。(成果集2015)

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検索できます。

## Chapter 9 Limitations on Multiple Applications within the Strategic Basic Research Programs

In Prior to the call of Research Proposals to the CREST, PRESTO, and ACT-X programs in the fiscal year of 2022, JST and AMED have clearly stated their policies on the limitation of multiple application to different funding programs of the Strategic Basic Research Programs as follow. JST will take certain measures to exclude duplicate applications to different research funding programs, to both described and those not described in this chapter, if it is identified by JST that the applications are unreasonably duplicating and correspond to applications leading to excessive concentration of research funds to some individuals. For details, please refer to (5) of this chapter and “8.1 Measures against Unreasonable Duplication and Excessive Concentration.”

**\* The limitation on multiple applications within the Strategic Basic Research Programs has been changed from FY2022.**

(1) An applicant may submit only one Research Proposal to one of Research Areas of the CREST, PRESTO, ACT-X, AMED-CREST\*<sup>14</sup>, or PRIME\*<sup>15</sup> program which calls for application in FY2022.

\* As an exceptional measure, multiple applications are possible in some areas. Please refer to (6) and (7) below.

(2) **In the following cases, the application will be rejected.**

- Applicants in the position of a to g currently, cannot apply for CREST, PRESTO, or ACT-X as a research proposer.
- If applicants are in the position of h currently, or a to g in the past, they cannot apply for "ACT-X". (Those currently in position of h may apply for CREST and PRESTO (Early graduation), but ACT-X research will finish at the end of the academic year in which they are selected for CREST or PRESTO).
- In either case, this excludes situations where the Research Period of the Research Project etc. concerned finishes within the FY2022.

a. Research Supervisor or Deputy Research Supervisor of ERATO in the Strategic Basic Research Program

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\*<sup>14, 15</sup> These are Advanced Research and Development Programs for Medical Innovation with the Strategic Basic Research Programs carried out by the Japan Agency for Medical Research and Development (AMED). AMED-CREST (unit type) promotes research in units led by Research and Development Directors, and PRIME (solo type) is a program in which Research and Development Directors promote research on their own.

- 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 acceleration subject 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
- (3) In the CREST program, the Lead Joint Researcher and other Research Participants of a Research Proposal are subjected to the following limitations.
- a. Multiple applications by an applicant, made by switching his/her position from Research Director to Lead Joint Researcher, or *vice versa*, are not allowed. This restriction will be applied across the Research Areas of CREST. From FY2020, this restriction will also be applied for Research and Development Directors and Sharers of AMED-CREST.  
\* This restriction will not be applied if a part of the formation of project team differs, however, JST may judge that the applications are unreasonable duplication or excessive concentration and take necessary measures. Please refer to “8.1 Measures against Unreasonable Duplication and Excessive Concentration” for details.
  - b. If an applicant has made one Research Proposal application as the Research Director, Lead Joint Researcher or other Research Participants while he/she has made another Research Proposal application as Lead Joint Researcher or other Research Participants, and both of the Research Proposals has become candidates of new research projects of the program, there may be cases where some adjustments are taken, including the reduction of research budget, or forced to select one project among the Research Proposals, based on a consideration on the contents of the Research Proposals and the size of cost of each Research Proposal. From FY2020, similar adjustments may be applied for AMED-CREST, PRIME, FORCE, LEAP, and ERATO. Please refer to “Chapter 9 Table 2: Possible / Impossible SIMULTANEOUS Applications to the CREST, PRESTO and ACT-X programs”.
  - c. In cases that an applicant, who is currently a Lead Joint Researcher or other Research Participants of a CREST research project, has made a Research Proposal application to the program, and the Proposal becomes a candidate of new research projects of the program, adjustments similar to those described in b may be applied. From FY2020, similar adjustments may be applied for AMED-CREST, PRIME, FORCE, LEAP, and ERATO. Please refer to “Chapter 9 Table 1: Possible / Impossible Applications to the CREST, PRESTO, and ACT-X Programs”.
- (4) From the FY2022, it is possible to be a PRESTO or ACT-X Individual Researcher and a CREST Lead Joint Researcher at the same time. Similar measures will be put in place for PRIME Individual Researchers, AMED-CREST, FORCE, and LEAP Research and Development Sharers, and ERATO Group Leaders. For

details, please refer to “Table 1: Possible / Impossible Applications to the CREST, PRESTO, and ACT-X Programs” and “Table 2: Possible / Impossible SIMULTANEOUS Applications to the CREST, PRESTO and ACT-X programs”.

\* If you become an individual researcher and a Lead Joint Researcher at the same time, JST may make necessary adjustments to avoid excessive concentrations of research funds and unreasonable duplications. Please refer to 8.1 Measures against Unreasonable Duplication and Excessive Concentration.

- (5) In a case that the Research Proposal of an applicant is selected as a candidate of the CREST, PRESTO, or ACT-X program in FY2022, and he/she becomes candidate in multiple research projects funded by competitive research funds operated by JST as a result, JST may make a reduction of budgets the research projects or force to select one research project (This is not a case for research projects, which are scheduled to be ended on or before March 31, 2023). This coordination includes the research applicant, and in the case of a CREST application, Lead Joint Researcher or Other Research Participants.
- (6) Regarding CREST "Research on Multi-sensing Biosystems and Development of Adaptive Technologies" and PRESTO "Multisensory Integration in Biological Systems" research area, as an exceptional measure, it is possible to submit duplicate application with AMED's PRIME "Integrated understanding of multi-sensing networks and elucidation of their control mechanisms leading to the innovation of medical technologies" R&D project, which is established under the same Strategic Objective. Please note that each application shall be done with using the format specified by JST (CREST, PRESTO) and AMED (PRIME) for the proposal. If the proposal form error happens, it will not be accepted. Also, it will not be selected in two areas at the same time.
- (7) Regarding PRESTO "Fundamental understanding of age-related organismal transformations" research area, as an exceptional measure, it is possible to submit duplicate application with AMED's PRIME "Bridging the fundamental mechanism of aging and the effective treatment of age-related disease associated with impaired functional system" R&D project, which is established under the same Strategic Objective. Please note that each application shall be done with using the format specified by JST (PRESTO) and AMED (PRIME) for the proposal. If the proposal form error happens, it will not be accepted. Also, it will not be selected in two areas at the same time.

\* If an Application advances to the interview-based review, the participation and application status of the CREST Research Director, Lead Joint Researcher and research participants as well as PRESTO applicants listed on the Application in the three linked programs shall be submitted to the secretariat (the format to be used shall be notified separately if an Application advances to the interview-based review).

[References]

Table 1: Possible / Impossible Applications to the CREST, PRESTO, and ACT-X Programs

(for Persons who are Currently Engaging into the CREST, AIP acceleration subject, PRESTO, ACT-I (acceleration phase), ACT-X, AMED, and ERATO Programs)

Type of Application in Research Proposal		Applying for CREST Research Director	Applying for CREST Lead Joint Researcher	Applying for CREST Other Research Participant (not research director or lead joint researcher)	Applying for PRESTO Individual Researcher	Applying for ACT-X Individual Researcher
Current Position in ongoing Research Project						
CREST	Research Director	Impossible (refer to (2) of page 98)	Possible <sup>Note1</sup>	Possible <sup>Note1</sup>	Impossible <sup>Note3</sup> (refer to (2) of page 98)	Impossible (refer to (2) of page 98)
	Lead Joint Researcher	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1,2</sup> (refer to (4) of page 99)	Possible <sup>Note1</sup> (refer to (4) of page 99)
	Other Research Participant (not research director or lead joint researcher)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1,2</sup>	Possible <sup>Note1</sup>
PRESTO	Individual Researcher	Impossible <sup>Note3</sup> (refer to (2) of page 98)	Possible <sup>Note1</sup> (refer to (4) of page 99)	Possible <sup>Note1</sup>	Impossible (refer to (2) of page 98)	Impossible (refer to (2) of page 98)
ACT-X	Individual Researcher	Possible (refer to (2) of page 98)	Possible <sup>Note1</sup> (refer to (4) of page 99)	Possible <sup>Note1</sup>	Possible (refer to (2) of page 98)	Impossible (refer to (2) of page 99)
AIP acceleration subject	Research Director	Impossible (refer to (2) of page 98)	Possible <sup>Note1</sup>	Possible <sup>Note1</sup>	Impossible <sup>Note3</sup> (refer to (2) of page 98)	Impossible (refer to (2) of page 98)
	Lead Joint Researcher	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1,2</sup> (refer to (4) of page 99)	Possible <sup>Note1</sup> (refer to (4) of page 99)
	Other Research Participant (not research director or lead joint researcher)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1,2</sup>	Possible <sup>Note1</sup>
AMED-CREST,	Research and Development Director	Impossible <sup>Note3</sup> (refer to (2) of page 98)	Possible <sup>Note1</sup>	Possible <sup>Note1</sup>	Impossible <sup>Note3</sup> (refer to (2) of page 98)	Impossible (refer to (2) of page 98)

FORCE, LEAP	Research and Development Sharer	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (4) of page 99)	Possible <sup>Note1</sup> (refer to (4) of page 99)
	Other Research Participant (not Director nor Sharer)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup>	Possible <sup>Note1</sup>
PRIME	Research and Development Director	Impossible <sup>Note3</sup> (refer to (2) of page 98)	Possible <sup>Note1</sup> (refer to (4) of page 99)	Possible <sup>Note1</sup>	Impossible <sup>Note3</sup> (refer to (2) of page 98)	Impossible (refer to (2) of page 98)
ERATO	Research Supervisor Deputy Research Supervisor	Impossible <sup>Note3</sup> (refer to (2) of page 98)	Possible <sup>Note1</sup>	Possible <sup>Note1</sup>	Impossible <sup>Note3</sup> (refer to (2) of page 98)	Impossible (refer to (2) of page 98)
	Group Leader	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (3)c of pages 99)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (4) of page 99)	Possible <sup>Note1</sup> (refer to (4) of page 99)
	Contract Developer	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (3)c of pages 99)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup>	Possible <sup>Note1</sup>
	Research Participant	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup> (refer to (3)c of pages 99)	Possible <sup>Note1</sup> (refer to (3)c of page 99)	Possible <sup>Note1</sup>	Possible <sup>Note1</sup>
<p>Note 1) If the Research Proposal of an applicant is selected for adoption, to avoid excessive concentrations of research funds and unreasonable duplications, JST may make necessary adjustments including a budget reduction of the selected research project or a selection of a research project the applicant may conduct, and others.</p> <p>Note 2) If the researcher wishes to participate CREST and also continue PRESTO Individual Researcher (JST employed) , JST will conduct a review.</p> <p>Note 3) This is only possible if it is approved by the research area supervisor and JST / AMED in advance (contact must be made 3 weeks before application deadline).</p>						

Table 2: Possible / Impossible SIMULTANEOUS Applications to the CREST, PRESTO and ACT-X programs

(for researchers who are NOT engaging in ongoing research projects such as CREST, PRESTO, ACT-X, AMED Programs and ERATO.)

Type of Application in Research Proposal B		Applying for CREST Research Director	Applying For CREST Lead Joint Researcher	Applying for CREST Other Research Participant (not research director or lead joint researcher)	Applying for PRESTO Individual Researcher	Applying for ACT-X Individual Researcher
Type of Application in Research Proposal A						
CREST	Research Director	Impossible (refer to (1) of page 98)	Possible <sup>Note1</sup> (refer to (3) a, b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Impossible (refer to (1) of page 98)	Impossible (refer to (1) of pages 98)
	Lead Joint Researcher	Possible <sup>Note1</sup> (refer to (3)a, b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup> (refer to (4) of page 99)	Possible <sup>Note1</sup> (refer to (4) of page 99)
	Other Research Participant (not research director or lead joint researcher)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup>	Possible <sup>Note1</sup>
	Feasibility Study of Specific Research Proposal of the previous fiscal year (Research Director)	Only assigned research area can be applied. (refer to 5.1.5 (2) of page 52)	Possible <sup>Note1</sup> (refer to (3)a, b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Impossible (refer to (1) of page 98)	Impossible (refer to (1) of pages 98)
PRESTO	Individual Researcher	Impossible (refer to (1) of page 98)	Possible <sup>Note1</sup> (refer to (4) of page 99)	Possible <sup>Note1</sup>	Impossible (refer to (1) of page 98)	Impossible (refer to (1) of page 98)
	Feasibility Study of Specific Research Proposal of the previous fiscal year	Impossible (refer to (1) of page 98)	Possible <sup>Note1</sup> (refer to (4) of page 99)	Possible <sup>Note1</sup>	Only assigned research area can be applied. (refer to 5.1.5 (2) of page 52)	Impossible (refer to (1) of page 98)
ACT-X	Individual Researcher	Impossible (refer to (1) of Page 98)	Possible <sup>Note1</sup> (refer to (4) of page 99)	Possible <sup>Note1</sup>	Impossible (refer to (1) of pages 98)	Impossible (refer to (1) of page 98)



AMED-CREST	Research and Development Director	Impossible <sup>Note3</sup> (refer to (1) of page 98)	Possible <sup>Note1</sup> (refer to (3) a, b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Impossible (refer to (1) of page 98)	Impossible (refer to (1) of pages 98)
	Research and Development Sharer	Possible <sup>Note1</sup> (refer to (3)a, b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup> (refer to (4) of page 99)	Possible <sup>Note1</sup> (refer to (4) of page 99)
	Other Research Participant (not Director nor Sharer)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup>	Possible <sup>Note1</sup>
PRIME	Research and Development Director	Impossible (refer to (1) of page 98)	Possible <sup>Note1</sup> (refer to (4) of page 99)	Possible <sup>Note1</sup>	Impossible <sup>Note3</sup> (refer to (1) of page 98)	Impossible (refer to (1) of pages 98)
ERATO	Research Supervisor Deputy Research Supervisor	Possible <sup>Note2</sup>	Possible <sup>Note1</sup>	Possible <sup>Note1</sup>	Possible <sup>Note2</sup>	Possible <sup>Note2</sup>
	Group Leader	Possible <sup>Note1</sup> (refer to (3)b of page 98)	Possible <sup>Note1</sup> (refer to (3)b of page 98)	Possible <sup>Note1</sup> (refer to (3)b of page 98)	Possible <sup>Note1</sup> (refer to (4) of page 99)	Possible <sup>Note1</sup> (refer to (4) of page 99)
	Research Participant	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup>	Possible <sup>Note1</sup>
	Feasibility Study of Specific Research Proposal of the previous fiscal year	Possible <sup>Note2</sup>	Possible <sup>Note1</sup>	Possible <sup>Note1</sup>	Possible <sup>Note2</sup>	Possible <sup>Note2</sup>
LEAP	Research and Development Director	Possible <sup>Note2</sup>	Possible <sup>Note1</sup>	Possible <sup>Note1</sup>	Possible <sup>Note2</sup>	Impossible (refer to (1) of page 98)
	Research and Development Sharer	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup> (refer to (4) of page 99)	Possible <sup>Note1</sup> (refer to (4) of page 99)
	Research Participant	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup> (refer to (3)b of page 99)	Possible <sup>Note1</sup>	Possible <sup>Note1</sup>

Note 1) If the Research Proposal of an applicant is selected for adoption, to avoid excessive concentrations of research funds and unreasonable duplications, JST may make necessary adjustments including a budget reduction of the selected research project or a selection of a research project the applicant may conduct, and others.

Note 2) In a case that both the Research Proposals A and B are selected for adoption, JST will make necessary adjustments between the Proposal. That is, the cancellation of the Research Proposal applied to the PRESTO or ACT-X program or the change of the Lead Joint Researcher of the CREST Research Proposal.

Note 3) With regard to CREST “Research on multi-sensing biosystems and development of adaptive technologies” research applicants, it is possible as an exceptional measure to submit multiple applications for the AMED “Integrated understanding of multi-sensing networks and elucidation of their control mechanisms leading to the innovation of medical technologies” R&D project AMED-CREST (unit type). In addition, it is also possible for research applicants to PRESTO “Multisensory Integration in Biological Systems” research areas to submit multiple applications for the

AMED “Integrated understanding of multi-sensing networks and elucidation of their control mechanisms leading to the innovation of medical technologies” R&D project PRIME (solo type), for research applicants to PRESTO “Fundamental understanding of age-related organismal transformations” research areas to submit multiple applications for the AMED “Bridging the fundamental mechanism of aging and the effective treatment of age-related disease associated with impaired functional system” R&D project PRIME (solo type).. Also,Noted that it will not be selected in two areas at the same time.

[Supplement]

- \* Researchers conducting a CREST, a PRESTO, or an ACT-I research project (“CREST Research Director”, “CREST Lead Joint Researcher”, “PRESTO Individual Researcher”, or “ACT-I Individual Researcher”), which is scheduled to end on or before March 31, 2023, are eligible to make a Research Proposal application, as an applicant applying for a “CREST Research Director”, a “PRESTO Individual Researcher”, an “ACT-X Individual Researcher” or to participate in a CREST research project as Lead Joint Researcher.
- \* If a researcher applies for PRESTO or PRIME during the course of ACT-X research and your application is selected, the researcher can carry out PRESTO or PRIME, but the ACT-X research should finish at the end of the academic year in which the researcher was selected for PRESTO or PRIME (early graduation). If the researcher is applying for PRESTO or PRIME during the course of ACT-X research, please notify the Research Supervisor and JST of the researcher’s intention.
- \* In this submission period, researchers may submit an application as a CREST Research Director or PRESTO Individual Researcher even if the researchers are currently carrying out a FOREST program (Fusion Oriented Research for Disruptive Science and Technology) as a Principal Investigator (Individual Researcher). Please contact a person in charge of FOREST about the handling of the FOREST research subject when they were selected by CREST or PRESTO.
- \* It is possible for those currently engaged in ACT-X research to apply for CREST, PRESTO, ACT-X as well as ACT-X Acceleration Phase at the same time, but they cannot be carried out concurrently. If selection for one is determined, the other application will be discontinued.

## Chapter 10: Submission via the Cross-ministerial R&D Management System (e-Rad) - Abstract

### ○ Cross-ministerial R&D Management System (e-Rad)\*<sup>16</sup>

The cross-ministerial R&D Management System (e-Rad) is a cross-ministerial system that provides a series of on-line processes on the competitive funding system(Acceptance of applications → Screening → Selection →Management of selected project → Result report, etc.).

### 10.1 e-Rad usage notes

Applicants are requested to make an application using e-Rad (<https://www.e-rad.go.jp/en>). Please be aware of the following points when submitting your application:

#### ○ **Please submit your application via e-Rad.**

A proposal for which the application procedure has not been completed via e-Rad by the deadline will not be subject to screening.

#### ○ **Recommended system environments to use the e-Rad system.**

The recommended system environments to use e-Rad are IE, Firefox, Chrome, Edge, Safari.

(\*IE cannot be used.)

<https://www.e-rad.go.jp/requirement.html>

#### ○ **Pre-registration of research institution, researcher information and information related to research integrity is required.**

Please refer to “10.4.1 Pre-registration of research institution and researcher information” and "Attachment Document: How to apply using the cross-ministerial R&D Management System (e-Rad)".

#### ○ **Please allow several days (or more) after the application deadline for inputting information into e-Rad.**

Input of information into e-Rad takes a minimum of around 60 minutes. Furthermore, on the day of the application deadline, there is a risk that the e-Rad system may be congested and inputting may take a long time. Please allow sufficient time before the application deadline to commence inputting information into e-Rad.

#### ○ **It is possible to “temporarily save” input information.**

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\*<sup>16</sup> "e-Rad" is an abbreviation of the R & D management system common to all ministries, with the acronym for Research and Development (R & D for science and technology) followed by the acronym Electric ((Electron)).

It is possible to discontinue input of and temporarily save application information part way through. For details, please refer to “Temporary storage of application information and resumption of entry” in “How to Apply Using the Common R & D Management System (e-Rad)” of Appendix Document (see 10.4.1).

○ **“Retraction” on e-Rad system is possible.**

**Up to and including the day prior to the application deadline**, it is possible for researchers to retract and re-edit their research proposals. For details, please refer to the “Amending Submitted Application Information: ‘Retraction’” in “How to Apply Using the Common R & D Management System (e-Rad)” of Appendix Document (see 10.4.1).

**Do NOT “retract” research proposals on the day of the application deadline.** On the day of the application deadline, there is a risk that the e-Rad system may be crowded and re-editing the proposal after retraction may take a very long time.

## 10.2 Application method using e-Rad

(1) Register research institution and researcher information.

The research institution must register its researcher information and be issued a log-in ID and password.

\* For detail, please refer to “10.4.1 Pre-registration of research institution and researcher information”.

(2) Obtain required application documents and research proposal forms.

Please download the research proposal form from the website of the call for research proposal.

The proposal format may differ depending on the research area. Please be sure to download and use the form of the research area that researchers are applying for.

(3) Prepare a research proposal. (Maximum file size: 3 MB)

(4) Enter application information into the e-Rad system.

(5) Submit your research proposal. (Upload file to e-Rad for submission)

- The created application form file can be uploaded only in PDF format. e-Rad has a PDF conversion function from WORD and Ichitaro files. In general, please use this conversion function to convert the submitted form file to PDF. It is possible to convert it to PDF with your own application software, but be sure to check that the text copied and pasted from the PDF reader screen is not garbled. In PDF conversion by some apps, the text embedded in PDF may not be the correct character code.

- Applications whose application status is NOT “Distribution Institution” or “Accepted” by the submission deadline will be INVALID. Please check the status of your application on the "Project List" screen.

### 10.3 Enquiries and Service Availability

#### 10.3.1 How to operate e-Rad

For how to operate e-Rad, visit the portal site (<https://www.e-rad.go.jp/en/>) or download the manual from the site. Be sure to agree to the terms of use before making an application.

#### 10.3.2 Where to direct questions on how to use the e-Rad system

Questions about the program itself are answered by the person in charge of the program, as usual. Questions about e-Rad operation methods are answered by the e-Rad Help Desk. Before asking questions, be sure to read both the website outlining the Call for Proposals and the e-Rad Portal site carefully. JST will not answer any questions regarding the status of the screening or acceptance.

<p>Questions on matters such as programs, application documents for submission, and submission procedures</p>	<p>JST Department of Innovation Research (person in charge of calls for proposals)</p>	<p>Be certain to send questions by e-mail, except when in a hurry. For matters related to proposal submission:  E-mail : <a href="mailto:rp-info@jst.go.jp">rp-info@jst.go.jp</a>  Tel : 03-3512-3530  Office hours: 10:00 -12:00, 13:00 - 17:00  ● Except on Saturdays, Sundays, holidays, the year-end and new year period.</p> <p>[Communication by e-mail may be requested even when a question is asked by telephone.]</p>
<p>Questions regarding usage of the e-Rad system</p>	<p>e-Rad helpdesk</p>	<p>Tel: 0570-057-060(navi dial)  Office hours: 9:00-18:00  ● Except on Saturdays, Sundays, holidays, and the year-end and new year period (29<sup>th</sup> December – 3<sup>rd</sup> January).</p>

- Website for this program: (<https://www.jst.go.jp/kisoken/boshuu/teian-en.html>)

- e-Rad portal website (<https://www.e-rad.go.jp/en/>)

#### 10.3.3 Availability of e-Rad

Basically, e-Rad operates 24 hours a day, 365 days a year, but may stop the service for system maintenance. This will be announced in advance on the portal site.

## 10.4 Operation Method and Notes

### 10.4.1 Pre-registration of research institution and researcher information

Research institutions have to be registered on e-Rad by the time of application. One research institution must assign a representative for e-Rad, download the research institution registration form from the e-Rad portal site (hereinafter referred to as “portal site”), and apply for registration. However, if the proposer belongs to an overseas research institution, the research institution will be registered at JST after adoption. Please proceed to the application screen with no affiliation registered for the researcher ID (Ministry-common R & D management system), and click the “Basic Information” tab (Attachment: Common R & D management system (e-Rad)) Please refer to "How to apply by"). In that case, it is necessary for the proposer himself to obtain the e-Rad login ID and password.

Applicants are: CREST, the Research Director and all Lead Joint Researchers, and PRESTO and ACT-X, Individual Researchers. Applicants need to obtain a password in advance (if you have already registered for another application, you do not need to re-register).

The acquisition procedure is as follows. Please register prior to two weeks or more. Please refer to the portal site for details.

1) Researchers belonging to domestic research institutions

- Worker: Research institution clerk
- Registration Contents: Research Institution and Researcher Information

2) Researchers who belong to a foreign research institution or researchers who do not belong to a research Institution

- Worker: Proposer yourself
- Registration Details: Researcher Information

Please refer to the document below and the attached sheet for the application guidelines and the acquisition of research proposal forms.

"How to Apply Using the Common R & D Management System (e-Rad)" of Appendix Document

<https://www.jst.go.jp/kisoken/boshuu/teian/koubo/2022e-rad.pdf> (Japanese only)

## Q & A

If there are major updates on this Q&A, it will be announced on the following website.

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

For information related to the operation of the Cross-ministerial R&D Management System (e-Rad), registration of research institutions and researchers, and use of the e-Rad system, please refer to the following website:

<https://www.e-rad.go.jp/en/>

### ○ Enrolling in the educational program for research integrity

#### Content of the educational program for research integrity

Q What content must be included in the educational program for research integrity conducted by affiliated institutions?

A Educational programs for research integrity are the responsibility of each research institution. JST does not specify the specific teaching material to be used in such programs.

(Reference)

According to the “Guidelines for Responding to Misconduct in Research Activities” (August 26, 2014, adopted by the Minister of Education, Culture, Sports, Science and Technology), which were effective as of April 2015, research institutions are required to implement a structure for preventing misconduct—such as the installation of a “Research Integrity Education Manager”—and conduct education at the institutional level. Further, the allocating institution is also required to confirm researcher enrollment in the institution’s research integrity education program.

Note, however, that the details in the referenced guidelines focus on misconduct related to academic papers and does not cover bioethics and conflicts of interest, which are different topics. If you have any questions, please contact the JST Office of Research Integrity.

Japan Science and Technology Agency Department of Audit and Legal Affairs, Research Integrity Division E-mail : rcr-kousyu@jst.go.jp
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### Program completion certification

Q Is it necessary to submit documentation certifying completion of an educational program for research integrity?

A No, submission is not necessary.

### Declaring completion with the certificate completion number

Q I have completed the digest version of eAPRIN (ex-CITI Japan) e-learning program, but where/how do I view the course completion number?

A After passing the quiz, Confirmation Report will be provided. The Confirmation Report Number (7 digits + ARD) is written on the Course Completion Report.

**受講確認書**  
JST申請用  
Confirmation Report

下記の単元を受講し、合格点を取得しました  
Took the following lesson and passed.

単元名(Lesson name): 責任ある研究行為ダイジェスト/< Digest Version >  
Responsible Conduct of Research\_RCR

受講日(Passed on): 2019/06/13

受講確認書番号(Confirmation Report Number): 1930269ARD ← Check the Confirmation Report Number

氏名(FULL NAME): 柴富林 花子

機関名(ORGANIZATION): APRIN大学

部局名(DEPARTMENT): 理工学部

メールアドレス(Mail Address): aprinhanako@xxx.ac.jp

一般財団法人 公正研究推進協会  
Association for promotion of Reserch integrity

↑ Sample of certificate of completion



### **Availability of an English version of the eAPRIN (ex-CITI Japan) e-learning program digest version**

Q Since I have not taken the program offered by my institution, I am planning to enroll in the digest version of eAPRIN (ex-CITI Japan) e-learning program. What options are there if my native language is not Japanese, which makes taking the course in Japanese difficult?

A An English translation of the digest version of eAPRIN (ex-CITI Japan) e-learning program has been published and posted on the Invitation for Proposal website.

### **Regarding the deadline for completing the educational program for research integrity**

Q I cannot complete the educational program for research integrity before the application deadline. Can I complete the program after the deadline?

A Completion of the educational program for research integrity is a prerequisite for applying. Enrollment and completion of this program will not be permitted after the solicitation deadline.

### **○ Common issue for CREST, PRESTO, and ACT-X**

#### **Responding to the fiscal year 2022 Call for Proposals**

Q When submitting a research proposal, is an approval of the institution with which I am affiliated required?

A No, it is not required. However, if your proposal is selected, a Collaborative Research Agreement will have to be signed by both JST and the research institution with which you are affiliated, so please notify your institution in prior ("5.2.7 Responsibilities of Research Institutions").

Q Why are duplicate application restrictions applied between JST and AMED's Strategic Basic Research Programs?

A The target programs are based on a program of the Ministry of Education, Culture, Sports, Science and Technology's Strategic Basic Research Programs, which promotes strategic basic research under strategic or R & D goals, although the executing agency is divided into JST and AMED. For this reason, duplicate application restrictions are applied between the two organizations.

#### **Use of color in research proposals**

Q Is it possible to use color for the text or figures in research proposals? Do evaluators evaluate research proposals in color document?

A Evaluators do evaluate color document in their assessment of research proposals. However, proposals may be printed out from PDF files, so we request you to use figures and tables that are easy to read even at low resolutions.

## **List of Achievements**

Q Can I also write a proceedings paper?

A Important proceedings papers can also be listed as research achievements. Especially in the information and security research fields, its importance is being touted.

## **“Information on Other Supports” of Research Proposal Application**

Q It says that it includes foreign institutions. What should be specifically described about the research funds that plan to accept or apply for from overseas institutions?

A At the time of application, researchers will be asked to fill in a wide range of research expenses that they are applying for and will accept, so competitive funding, subsidies from private foundations, contract research expenses from companies, joint research expenses, etc. Please be sure to fill in all research funds accepted from foreign institutions. Due to unavoidable circumstances, e.g. confidentiality agreement, it is possible to submit without filling in the items other than effort. Noted that the research proposal will be provided to outside experts during the screening process.

## **Requirements for applicants**

Q What is the status regarding research proposals submitted by female researchers?

A Female researchers comprise 5–10 % (CREST), 10–20% (PRESTO), and 15-30% (ACT-X) of applicants and selectees. In the hope of encouraging research proposal submissions from a broad spectrum of researchers, JST is actively trying to improve the environment where researchers can give full play to their abilities. As a part of the activities, Strategic Basic Research Programs have special sites for the promotion of diversity. Data on selected female researchers are publicly available on this website. Activities to promote diversity in CREST and PRESTO are announced on <https://www.jst.go.jp/kisoken/crest/nadeshiko/index.html>  
JST is continuously trying to improve its programs and research environment so as to make individual researchers possible to give full play to their ability and enjoy active roles. Please refer to the JST diversity website:

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

## **Overhead Costs (Indirect Costs)**

Q Is support for covering overhead costs (indirect costs) paid to all research institutions that sign a Collaborative Research Agreement?

A In principle, an amount equal to 30% of research costs (direct costs) is paid to all research institutions that sign a Collaborative Research Agreement. This amount covers overhead costs (indirect costs).

Q What types of expenditures are counted as overhead costs (indirect costs)?

A Overhead costs (indirect costs) include expenditures for improving the research environment for participants in research projects implemented under CREST, PRESTO and ACT-X programs and money used by research institutions to cover expenditures required to enhance their overall functions.

### **Use of Research Budgets**

Q Is it possible to subcontract program preparation and other such work to external companies, etc.?

A If it is required as a matter of advancing research work, it is possible. However, there is a premise that such subcontracting of work to outside parties is based on subcontracting agreements that exclude research and development work. In principle, the subcontracting of research and development work is not permitted.

### **Personnel Transfers after Proposal Selection**

Q If a Research Director (CREST) or an Individual Researcher (PRESTO or ACT-X) experiences a change in position (promotion, transfer to a different research institution, etc.) while conducting research, will the Research Director (CREST) or Individual Researcher (PRESTO or ACT-X) be permitted to continue research activities?

A As long as it is possible to continue research activities unhindered by the change in position, research activities may be continued. Having another person take over as Research Director (CREST) or Individual Researcher (PRESTO or ACT-X) as a result of a change in position, however, is not permitted.

Q If a research institution affiliation changes because of a personnel transfer, for example, as research is being conducted, is it possible to move research equipment, etc., purchased with research funds to the new research institution?

A Equipment, etc., purchased with funds accounted for as research costs (direct costs) must, in principle, be moved, via transfer of ownership, etc., to the new research institution in accordance with a Collaborative Research Agreement.

### **Others**

Q Who is the Program Officer (PO) for the program? What roles does the PO perform?

A For the CREST, PRESTO, and ACT-X programs, the Research Supervisor is the PO designated for competitive funding systems. For information on the roles played by the Research Supervisor, refer to “2.1.1 CREST Overview,” “3.1.1 PRESTO Overview,” and “4.1.1 ACT-X Overview.”

Q Please provide information on the research topics selected and applications submitted for the previous fiscal year.

A Please refer to the JST websites below.

- CREST <https://www.jst.go.jp/kisoken/crest/en/application/index.html>
- PRESTO <https://www.jst.go.jp/kisoken/presto/en/application/index.html>
- ACT-X <https://www.jst.go.jp/kisoken/act-x/en/index.html>

Q At present, I am affiliated with an overseas research institution and do not have a researcher number. How should I register for e-Rad when applying as a CREST Joint Research Group or PRESTO (not JST employed) Researcher?

A Please arrange e-Rad registration for overseas Lead Joint Researchers and PRESTO Researchers by yourself under “Worker: Proposer” and “Registration Details: Researcher Information.” Personally apply for a researcher registration number by mailing (via postal mail) a completed Researcher Number Issuance Request Form, copies of identification documentation and other materials directly to the e-Rad system administrator. For more details, refer to Application Guidelines “10.4.1 Pre-registration of research institution and researcher information” and the e-Rad portal site.

<https://www.e-rad.go.jp/en/researcher/index.html>

Q At present, I am affiliated with an overseas research institution. When applying as a CREST Joint Research Group or PRESTO (not JST employed) Researcher, can I use the e-Rad researcher number obtained when I was affiliated with a Japanese domestic research institution in the past?

A If you have already obtained an e-Rad researcher number and are currently able to apply, it is no problem to apply with that number. In that case, details of the registered institution with which you were affiliated in the past may be displayed in the system. Please enter your current affiliated institution in the entry field for entering particulars. Please register your affiliated institution with JST after selection.

Q I am not able to temporarily store my research proposal on the e-Rad system.

A Unless you fill in all items in “Application,” you cannot store information temporarily. Modification of the input data is possible, so fill in all the items with temporary information first; then, temporary storage will be possible.

Q If the date of the interview scheduled as part of the selection process is inconvenient, is it possible for someone else be interviewed in my place? Alternatively, is it possible to schedule a different interview date?

A It is not possible to have someone else interviewed in your place. In addition, since, interview dates are set by coordinating the schedules of numerous evaluators, securing a different interview date is not possible. Please check the interview period information shown in “(2) Call and Selection Schedule” in the section “Overview of the Call for Research Application” of this document and also the interview schedules for individual Research Areas which will be announced on the “Call for Research Proposals” website (<https://www.jst.go.jp/kisoken/boshuu/teian-en.html>).

## ○ Issues for CREST

### **Entering Research Costs in Proposals**

Q Is it necessary to include in the research proposal: 1) the basis for cumulated research costs and 2) yearly budgets?

A It is not necessary to include the bases for cumulated research costs, but an itemized research budget and the research budget for the entire research group should be included in the Research Proposal (Form 5). In addition, applications which are selected for participation in the interview phase of the selection process will be asked to prepare supplementary materials covering various matters, including details of research expenditures.

### **Research Organization and Budget Allocation**

Q Please give inappropriate examples of Joint Research Group organization and Joint Research Group budget allocations which would be unacceptable.

A Unacceptable formation of Joint Research Groups include (but are not limited to) followings: 1) The Research Director does not play the central role in the research organization to pursue the proposed research initiative; 2) A substantial portion of the research is subcontracted to an external party or parties; 3) The role and position of the Joint Research Group in the research initiative is unclear; and 4) The budget is allocated equally to the Joint Research Groups without considering their roles and positions.

Q Is it possible to change the research project organization and total budget, which were presented in the research proposal at the interview screening process?

A No, please do not change the contents of the research proposal since selections are conducted based on these contents. Please be very careful to create a research proposal that you will not change later. It should be noted, though, that after the selection process, changes may be requested in accordance with the instructions of the Research Supervisor.

### **Applicant Requirements**

Q Is it possible for non-full-time researchers (guest researchers, etc.) to submit research proposals? Also, is it possible for researchers scheduled to retire during the research period to submit proposals?

A Both are possible if you can establish your own research project organization at a domestic (located in Japan) research institution during the research period and the research institution could conclude a contract Collaborative Research Agreement with JST.

### **Research Team Organization**

Q Could “Individual Researcher”, who is currently performing a PRESTO research, be included in the research project organization – as a Lead Joint Researcher – for the CREST research proposal?

A From FY2022 applications, it is possible for active PRESTO or ACT-X Individual Researchers to participate as a CREST Lead Joint Researcher. However, once an applicant becomes a selection candidate, adjustments such as reductions in research costs may occur depending on factors such as research content and scale. Please refer to “Chapter 9 Limitations on Multiple Applications within the Strategic Basic Research Programs” for details.

Q Can researchers affiliated with industrial companies join a research organization as Lead Joint Researchers or other research participants?

A Yes, it is possible. Concluding a Collaborative Research Agreement with JST is required to be a Lead Joint Researcher. See also “5.2.8 Responsibilities of Research Institutions” of the Application Guidelines.

Q Is it possible to include multiple organizations in one group? In other words, are each group required to be divided by researchers’ affiliated organization?

A Multiple institutions can form one group when it is necessary to undertake same research topic. However, in case which it is necessary to implement budgets for each institution separately, agreements for contract research may be concluded separately after the research proposal approved.

\*[description of a Research Director’s group] A researcher not affiliated with the same organization as the Research Director (note 1) may be included as a member of the Research Director’s group. In such a case, however, it is

essential that “the organization with which the Research Director is affiliated manage the research expenses of the researcher affiliated with another organization (note 2)”. If this accounting is not acceptable, the researcher affiliated with another organization can be described as part of a joint research group.

\*[description of a joint research group] Describe the person who leads a joint research group as a Lead Joint Researcher. A researcher not affiliated with the same organization as the Lead Joint Researcher (note 1) may be included as a member of the same group. In such a case, however, it is essential that “the organization with which the Lead Joint Researcher is affiliated manage the research expenses of the researcher affiliated with another organization (note 3)”. If this is not acceptable, the researcher affiliated with another organization should be described as another joint research group.

Note 1: the same business firm in case of a business firm or the same organization (research department and so on) in case of a university

Note 2: when there is a rational reason for a member affiliated with another organization to spend the research expenses of the organization with which the Research Director is affiliated and when the organization with which the Research Director is affiliated can manage the research expenditure (the research expense is paid to the organization with which the Research Director is affiliated) of the researcher. Please see the application guideline “5.2.7. Responsibilities of Research Institution”.

Note 3: when there is a rational reason for a member affiliated with another organization to spend the research expenses of the organization with which the Lead Joint Researcher is affiliated and when the organization with which the Lead Joint Researcher is affiliated can manage the research expenditure (the research expense is paid to the organization with which the Lead Joint Researcher is affiliated) of the researcher. Please see the application guideline “5.2.7. Responsibilities of Research Institutions”.

### **Research Site**

Q What criteria will be used to determine whether the performance of research would be impractical if not done at a foreign institution?

A Decision concerning whether research must be performed overseas are assumed as following.

- 1 . Required facilities do not exist in Japan and have been installed only in foreign institution.
- 2 . Field studies that can be performed only at overseas are required.
- 3 . Research materials can be obtained only at a foreign research institution or foreign location and cannot be brought to Japan.

### **Research Cost**

Q Should we include the overhead costs (indirect costs), which would be paid to the research institution after a Collaborative Research Agreement is signed, in the amount of "Total Research Budget" (CREST Form 1) and "Research Budget Plan" (CREST Form 5) described in the research proposal?

A Do not include overhead costs (indirect costs). Enter only direct costs information.

Q After a research proposal is selected, how should the allocation of research expenditures within the team be decided?

A Once a research proposal is selected, allocation of research expenditures within the team are determined based on the research plan prepared every fiscal year. For more information on research plans, please refer to "5.2.1 Research Plan Preparation."

### **Collaborative Research Agreement**

Q Would a Collaborative Research Agreement with Lead Joint Researchers be subcontracted<sup>17</sup> from the research institution with which the Research Director is affiliated?

A In this program, Collaborative Research Agreement are not subcontracts. JST contracts separately with each of research institutions with which the Research Director and Lead Joint Researchers are affiliated.

### **Research Evaluations**

Q How is research evaluated and how will the evaluation results be utilized?

A In principle, CREST research projects undergo an:

1) Interim evaluation around three years after they begin,

and a

2) Ex-post evaluation at the end of the research period.

For more information, please refer to "5.2.4 Project Evaluations". In addition, "Research Areas" are evaluated ("5.2.5 Research Area Evaluation") as well as "follow-up evaluations" which take place after a certain amount of time has passed after the completion of the research period. All evaluation results will be posted on the website.

### **Multiple Applications**

Q Is it possible to make a CREST research proposal as a Research Director and participate in another research proposal as a Lead Joint Researcher?

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<sup>17</sup> "Subcontract" in the research contract means that JST concludes a research contract with a research institution with which the Research Director is affiliated and the said institution concludes another research contract with a research institution with which a joint researcher is affiliated.



A This is possible, but if both proposals come to be considered seriously for selection, research funding may be lowered or the researcher in question may be asked to participate in only one of the research projects, depending on factors like the details and scale of the research to be performed. It should be noted that having researchers swap roles as Research Director and Lead Joint Researcher and submitting multiple research proposals is not permitted. For more details, please refer to "Chapter 9 Limitations on Multiple Applications within the Strategic Basic Research Programs".

Q I have been adopted for AMED-CREST or PRIME of AMED, and can I apply for CREST, PRESTO, or ACT-X?

A From FY2020 applications, it is not possible to apply to be a CREST Research Director or PRESTO/ACT-X Individual Researcher when engaged in AMED's AMED-CREST or PRIME research. Please refer to "Chapter 9 Limitations on Multiple Applications within the Strategic Basic Research Programs" for details.

## ○ Issues for PRESTO

### **Requirements for Applicants**

Q Does the PRESTO program have an age limit?

A There is no particular age limit for submitting PRESTO research proposals. However, research is performed mainly by researchers in their 30s and it is expected that PRESTO can help to boost the careers of such researchers.

Q Could students apply?

A Yes, he/she can apply. A requirement is, however, that the student participate in PRESTO will end the status of being a student by the end of March in the following year after if his/her proposal is selected. Concerning the way how to obtain e-Rad ID, refer to Q&A of issues for ACT-X.

Q Can researchers engaged in ACT-X research apply to PRESTO?

A Yes, application is possible. However, if selected, ACT-X research will finish at the end of that academic year. In addition, when applying to PRESTO while engaged in ACT-X research (including during the Acceleration Phase), please notify the JST (ACT-X area manager) and your supervisor to that end.

Q Is it possible for non-full-time researchers (guest researchers, etc.) to submit research proposals?

A The PRESTO program has no restrictions in terms of the institutional affiliations or positions of applicants. Whether an applicant is a full-time employee of a research institution or not, or paid or not, is not considered in the selection process.

Q Is it possible to submit a PRESTO research proposal while participating in a CREST research project as a Lead Joint Researcher?

A From FY202, it is possible to be a PRESTO Individual Researcher and a CREST Lead Joint Researcher at the same time (including cases in which the researcher is already participating as a CREST Lead Joint Researcher and a PRESTO application then being selected, as well as cases in which PRESTO for which one is personally applying and CREST for which participation is planned as Lead Joint Researcher are both selected at the same time). However, once an applicant becomes a selection candidate, adjustments such as reductions in research costs may occur depending on factors such as research content and scale (excluding research finishing in the 2022 academic year). Please refer to “Chapter 9 Limitations on Multiple Applications within the Strategic Basic Research Programs” for details. Please also consider your application after consulting with the CREST Research Director in advance.

Q Can a Special Researcher at the Japan Society for the Promotion of Science apply to the PRESTO program?

A There are no restrictions on the applicant's position at the time of application. Researchers who are currently performing work under the system of an institution other than JST, or who will apply to do so, should ask that institution whether it is appropriate to perform the work under its system and the PRESTO program, concurrently.

### **Research Cost**

Q Is it necessary to include in the research proposal: 1) The bases for cumulated research costs and 2) Yearly budgets?

A It is not necessary. However, those selected for participation in the interview phase of the selection process will be asked to prepare supplementary materials covering matters like details of research expenditures.

### **Requirements for Performing Research Work at an Overseas Research Institution**

Q What are the requirements for performing research work at an overseas research institution?

A Please contact to person in charge of contract in the foreign institute for prior consent since there are requirements such as conclusion of a research contract with conditions indicated by JST is needed. (Please also

check PRESTO-Form 7)

※Refer to “References” in the “How to apply” section of the following website

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

Particular attention should be paid to the three points below.

1. Appropriate expense execution shall be possible based on the research expense execution guidelines specified by JST.
2. Payment of indirect expenses to the relevant overseas research institution does not exceed 30% of direct expenses (research expenses).
3. It shall be possible to submit to JST English-language cost statements showing the details of research expenditures (equivalent to the account books used by Japanese institutions).

Contract may not be concluded if foreign institute does not accept above condition.

Please refer to “3.2.6 Proposal Submission Requirements” for details.

Please also note that PRESTO Individual Researcher personnel expenses cannot be disbursed from PRESTO research costs.

\* Researchers affiliated with overseas research institutions are exempt from “Measures for Strategic Basic Research Programs (CREST, PRESTO, ACCEL, ACT-X) Related to the “Use of Direct Costs for Principal Investigator (PI) Personnel Expenses (revised December 1, 2020, JST Department of Innovation Research).”

### **Employment of Researchers with Doctoral Degrees**

Q Under the PRESTO program, is it possible to employ additional researcher with a doctoral degree (a postdoc)?

A Under the PRESTO program, it is not possible to create a research team including postdocs. However, postdocs can be employed as research assistants to support the efforts of an Individual Researcher pursuing PRESTO research.

### **Other**

Q Is it possible to suspend and later resume PRESTO research in response to life events (childbirth, child care, and care giving)?

A If a PRESTO Individual Researcher experiences of a life event during the research period, it is possible, upon consultation with the Research Supervisor, to suspend research work for periods of time designated for individual life events and later resume work. We also have a support system aimed at continuing research at life events. For details, please refer to the following website.

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

Q I am currently assigned or am planned to be assigned from my affiliated institution to another institution. Is it possible to conduct PRESTO research at my assigned research institution?

A It is possible to conduct research at an institution other than that to which you are affiliated. However, when executing research costs at the institution where research is actually carried out, JST will conclude a Research Agreement with the institution actually conducting research (Note that receiving consent from the institution where research is conducted is a precondition of Individual Researchers arranging of their own volition an assigned institution to conduct research). In terms of the e-Rad account, using either the affiliated or assigned institution is possible when applying, but please enter the research institution with which concluding the Research Agreement is planned in the entry field for entering the Research Institution under the e-Rad individual particulars.

Q Is it possible to conduct PRESTO research remotely while myself living overseas (outside Japan) after nominating a Japanese domestic institution as the institution for carrying out PRESTO research (exclusive assigned institution)?

A If the researcher themselves is living overseas even though a Japanese domestic institution is the institution for carrying out PRESTO research, it is crucial to build a complete structure for thorough information management and security export control systems at the assigned institution. Personnel management of the researcher also needs to be carried out according to the laws of the country of residence. Therefore, carrying out PRESTO research as an exclusive appointee is possible at a Japanese domestic assigned institution only if the JST deems that the following three conditions are satisfied:

- (1) An appropriate personnel management structure is in place in accordance with the laws of the jurisdiction of residence, such as facilities for carrying out research being provided at the satellite office etc. in the country of residence
- (2) In light of the cross-border flow of information taking place, sound network security is fully implemented to ensure that thorough security export control systems are provided
- (3) Systems are in place at the assigned institution so that research costs can be executed and managed remotely from overseas, and the assigned institution has consented to research taking place overseas

\*Those who are not not JST employed Researchers may carry out research overseas under the responsibility of their affiliated institution while paying heed to (1) to (3) above.

Q Should personnel cost for PRESTO Individual Researcher with Exclusive Appointment come from research expenditure? How much is the approximate cost?

A JST will cover the personnel cost (separately from the research cost) based on the job assignment agreement conducted between the host research institution and JST.

○ **Issues for ACT-X**

**Requirements for Applicants**

Q Does the ACT-X program have an age limit?

A No. There is no limitation on age. However, this program is intended for researchers who have held a doctoral degree for less than eight years as of April 1, 2022

\*Researchers who earned their bachelor's degrees\* less than 13 years ago (as of April 1, 2022) if they have not acquired doctoral degrees.

\*This includes researchers who satisfy the described terms and conditions when the period of maternity or paternity leave taken after acquiring the degree is excluded.

Graduate school students are also invited to our program regardless of the terms and conditions described above.

Q Can university students apply?

A Only post-graduate students can apply.

Q Is it possible for non-full-time researchers (guest researchers, etc.) to submit research proposals?

A The ACT-X program has no restrictions in terms of the institutional affiliations or positions of applicants. Whether an applicant is a full-time employee of a research institution or not, or paid or not, is not considered in the selection process. However, it is required that the Collaborative Research Agreement between the organization the researcher belongs to and JST should be able to specify the applicant him- or herself (or the academic advisor if the applicant is a student) as the "research implementation manager."

Q I belong to a company, but I do not have a doctorate. Can I apply for the program?

A You can apply if you are a bachelor for less than 13 years as of April 1, 2022. However, it is required that the Collaborative Research Agreement between the organization the researcher belongs to and JST should be able to

specify the applicant him- or herself (or the academic advisor if the applicant is a student) as the "research implementation manager."

Q How do I know if I have the authority to execute a contract research fund or can be a party to a Collaborative Research Agreement?

A In the form of the Collaborative Research Agreement template (<https://www.jst.go.jp/contract/index2.html>), become a "Principal Investigator" and become a registered researcher of the institution (research site) to determine whether or not it is possible for the research site to conclude the Collaborative Research Agreement with JST and whether or not it is possible to execute the contract research fund by itself based on the consigned contract. Please check with the secretariat. For non-students, first coordinate with the supervisor and the institution (research institution) at your institution (research institution) so that you have executive authority and be a party to the contract research contract (See 4.2.6 "Proposal Submission Requirements"). Please contact JST if there is anything you are unsure about at the stage of coordinating with your institution.

Q I have been a doctor for less than 8 years as of April 1, 2022, but have been a bachelor for more than 13 years. May I apply for the program?

A Given that you are a doctor, the number of years being a bachelor does not matter. You can apply for the program if you have held a bachelor for less than 8 years. However, you should know that the Research Areas of ACT-X are intended for the development and production of young researchers; thus, one of our norms for the selection is that your proposal should conform to the intention of the Research Areas.

Q I am a company worker continuing education in doctorate program as a university student. Can I apply either as a student or as a company researcher?

A You can apply as either position. However, if you are going to apply as a company researcher, you need to meet the requirement of the year limitation after acquiring bachelor's degree (If you will apply as a student, there is no year limitation after acquiring bachelor's degree). However, you should know that the Research Areas of ACT-X are intended for the development and production of young researchers; thus, one of our norms for the selection is that your proposal should conform to the intention of the Research Areas. If the research activity is conducted in universities etc., JST will conclude a research contract with universities etc. as a basis.

Q Is it possible to submit an ACT-X research proposal and participate as a Lead Joint Researcher in a CREST research project?

A From FY2022, it is possible to be a ACT-X Individual Researcher and a CREST Lead Joint Researcher at the same time (including cases in which the researcher is already participating as a CREST Lead Joint Researcher and a ACT-X application then being selected, as well as cases in which ACT-X for which one is personally applying and CREST for which participation is planned as Lead Joint Researcher are both selected at the same time). However, once an applicant becomes a selection candidate, adjustments such as reductions in research costs may occur depending on factors such as research content and scale (excluding research finishing in the 2022 academic year). Please refer to “Chapter 9 Limitations on Multiple Applications within the Strategic Basic Research Programs” for details. Please also consider your application after consulting with the CREST Research Director in advance.

Q I am currently a PRESTO researcher and is it still possible for me to apply to ACT-X?

A You cannot apply to ACT-X. (For detail, please refer to “Chapter 9 Limitations on Multiple Applications within the Strategic Basic Research Programs”)

Q Can research fellow (PD, DC) at the Japan Society for the Promotion of Science apply to the ACT-X program?

A There are no restrictions on the applicant's position at the time of application. Researchers who are currently performing work under the system of an institution other than JST, or who will apply to do so, should ask your affiliated institution whether it is appropriate to perform a work under its system and the ACT-X program concurrently.

Q What if I was expecting to continue the research at a research institute in this country until I finish the ACT-X research, but I happen to transfer to another research institute overseas before I finish the research, which implies that I have difficulty in continuing the research. Should the research be canceled?

A If you cannot meet the ACT-X requirement, the research will be terminated.

Q Can I apply for ACT-X even when I am planning to study abroad?

A Application is possible if you are planning to study abroad, provided you can maintain an unbroken Collaborative Research Agreement with your affiliated institution (Japanese domestic institution for carrying out research) throughout the study-abroad period (for ACT-X, a Collaborative Research Agreement cannot be concluded

between JST and an overseas institution as the institution for carrying out research). Please however also enter the fact that you are planning to study abroad and the period, destination, and status of discussions with the affiliated institution in the Special Remarks section of the Application “Reasons for application (when making multiple applications in the same research area), points of difference and planned changes from previous applications, other special remarks, etc.” We will check if ACT-X research is possible as part of the selection process.

### **Research Cost**

Q Is it necessary to include in the research proposal: 1) The bases for cumulated research costs and 2) Yearly budgets?

A It is not necessary. However, those selected for participation in the interview phase of the selection process will be asked to prepare supplementary materials covering matters like details of research expenditures.

### **Details that Should be Included in the Project Description**

Q Do I have to give the project description for the acceleration phase in the research proposal?

A No. you do not. Please give the project description for the 2 years and 6 months in the research proposal.

### **Execution of Research Expenses**

Q I am a JSPS special researcher, but if I am selected, I can apply for "Additional budget support such as research assistant (RA) to ACT-X student (doctor / master) researcher". ?

A A student (DC) can apply, but a non-student PD (PD) cannot. Please check with the Japan Society for the Promotion of Science to see if there is no problem applying for ACT-X from the position of a Research Fellow (DC).

### **Employment of Researchers with Doctoral Degrees**

Q Under the ACT-X program, is it possible to employ another researcher with a doctoral degree (a postdoc)?

A Under the ACT-X program, it is not possible to create a research team including postdocs. However, postdocs can be employed as research assistants to support the efforts of an Individual Researcher.

### **(Applications by Students) Preliminary Discussions with your affiliated Institution**

Q I am a student. Is there anything that I have to discuss with the university I am affiliated to with the course of making an application?



A First of all, it is necessary that the institution with which you are affiliated can conclude a Collaborative Research Agreement with JST. Please refer to the following web page to see the format for the Collaborative Research Agreement:

<https://www.jst.go.jp/contract/index2.html>

Furthermore, as stated in Special Clause 4 of Appendix 8-2, it is essential that an understanding is required between the institution and you regarding the treatment of any discoveries etc. that are made. Furthermore, it is stipulated that the responsibility for the management or, should it arise, any misuse of research funds lies with not only with you but also with your academic supervisors under the Collaborative Research Agreement. Your academic supervisors are required to submit a memorandum of confirmation giving their consent for the above, and you must submit the memorandum together with the research proposal.

The form of memorandum of confirmation can be downloaded from the following website. You and your academic supervisor are requested to sign the document, save it in a PDF format and submit it together with the research proposal via e-Rad.

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

※Please click the name of Research Area which you are going to apply. Forms can be downloaded from “How to apply” section on the website

### **(Applications by Students) Continuation of ACT-X Research after Taking Up Employment**

Q I am a student. If I become employed by a company etc. midway through my research can I continue with the ACT-X research?

A In order to continue pursuing your ACT-X research you need to obtain the consent of your place of employment for simultaneously carrying out the work of your employers and the ACT-X research. Moreover, if the place where you conduct your research is your place of employment, a Collaborative Research Agreement has to be drawn up between your employers and JST. You can continue to carry on your ACT-X research when your employer’s consent to both of these conditions have been obtained.

Q I am a student. After discussions with my institution, it has become clear that I am unable to have the authority to execute contract research funds and I cannot become a party to the Collaborative Research Agreement. In that case, who will be listed in the Agreement as the person conducting the research?

A The names of the academic supervisor etc., as research implementation manager, and the applicant (student), as research practitioner, will both be listed in the Agreement.

### **(Applications by Students) Graduation during the ACT-X Research Period**

Q I am a student. I am going to graduate during my 2.5 year research period. In this case, should I just conduct research work before graduation?

A Please accomplish your 2.5 year research period. Consult with your academic supervisors to obtain academic post and continue your research work. If you worked hard to obtain academic post but failed and became difficult to continue ACT-X research, please immediately consult with JST.

### **(Applications by Students) Responsibility of Academic Supervisors**

Q I am an academic supervisor. One of my students is considering applying for the ACT-X program and I would like to know to what extent academic supervisors are responsible for it.

A Under the Collaborative Research Agreement between JST and the institution to which the student is affiliated, academic supervisors are held responsible for the management of contract research costs and any misuse of them as a “research implementation manager”. If the student graduates before he/she finishes the research, you are requested for consideration as much as possible so that they can continue the ACT-X research after graduation.

### **(Applications by Students) Registration of students in e-Rad**

Q I am a student. How can I acquire a researcher ID for e-Rad?

A 1. Confirm that the organization you are affiliated with can conclude Collaborative Research Agreement with JST. (There is another Collaborative Research Agreement prescribed for the case in which a student is the main researcher.)

2. Have the secretariat of the organization you are affiliated with confirm whether it allows you to acquire a research ID for e-Rad. If not, consider methods acceptable to the organization, including the following:

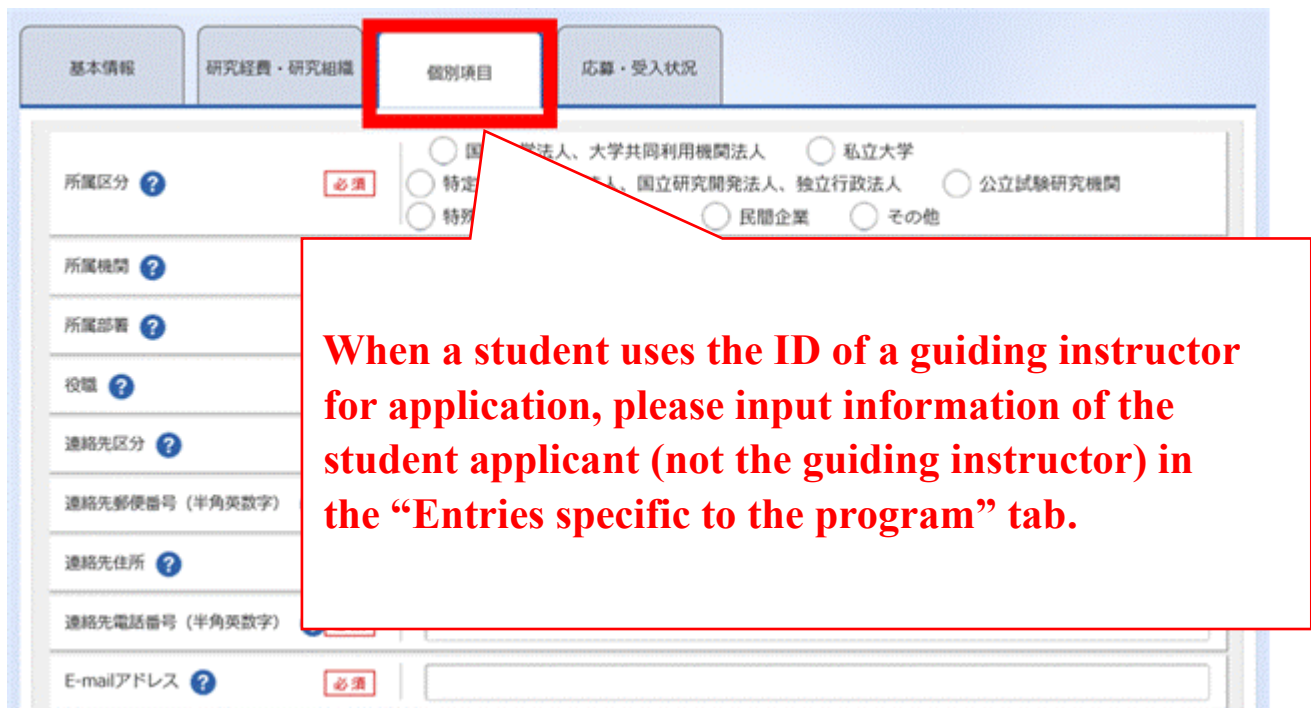
(1) Use the ID of a guiding instructor for application.

(2) Acquire a researcher ID as “a researcher not affiliated with any organization”

<https://www.e-rad.go.jp/en/>

Q I am a student. A guiding instructor has approved for me to make a proposal to ACT-X and to sign a confirmation document. However, the university I attend does not approve for a student to possess a researcher ID for e-Rad, whether the student is affiliated with the university or not. Therefore, I am studying how to make a proposal using the ID of the guiding instructor. Are there any precautions concerning the submission of a proposal to e-Rad?

A1 When you use the ID of a guiding instructor for application, input information on yourself instead of information on the guiding instructor in [individual item] tab (JST makes various contacts with the proposer on the basis of the information). => See the figure below.



The image shows a screenshot of a Japanese application form. At the top, there are four tabs: '基本情報', '研究経費・研究組織', '個別項目', and '応募・受入状況'. The '個別項目' tab is highlighted with a red box. Below the tabs, there are several input fields. A red callout box with a white background and a red border points to the '所属区分' field. The callout box contains the following text in red: 'When a student uses the ID of a guiding instructor for application, please input information of the student applicant (not the guiding instructor) in the “Entries specific to the program” tab.' The '所属区分' field has a red '必須' (required) label and a list of radio button options: '国立大学法人、大学共同利用機関法人', '私立大学', '特定非営利活動法人、国立研究開発法人、独立行政法人', '公立試験研究機関', '民間企業', and 'その他'. Other fields include '所属機関', '所属部署', '役職', '連絡先区分', '連絡先郵便番号 (半角英数字)', '連絡先住所', '連絡先電話番号 (半角英数字)', and 'E-mailアドレス' (with a red '必須' label).

A2 Definition of efforts in case of students is different from a usual definition (ratio of involvement time to the total work time per year). The former means the “ratio of time spent on ACT-X research to weekly 40 hours.” Follow this definition for input in the proposal. However, input of an intact efforts value of the proposal in e-Rad imposes pressure on the ratio of guiding instructor’s efforts on e-Rad possibly influencing on managing instructors’ efforts by the university. Properly make adjustment in such a case, such as inputting the smallest possible value (1%) in e-Rad. => See the figure below.

基本情報 **研究経費・研究組織** 個別項目 応募・受入状況

### 研究経費

年度ごとの経費の登録を行います。  
「1.費目ごとの上下限」

**1.費目ごとの上限**

	上限	下限
直接経費	500,000千円	(設定なし)
間接経費	(設定なし)	-

**2.年度別経費内訳** (単位:千円)

	2018年度	2019年度	2020年度	20	合計
直接経費					
間接経費					

**研究組織**

**1.申請種 (初年度)**  
「1.申請種 (初年度)」  
ここで入力した値

直接経費  
間接経費

**2.研究組織情報**  
課題に参加するメンバーと、研究メンバーごとの研究経費初年度を入力してください。  
研究者ごとの金額合計」に反映されます。

行の追加

研究者を検索	研究者番号 氏名	研究機関 部署/職階 必須	専門分野 学位 役割分担 必須	直接経費 間接経費 (千円) 必須	エフ ォ ー ト (%) 必須	閲覧・ 編集権限	削除	移動
	10000142 基礎研 市ヶ谷 (キンケン イチ カヤ)	独立行政法人科学技術振興 研究部 主席/その他	なし	0 千円 0 千円				

行の追加

研究組織内の連絡事項を登録する

▼ 任意項目を表示

**[Research Cost, Research Organization] tab**

**When a student uses the ID of a guiding instructor for application, use 1%, for convenience, as efforts ratio to minimize the influence on guiding instructor's actual efforts.  
(Input the student's actual efforts in the text of a proposal document.)**

### **(Applications by Students) Intellectual property right related to inventions by students**

Q I am in charge of contracts for a research organization. A student of this university is considering a proposal to ACT-X. The university has a stipulation in place that the intellectual property right related to invention by a student belongs to the student him/herself, which makes it impossible for the right to belong to the university.

On the other hand, the Collaborative Research Agreement (Appendix 8-2) of JST states that “a contract research organization takes measures for the intellectual property right related to contract research achievement to belong to the contract research organization.” The provision does not agree with the stipulation by the university. Is the student of this university not allowed to make a proposal to ACT-X in such a situation?

A ACT-X believes that an intellectual property right for invention by a student researcher not employed by a university belongs to the university in principle. However, it is possible for the intellectual property right to belong to the student in case the university has such a rule that an intellectual property right related to research achievement in ACT-X must belong to the student. It is possible also for the student to apply a proposal to ACT-X. In that case, however, the student needs to submit a “confirmation document” of agreement to (1) and (2) below in addition to provisions of agreement in an ordinary “confirmation document.” A confirmation document for such a case (a special form) is prepared separately. Contact [rp-info@jst.go.jp](mailto:rp-info@jst.go.jp) to ask for the special form.

(1) A student has the same obligations as those of OTSU (B) in articles 2-7 of “intellectual property provisions” of Collaborative Research Agreement, separate prescription 4, when an intellectual property right related to invention obtained as research achievement in ACT-X belongs to the student.

(2) Considering universities’ recent view to inventions by students during their employment on a contract job, such as “About how to handle inventions at universities (Study Committee for Risk Management in Collaboration between Industry and University of Ministry of Education, Culture, Sports, Science and Technology),” there may be cases in the future in which an intellectual property right related to contract research achievement belongs to the research organization. Research organization who decided that the intellectual property right will belong to the organization, should follow the duties stipulated in “intellectual property provisions,” Collaborative Research Agreement, separate prescription 4.

## Life Events During the Research Period

Q Is it possible to suspend and later resume ACT-X research in response to life events (childbirth, child care, and care giving)?

A If a ACT-X Individual Researcher experiences of a life event during the research period, it is possible, upon consultation with the Research Supervisor, to suspend research work for periods of time designated for individual life events and later resume work. In this case, JST will allocate the same amount of research budget which this Individual Researcher have not yet used because of his/her suspension of research activity due to the life event.

### CREST/PRESTO/ACT-X

Please make sure to visit our Invitation for Research Proposals page for the latest updates and frequently asked questions:

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

Contact for Inquiries (We cannot answer to inquiry related to selection process)

Please submit inquiries by email (except for urgent inquiries).

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

Tel: +81-3-3512-3530\* (Mon. – Fri. 10:00–12:00, 13:00–17:00)

\*Except Saturdays, Sundays, and National Holidays

[Communication by e-mail may be requested even when a question is asked by telephone.]