



10th Annual Meeting

**Research Ethics, Integrity, and Culture in the Context
of Rapid Results & Science and Technology**

Workforce Development

Expanded Case Studies

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LIST OF CASE STUDIES

RESEARCH ETHICS, INTEGRITY, AND CULTURE IN THE CONTEXT OF RAPID-RESULTS RESEARCH

CASE STUDY NAME	GRC PARTICIPANT	COUNTRY
Rapid implementation against COVID-19	São Paulo Research Foundation (FAPESP)	Brazil
Code of Good Scientific Practice	São Paulo Research Foundation (FAPESP)	Brazil
Research Ethics and Integrity Policies: Education, Motivation, Regulation, Supervision, Punishment	National Natural Science Foundation of China (NSFC)	China
J-RAPID	Japan Science and Technology Agency (JST)	Japan
Transparency of research activities	Japan Science and Technology Agency (JST)	Japan
Promoting Research Integrity	Japan Society for the Promotion for Science (JSPS)	Japan
Rapid call for international joint research against the coronavirus (COVID-19) pandemic	National Research Foundation of KOREA (NRF)	Korea
Research program to solve urgent safety issues	National Research Foundation of KOREA (NRF)	Korea
COVID-19 Innovation Acceleration Fund	Ministry of Business, Innovation and Employment (MBIE)	New Zealand
Special Call on Coronaviruses	Swiss National Science Foundation (SNSF)	Switzerland

SCIENCE AND TECHNOLOGY WORKFORCE DEVELOPMENT

CASE STUDY NAME	GRC PARTICIPANT	COUNTRY
Bolsa de Iniciação Científica – IC (Research Scholarship for Undergraduates)	São Paulo Research Foundation (FAPESP)	Brazil
Institutional Gender Policy	National Agency for Research and Development (ANID)	Chile
SAGA UNESCO Chile	Ministry of Women and Gender Equality (MIMEG)	Chile
Policies to promote diversity and inclusion of female researchers in the STEM workforce	National Natural Science Foundation of China (NSFC)	China
Science and Technology Workforce Development Approaches	National Natural Science Foundation of China (NSFC)	China
Open discussion platform for research facilities and public	Japan Science and Technology Agency (JST)	Japan
Jpan High School Science Championships and Japan Junior High School Science Championships	Japan Science and Technology Agency (JST)	Japan

Fostering Next-Generation Scientists Program	Japan Science and Technology Agency (JST)	Japan
Global Science Campus (GSC)	Japan Science and Technology Agency (JST)	Japan
Supporting Student Contests in Science and Technology	Japan Science and Technology Agency (JST)	Japan
Super Science High School (SSH)	Japan Science and Technology Agency (JST)	Japan
Support for Girl Students in Choosing Science Courses	Japan Science and Technology Agency (JST)	Japan
Increasing the Ratio of Female Committee Members	Japan Science and Technology Agency (JST)	Japan
The Brilliant Female Researchers Award (The Jun Ashida Award)	Japan Science and Technology Agency (JST)	Japan
Marie Sklodowska Curie Award	Japan Science and Technology Agency (JST)	Japan
Moonshot MILLENNIA Program Country	Japan Science and Technology Agency (JST)	Japan
Researcher Support System for Birth, Childrearing and Nursing Care, and Guidelines for the Use of Research Funds	Japan Science and Technology Agency (JST)	Japan
Support for Pioneering Research Initiated by the Next Generation (SPRING)	Japan Science and Technology Agency (JST)	Japan
JSPS Research Fellowships for Young Scientists (DC, PD, RPD, SPD)	Japan Society for the Promotion for Science (JSPS)	Japan
Cross-border Postdoctoral Fellowship (CPD)	Japan Society for the Promotion for Science (JSPS)	Japan
Overseas Research Fellowships	Japan Society for the Promotion for Science (JSPS)	Japan
Overseas Challenge Program for Young Researchers	Japan Society for the Promotion for Science (JSPS)	Japan
Invitation Fellowships for Research in Japan	Japan Society for the Promotion for Science (JSPS)	Japan
Frontiers of Science (FoS) Symposiums	Japan Society for the Promotion for Science (JSPS)	Japan
HOPE Meetings – Five Days with Nobel Laureates	Japan Society for the Promotion for Science (JSPS)	Japan
Grant-in-Aid for Research Activity Start-up	Japan Society for the Promotion for Science (JSPS)	Japan
Brain Korea 21	National Research Foundation of KOREA (NRF)	Korea
DOROTHY COFUND programme: Postdoctoral Fellowships in Public Health Crisis	Health Research Board (HRB) Irish Research Council (IRC) Environmental Protection Agency (EPA)	Ireland
Practice-to-Science	Swiss National Science Foundation (SNSF)	Switzerland

Diversity and inclusivity (focus on women)	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
2202 Science Olympiad	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
High School/Secondary School Students Different Subjects University Students Research Project Contests	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
MSc/MA Scholarship Programs	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
National Industrial MSc/MA Scholarship Program	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
National PhD Scholarship Program	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
National MSc/MA Scholarship Program in the Priority Fields in Science and Technology	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
National PhD Scholarship Program in the Priority Fields in Science and Technology	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
Overseas Graduate Scholarship Program (Only PhD.)	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
International Research Fellowship Programme for PhD Students	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
Research Fellowship Programme for International Researchers	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
National Postdoctoral Research Fellowship Program for Turkish Citizens	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
International Postdoctoral Research Fellowship Program for Turkish Citizens	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
Fellowships for Visiting Scientists and Scientists on Sabbatical Leave	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
International Fellowship for Outstanding Researchers International Fellowship for Early Stage Researchers	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
Co-Funded Brain Circulation Scheme 2 (CoCirculation2)	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey

A Grant Program for Scientific Training	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
Industrial Ph.D. Fellowship Program	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
National Leadership Researcher Program	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
C STAR-Intern Researcher Scholarship Programme	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
Mentorship Program	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
Deneyap Technology Centers	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
Undergraduate Scholarship Program	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
Research & Industry Oriented Project Support Programme for Undergraduate Students	The Scientific and Technological Research Council of Turkey (TUBITAK)	Turkey
'Remote research positions for scholars in need: a way to strengthening national workforce	National research Foundation of Ukraine (NRFU)	Ukraine
Supporting the community adoption of R4R-like narrative CVs: a comprehensive and collaborative R&I sector approach	United Kingdom Research and Innovation (UKRI)	United Kingdom
Integrated Public Partnership Partnerships (PPPs)	Research Council of Zimbabwe (RCZ)	Zimbabwe
Human Capital Scholarships	Research Council of Zimbabwe (RCZ)	Zimbabwe

EXTENDED CASES STUDIES

The extended case studies for Research Ethics, Integrity, and Culture in the Context of Rapid-Results Research are designed to showcase the ways in which research councils have conceptualized and operationalized rapid-results research programmes. The case studies in this section include descriptions of calls for submission of rapid-results research proposals, details about how the merit review processes were revised for such calls, information about how productive international collaboration was fostered, and codes and messaging related to research ethics in the context of such programmes. We intend for the case studies to serve as starting points for discussion among GRC participants to conceptualize the next generation of responsive, ethical, and collaborative rapid-research results programmes.

RESEARCH ETHICS, INTEGRITY, AND CULTURE IN THE CONTEXT OF RAPID-RESULTS RESEARCH

Type of Activity	# of Cases
Rapid Response Calls	4
International Collaboration	2
Research Ethics, Policy and Training	4

Rapid Response Calls

Rapid implementation against COVID-19 - Brazil

FAPESP launched early 2020 (March) two calls for rapid research implementation: technology-driven & science based. The technology driven research aimed at supporting start-ups willing to apply or scale processes or products related to the infrastructure needed to address the pandemic. The science-based arm of the rapid research implementation focused mostly on understanding the disease and the virus interaction with target tissues such as brain, lung, inflammatory responses and strategies for potential treatments, virus detection and vaccine development. In both cases, researchers that had ongoing research projects were invited to ask for supplementary funds. This strategy proved efficient to select research groups ready to react to the pandemic willing to use their existing infrastructure to address the challenge global challenge. Alongside, FAPESP also supported international joint proposals and produced a large amount of news and webinars to inform society and several stakeholders.

Further Information:

<https://fapesp.br/en/covid19>

Research program to solve urgent safety issues – Korea

○ Purpose

- This research program aims to solve or prevent various unexpected disasters or safety problems by the development and application of measures to swiftly respond to them.

○ Funding Duration: 1 to 2 years

- Funding Size: KRW 250 million to KRW 400 million per year (USD 200,000~330,000)
- Program Features & Procedures
 - Various government bodies and public organizations including the Ministry of Science and ICT, the Ministry of the Interior and Safety, the Central-Local Governmental Panel on Disaster and Safety Control, and the National Research Foundation, have made cooperation to solve various disaster-related problems.
- Streamlining the Process
 - NRF came up with a plan for the program less than one month after Korea had the first COVID-19 confirmed case in January 2020. (The process from budget request to research funding took just two months.)
 - NRF shortened the program's application period to less than five days or designated researchers without public notices.

COVID-19 Innovation Acceleration Fund – New Zealand

This fund was put in place in response to the COVID outbreak in early 2020.

From April 2020 to June 2020, we called for expression of interests for COVID-19 Innovation Acceleration Fund (the Fund) funding.

The Fund aimed to:

- accelerate the operational deployment of innovative solutions to support responses to COVID-19, and alleviate the direct impacts of the virus threat, and
- provide rapid short-term support to New Zealand based entities to develop and more quickly deploy a range of new products, processes, or services ('products').

In response to COVID, MBIE set up the COVID-19 Innovation Acceleration Fund which followed a standard assessment process but was very fast paced. The assessment of proposals was shortened from several weeks to 2 days. Our focus was on short funding rounds and funding fundable proposals.

MBIE departed from its standard process of using external assessors to having MBIE experts (such as the Chief Science Advisor) triage proposals. External reviewers were largely on call to be available to assess proposals.

Some applicants were critical of the streamlined process as there was less transparency that you would normally expect from the usual funding round. Another criticism was that this fund was less fair.

Because this was a type of on-demand fund then MBIE could not guarantee that the best ideas were being funded as good ideas were funded when they arrived in the in box.

In times of emergency there is a need to do things in a more streamlined way to get quick results. This is a tradeoff to the normally funding process which can take several months to open and then a couple of more months to get to a decision.

Further Information:

<https://www.mbie.govt.nz/science-and-technology/science-and-innovation/funding-information-and-opportunities/investment-funds/covid-19-innovation-acceleration-fund/#:~:text=The%20Fund%20aimed%20to%3A,of%20the%20virus%20threat%2C%20and>

Special Call on Coronaviruses – Switzerland

In March 2020 - shortly after the outbreak of the Covid-19 pandemic - the SNSF launched the Special Call on Coronaviruses. In view of this public health emergency of global proportions, an intensification of research efforts was urgently needed. The call addressed researchers in all disciplines who can contribute to a better understanding of the virus, its spread, the resulting illness as well as diagnosis and treatment, or who can help the health system and society as a whole deal more effectively with the pandemic. This was the first time that the SNSF launched a call for proposals in response to current events.

Later in 2020 the SNSF launched a call for the National Research Programme "Covid-19" (NRP 78). The aim is to provide health care recommendations and innovative solutions to fight the coronavirus disease from a biomedical and clinical perspective. The NRP operates with an overall budget of 20 million Swiss francs and its research projects are running for two years. Unlike regular NRPs, the evaluation was shortened to a single-stage procedure.

In spring 2021, the Federal Council mandated the SNSF to implement the new National Research Programme "COVID-19 in Society" (NRP 80). The programme aims to explore the impact of the COVID-19 pandemic on the economy, politics, and society. It aims to help manage current and future pandemics by analyzing social processes during the pandemic from a social science perspective. NRP 80 thus complements NRP 78 "COVID-19", as well as the Special Call on Coronaviruses.

Further Information

Special Call:

<https://www.snf.ch/en/pN10glmaRWF EWvs1/funding/programmes/coronavirus>

NRP 78: <https://www.snf.ch/en/17tw0513AftQjBCD/news/news-200430-call-for-proposals-nrp-78-covid-19>

NRP 80: <https://www.snf.ch/en/nFjwkWN3NieVzmGo/news/210429-news-new-national-research-programme-launched-covid-19-in-society>

International Collaboration

J-RAPID – Japan

The J-RAPID program supports urgent collaboration activities between Japanese and foreign researchers in response to natural or anthropogenic disasters or similar unanticipated events.

J-RAPID aims to play an initial response role by promptly supporting the aforementioned activities before ordinary projects are implemented by national government, academic societies, or others.

J-RAPID supports international collaborative projects in collaboration with funding agencies and research institutes in foreign countries.

JST calls for proposals when it identifies needs for immediate support of international collaborative research or survey activities on unanticipated events which have occurred in Japan or other countries, considering the degree of urgency and social/economic impacts of the events and/or at the request of the national government or academia.

JST assists researchers in Japan and funding agencies or research institutes in counterpart countries who are assisting researchers in their own countries.

In order to fund promptly, as a general rule, proposals are reviewed on a first-come-first-served basis.

Past calls:

Apr 2020	COVID-19
Feb 2019	Anak Krakatau volcano eruption and tsunami in Indonesia
Apr 2016	Kumamoto Earthquake (in Japan)
Jun 2015	Nepal earthquake
Feb 2014	Philippine "Typhoon Yolanda"
Feb 2012	Thai flood disaster
Apr 2011	Great East Japan Earthquake

Further Information:

https://www.jst.go.jp/inter/english/program_e/j-rapid_e/j-rapid.html

Contact: Nahoko Ando, JST (nahoko.ando@jst.go.jp)

Rapid call for international joint research against the coronavirus (COVID-19) pandemic – Korea

- Purpose
 - As global threats, including the declaration of COVID-19 as a pandemic, had emerged, NRF initiated the rapid call for an international joint research program to respond to the crisis while encouraging multinational cooperation.
 - NRF funded the research areas in a proactive manner that can be conducted in the short term according to the outbreak stages of COVID-19, such as epidemiological investigation, prevention and control, quarantine, policies, and response to future changes.

- Research Area
 - Epidemiological investigation of infectious diseases (COVID-19), cooperation in the global public health
 - Life after COVID-19: Joint response and cooperation at the global level

- Funding Size & Achievements
 - KRW 50 million (approximately USD 48,000) was provided per project as an international joint research fund for Korean and overseas researchers who studied together.
 - NRF selected a total of 13 research projects including engineering and pharmaceutical studies and established cooperative networks with 11 countries.

- Program Features
 - Researchers were allowed to choose their research period by themselves (6 to 12 months)
 - There were no restrictions on the research partner's country, and researchers were able to apply for NRF's research funds even if they had no co-funding from the partner's country.

Research Ethics, Policy, and Training

Code of Good Scientific Practice – Brazil

FAPESP defined in 2011 its policy of ethical research integrity by releasing a comprehensive, systematic, and detailed Code of Good Scientific Practices and taking measures designed to ensure the integrity of the research it supports. It undertakes to achieve this through a set of action strategies built upon three independent pillars: 1) education; 2) prevention; 3) fair and thorough investigation and sanction.

Although the established consensus is that the principal responsibility for formulating and implementing institutional policies of scientific good practices lies with the research institutions, it is also a consensus that co-responsibility lies with the research sponsoring agencies, as an inherent part of their mission in managing public resources for the purpose of promoting the advancement of science. A comprehensive and detailed code is an important instrument to make an institutional policy of good scientific practice effective.

Further Information:

<https://fapesp.br/boaspraticas>

Research Ethics and Integrity Policies: Education, Motivation, Regulation, Supervision, Punishment – China

NSFC focuses on 4 parties regarding research ethics and integrity, including Applicants, Applicant Institutions, Review Experts and NSFC Staff.

In total, NSFC focuses on 5 Aspects to promote research integrity and scientific culture, including education, motivation, regulation, supervision, and punishment.

Education:

- (1) NSFC arranges conferences on NSFC management, training workshops and seminars, on-site supervision of panel review meetings to create an enabling environment.
- (2) NSFC is planning to roll out a scientific integrity educational handbook and an educational video containing cases of scientific misconduct for warning.
- (3) NSFC requires integrity department for the host institution and encourages applicant-institutions to conduct courses on research integrity and ethics for staff and students.

Motivation:

- (1) NSFC deepens reforms to help researchers to devote to science.
- (2) NSFC optimizes policies to encourage researchers to pursue excellence.
- (3) NSFC promotes the NSFC culture to build healthy academic ecology.

Regulation:

- (1) In 2009, NSFC formulated the “Code of NSFC Staff Professional Ethics and Conduct”. In 2015, NSFC formulated “Code of Conduct for NSFC Review Experts”.

(2) In 2020, NSFC revised the Regulation on Adjudicating Research Misconducts Related to NSFC Funded Projects. The following are regarded as research misconduct according to the latest Regulation:

- Falsification/fabrication/plagiarism
- Dealing/ghost writing
- False/concealing information
- Getting funds through improper means such as bribery or benefit exchange
- Violating the code of conduct for review/research ethics/authorship

(3) Since last year, NSFC has been formulating “Research Code of Conduct for Funded Project by NSFC” which will cover the four parties including researchers/applicants and host institutions, based on the Code of Conduct for NSFC Staff and Code of Conduct for NSFC Review Experts.

Supervision:

(1) NSFC is constantly working on improving the supervision system. NSFC established the Supervision Committee in 1998. It is the first academic supervision body under a government agency in charge of science and technology management in China. Since then, all the allegations and complaints shall be trailed by the committee.

(2) NSFC strengthens supervising the key points through the whole process of funding, including:

Letter of commitment before submitting proposals/reviewing since 2018;

Similarity checking of the proposals in the system since 2012;

On-site supervision during panel review meeting since 2007;

Annual performance evaluation/inspection of the project fund.

(3) Re-supervision: supervising the performance of supervisory duties of the host institution

(4) Co-supervision: cooperating and interacting between other RI institutes in China as well as overseas.

Punishment:

NSFC holds the principles of “Zero tolerance” and “Joint punishment”. Other than the independent investigation, to make joint punishment, NSFC will make more efforts to cooperate with other government departments of China, such as the Ministry of Education, the Ministry of Science and Technology etc., to build a credit record system of research integrity.

Promoting Research Integrity – Japan

1] Publishing the book *For the Sound Development of Science-The Attitude of a Conscientious Scientist* (Green Book) [since 2015]

To promote the proper conducting of research activities while precluding research misconduct, research-ethics, JSPS develops and promulgates education materials. As one of two forms of such materials, this book was edited by JSPS and published in 2015 by Maruzen Publishing Co., Ltd. in both Japanese and English versions.

2] Providing e-Learning Course on Research Ethics (eL CoRE) for researchers and for graduate students [since 2016]

To promote the proper conducting of research activities while precluding research misconduct, research-ethics, JSPS develops and promulgates education materials. This e-Learning Course has since 2016 been posted on JSPS's website in both Japanese and English version.

Based on the Green Book and learning materials derived from it, one e-Learning Course on Research Ethics (eL CoRE) for researchers and another for graduate students have been developed and are now provided over the Internet as a service to make research-ethics education available to anyone, anywhere, anytime.

3] Enhancing Research-Ethics Education--Convening Symposiums and Seminars [since 2014]

Symposiums and other meetings are held to add vigor to research-ethics education, and support is provided to enhance the practicability of research-ethics education.

For examples:

1. One or two symposiums are held via cooperation between the Japan Science and Technology Agency (JST) and Japan Agency for Medical Research and Development (AMED) each year.

2. To put more effectively "eL CoRE" training into practice, online research-ethics seminars are held that included a simulated workgroup experience. (Held four times to date)

4] Providing Consulting Services for Preventing Research Misconduct [since 2006 under Guidelines]

Consultation is provided to research institutions on the establishment of systems for preventing research misconduct and advice is given them on how to investigate and process reported cases of specific misconduct.

5] Stipulating policies and rules as important points to keep in mind in the Application Guidelines for JSPS programs [since 2006]

Example: Application procedure for the Grants-in-Aid for Scientific Research (KAKENHI)

The application guidelines for JSPS's various programs stipulate policies and rules related to misuse of research funds and acts of misconduct in research activities, require the submission of a research misconduct checklist, and mandate the taking of a research ethics education course.

Further Information:

https://www.jsps.go.jp/j-kousei/data/rinri_e.pdf (actual book also available at stores)

<https://elcore.jsps.go.jp/top.aspx>

<https://www.jsps.go.jp/j-kousei/symposium.html> (a few times per year, available only in Japanese)

https://www.jsps.go.jp/english/e-kousei/contact_point.html

https://www.jsps.go.jp/j-grantsinaid/22_startup_support/data/r04/r4_kensta_koubo_e.pdf

Transparency of research activities - Japan

To build reliable research environment, the Japanese government, Cabinet Office in 2021 published a Research Integrity Investigation and Analysis Report. JST follows the government policy to maintain the transparency of research activities. JST collect necessary information by call text and application forms, to know the researchers' other funding.

Further Information:

https://www8.cao.go.jp/cstp/english/about/research_integrity.html

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EXTENDED CASES STUDIES

The extended case studies for Science and Technology Workforce Development integrates the best practices and core values of the research councils to improve partnerships, innovation in STEM, public policies, international collaboration, and better global opportunities in the S&T Workforce Development. The case studies in this section include descriptions of national and international programs for Master's, Ph.D., & Postdoctoral calls, also strengthening of public policy programs approaching S&T workforce development, integrate call programs for better opportunities in STEM making inclusion a must. We intend for the case studies to serve as a key point to benchmark innovation programs, actions, and initiatives, making them a starting point for discussion among GRC participants.

SCIENCE AND TECHNOLOGY WORKFORCE

Type of Activity	# of Cases
STEM, Natural Science and Humanities Workforce Development approaches	17
Research and innovation landscapes rapidly evolving for future demands approaches	9
Public Policy deliberation in S&T workforce development approaches	2
Integrated public, private, academia, key stakeholders' initiatives in STEM	7
Resourcing (including funding) for STEM education and development	9
International cooperation and partnerships to promote the development of the STEM workforce	3
Diversity and inclusivity (ensuring the contributions of individuals from groups that have been historically underrepresented-such as women and early career researchers and underserved in the STEM enterprise)	10

STEM, Natural Science and Humanities Workforce Development approaches

Bolsa de Iniciação Científica – IC (Research Scholarship for Undergraduates) – Brazil

To offer opportunity for undergraduates to develop a fully-fledged research project for which they are co-responsible with their supervisors.

Undergraduate students submit a research project to be developed under the guidance of an experienced researcher. If approved, the student receives a stipend, and the possibility to develop part of the research abroad. The initiative gives the undergraduate students the possibility to develop a project they have helped to craft and to experiment the whole process evaluation pipeline. It also gives the research groups incentive and means to allow for the participation of undergraduate students in their larger projects.

Further Information:

<https://fapesp.br/bolsas/ic>

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Science and Technology Workforce Development Approaches -China

NSFC supports the development of the Science and Technology Workforce through 17 programs. Among these programs, NSFC has formed a system of 6 programs specifically aimed at supporting the researchers in different age groups at various career stages:

- (1) Young Scientists Fund: YSF is open to young researchers aged under 35(40 for female). Every year, NSFC supports more than 20000 projects in this category, providing the first bucket of gold for researchers to start their careers.
- (2) Excellent Young Scientists Fund: Excellent YSF aims at supporting professionals with potentials aged under 38(40 for female) to further promote their career development. Every year NSFC selects around 600 proposals
- (3) National Science Fund for Distinguished Young Scholars: NSFDYS is designed to cultivate leading talents. Every year NSFC funds around 300 projects to support outstanding researchers and scientists under the age of 45 who has achieved remarkable results and showed huge potential of future career development.
- (4) Science Fund for Creative Research Group: NSFC supports around 50 projects of science fund for creative research group. This program opens to prominent scientists under 55 who lead their research teams to explore the frontiers of science.
- (5) Basic Science Center Program: NSFC funds about 20 projects of Basic science center program every year to support elite scientists under 60 leading research teams to explore the next frontier of science, creating high international impacts in their fields of studies.
- (6) Fund for Less Developed Regions: To promote local S&T and economic and social development, NSFC supports and attracts science researchers in less developed regions through Fund for less developed regions by selecting around 3500 proposals every year.

For the applicants who received the fund, NSFC has simplified the process of the use of the fund and the budget compiling. Researchers can adjust easier, and we don't retrieve surplus funds when the project is completed. For the Talents programs, Applicants are not required to prepare budgets in their proposals, and there is no proportional limit on items of expenses.

JSPS Research Fellowships for Young Scientists (DC, PD, RPD, SPD) – Japan

Awarded to excellent young researchers in Japan, these fellowships offer fellows an opportunity to focus on a freely chosen research topic based on their own innovative ideas. Ultimately, the program works to foster and secure excellent researchers. This fellowship program is Japan's core program for cultivating young researchers here in Japan, with more than 5,000 fellows participating in it every year.

Outstanding young researchers may be given a Restart Postdoc (RPD) Fellowship after suspending their research activities for the purpose of childbirth and/or infant nursing.

Further Information:

<https://www.jsps.go.jp/english/e-pd/index.html>

https://www.jsps.go.jp/j-pd/data/boshu/dc_yoko.pdf

https://www.jsps.go.jp/j-pd/data/boshu/pd_yoko.pdf

Cross-border Postdoctoral Fellowship (CPD) – Japan

The “Cross-border Postdoctoral Fellowship (CPD)” was established for the purpose of providing excellent young researchers with an opportunity to concentrate on their research for a long period at an overseas university or research institution.

Further Information:

<https://www.jsps.go.jp/english/e-ab/index.html>

https://www.jsps.go.jp/j-pd/data/boshu/cpd_yoko.pdf

Overseas Research Fellowships – Japan

To foster highly capable researchers with wide international perspectives, these fellowships give excellent young Japanese researchers an opportunity to carry out long-term research at an overseas university or research institution.

This Overseas Research Fellowships--Restart Research Abroad (RRA) program gives young Japanese researchers who have suspended their research activities due to a life event (e.g. marriage, childbirth, child-raising, nursing, caregiving) eligibility to apply for an RRA fellowship.

Further Information:

<https://www.jsps.go.jp/english/e-ab/index.html>

https://www.jsps.go.jp/j-ab/data/shinsei_04/00-1_bosyuyoko.pdf

Overseas Challenge Program for Young Researchers - Japan

This program gives doctoral students an opportunity to go overseas to challenge a new research environment, one in which they engage in joint research with researchers in the host country. Hence, the program contributes to the fostering of young researchers who possess abundant international experience and who can be expected to play leading roles in the wider scientific arena.

Further Information:

<https://www.jsps.go.jp/english/e-abc/index.html>

https://www.jsps.go.jp/j-abc/data/boshu/kcp_boshuyoko

Invitation Fellowships for Research in Japan - Japan

JSPS carries out programs that provide excellent researchers from other countries an opportunity to conduct collaborative research, discussions, and opinion exchanges with researchers in Japan.

- Importance is placed on the scientific value of the research plan irrespective of the applicant's research field or nationality
- Various programs are tailored to the visitors' career stage and the purpose of their visit.
- Multiple application opportunities are provided during the year.

Further Information:

https://www.jsps.go.jp/english/e-inv_researchers/index.html

Brain Korea 21- Korea

"Brain Korea 21 (BK21)" is Korea's representative science and technology (including humanities and social sciences) workforce development initiative. BK21 aims at enhancing research capabilities in key academic fields; fostering younger-generation researchers; reforming the graduate school system; and ensuring substantiality of graduate schools' education. The BK21 initiative is expected to contribute to strengthening the research competitiveness of Korean universities and cultivating highly qualified human resources with master's degrees or doctorates who will lead the future society.

Through BK21, NRF provides "graduate school innovation funds" for the university headquarters-centered system innovation, through which schools can become leading players in their science and technology innovations that improve the university system and the graduate school education.

The BK21 Initiative seeks not only to cultivate excellent human resources but also to strengthen the research capabilities of universities through graduate school innovation.

Further Information:

<https://bk21four.nrf.re.kr/index.do>

Seungmo JEONG, jsm7@nrf.re.kr

2022 Science Olympiad - Turkey

The aim of the program is to develop secondary and high school education and computer training, to enable them to participate in National Science Olympiad training and International/Divisional competitions.

The approach in organizing these competitions is to train students as future scientists in the scientific fields they are curious about.

Further Information:

<https://bilimolimpiyatlari.tubitak.gov.tr/en>

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High School/Secondary School Students Different Subjects University Students Research Project Contests -Turkey

It is aimed to bring the culture of preparing scientific projects to the relevant people.

The approach in organizing these competitions is to encourage students to produce innovative and original solutions to scientific problems they are curious about.

Further Information:

<https://tubitak.gov.tr/en/competitions/content-2204-a-high-school-students-research-projectscompetition>

<https://tubitak.gov.tr/en/competitions/content-2204-b-secondary-school-students-researchprojects-competition>

<https://tubitak.gov.tr/en/competitions/content-2204-c-high-school-students-polar-researchprojects-competition>

<https://www.tubitak.gov.tr/tr/yarismalar/icerik-2204-d-lise-ogrencileri-iklim-degisikligi-arastirmaprojeleri-yarismasi>

<https://www.tubitak.gov.tr/en/competitions/content-2242-university-students-research-projectcompetitions>

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National Industrial MSc/MA Scholarship Program -Turkey

In order to contribute to the improvement of human resources regarding Turkey's research priorities in industrial fields, successful M.Sc. students seeking to pursue a graduate degree in Turkey in the fields are needed by industry are granted monthly scholarship to continue and complete their education.

Further Information:

<https://tubitak.gov.tr/tr/burslar/lisansustu/egitim-burs-programlari/icerik-2210-yurt-ici-yuksekk-lisansburs-programlari>

Ezgi GÜRÇAY KÜKNER

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Tel : 444 66 90

National PhD Scholarship Program – Turkey

In order to contribute to the improvement of human resources regarding Turkey's research priorities, PhD students seeking to pursue a graduate degree in Turkey in the fields of Natural Sciences, Engineering and Technological Sciences, Medical Sciences, Agricultural Sciences, Social Sciences and Humanities, are granted monthly scholarship to continue and complete their education.

Further information:

<https://tubitak.gov.tr/tr/burslar/lisansustu/egitim-burs-programlari/icerik-2211-yurt-ici-doktora-bursprogramlari>

Hüsniye AYDEMİR

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Tel : 444 66 90

Research Fellowship Programme for International Researchers – Turkey

The purpose of the program is to advance international cooperation of Turkey in science and technology by providing financial support to international young researchers who have received their PhD or are still registered to a doctoral program abroad.

The scope of the program includes monthly stipend, travel expenses and private health insurance cost.

Further information:

<https://tubitak.gov.tr/en/scholarship/postdoctoral/international-programmes/content-2216-research-fellowship-programmefor-international-researchers>

Beyza Topuz Demir E-Mail: bideb2216@tubitak.gov.tr

Co-Funded Brain Circulation Scheme 2 (CoCirculation2) - Turkey

The objectives of CoCirculation2 are to enhance the career development of 100 Experienced Researchers wishing to diversify their individual competence through advanced training, international and intersectoral mobility opportunities through incoming mobility into Turkey. Highly qualified supervisors and excellent supervision arrangements will support the ERs' career development. The researchers will enjoy fair and attractive conditions of funding and/or salaries with adequate and equitable social security provisions. In addition, CoCirculation2 will enhance the research capacity of the host organizations, will support them to bring their recruitment and employment conditions in line with those outlined in the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers (Charter and Code), and will strengthen their ties to the ERA. CoCirculation2 will thus have a positive impact on the Turkish Research Area (TRA).

Further information:
<https://cocirc2.org.tr/>

Mentorship Program - Turkey

The aim of the Mentorship Program is to support the career development of undergraduate scholars and Science Olympic students supported by TUBITAK's Scientist Support Programs Directorate and provide mentoring support to contribute to reach their goals.

The Mentorship Program supports research by guiding students and increasing students' motivation to enable them to grow up as future scientists by developing their predisposition to thinking and research.

Further information:
<https://tubitak.gov.tr/en/scholarship/undergraduatesgraduates/national-programmes/content-2248-mentorship-program>
Ela ANKARALI e-mail: bideb2248@tubitak.gov.tr

Deneyap Technology Centers – Turkey

The project for the establishment of 81 to 100 Deneyap Technology Centers in Turkey started in 2018. Project stakeholders are Republic of Turkey Ministry of Industry and Technology, Republic Of Turkey Ministry of Youth and Sports, The Scientific and Technological Research Council Of Turkey, and Turkish Technology Team Foundation. 66 centers have been established in 55 cities in the last 3 years. Within the scope of the project, STEM-based pieces of courses are given to K-8 and K-12 students. Academic curricula are developed and implemented within the scope of the training which include Design and Thinking, Robotics and Coding, Electronic Programming, and Internet of Things (IoT), Software Technologies, Advanced Robotics, Artificial Intelligence, Cyber Security, Mobile Application, Energy Technologies, Aviation and Space Technologies, Materials Science and Nanotechnology courses.

Further information:
www.deneyapturkiye.org
Eda.asili@tubitak.gov.tr

'Remote research positions for scholars in need: a way to strengthening national workforce - Ukraine

The initiative is a result of collaboration of the NRFU and uascience-reload.org project which emerged around this petition, which aims to help scholars in need. It was named 'Remote research positions for scholars in need' with the main aim to develop an alternative approach to developing international research cooperation and STEM, Natural Sciences and Humanities workforce. Another important objective may be provision of equal conditions for researchers around the globe with special focus on research workforce in countries undergoing crises and to avoid under representation of researchers who cannot physically get onsite research positions/fellowships.

Another objective lies in the economic sphere because the approach can substantially reduce research expenses.

Further information:

<https://uascience-reload.org>

<https://nrfu.org.ua/grantees/zakordonna-dopomoga-ukrayinskym-vchenym/>

Olga Polotska, Executive Director of the National Research Foundation of Ukraine
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Research and innovation landscapes rapidly evolving for future demands approaches

DOROTHY COFUND programme: Postdoctoral Fellowships in Public Health Crisis – Ireland

DOROTHY is an initiative led by the Irish Research Council, in collaboration and with cofounded mechanisms with the Health Research Board (HRB) and the Environmental Protection Agency (EPA) and co-funded by the European Union.

Public health crises are too complex to be tackled in silos. Responding to the need to equip European societies with experts who are specially trained to address these challenges in a cooperative fashion, we have designed DOROTHY COFUND to recruit, train and launch the careers of 25 excellent fellows through 36-month fellowships.

Fellowships will have an international outgoing phase of 18 months, followed by a return phase to Ireland of 18 months. Fellows will be encouraged to include a non-academic secondment. Two recruitment calls will be run. The programme will assist fellows in accelerating their careers through excellent training and networking opportunities in the Irish and EU innovation ecosystem.

DOROTHY is open to applicants from all nationalities, provided they haven't resided in the outgoing phase country for more than 12 months in the three years immediately before the call deadline and to all disciplines, provided that their research topic relates to public health crises. Applicants must be an Experienced Researcher (ER). The definition of ER in the H2020 MSCA programme will be applied: ERs must, at the call deadline, be in possession of a doctoral degree or have at least four years of full-time equivalent research experience.

Further Information:

<https://www.hrb.ie/funding/funding-schemes/all-funding-schemes/grant/dorothy-co-fund-programme-postdoctoral-fellowships-in-public-health-crisis-call-opening-23-march/>

<https://research.ie/funding/dorothy-cofund-programme/?f=>

<https://dorothy.ie/>

Dr Annalisa Montesanti (amontesanti@hrb.ie)

National MSc/MA Scholarship Program in the Priority Fields in Science and Technology – Turkey

In order to contribute to the improvement of human resources regarding Turkey's research priorities, successful M.Sc. students seeking to pursue a graduate degree in Turkey in the primary fields determined by TÜBİTAK administrative council are granted monthly scholarship to continue and complete their education.

Further information:

<https://tubitak.gov.tr/tr/burslar/lisansustu/egitim-burs-programlari/icerik-2210-yurt-ici-yuksekk-lisansburs-programlari>

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National PhD Scholarship Program in the Priority Fields in Science and Technology - Turkey

In order to contribute to the improvement of human resources regarding Turkey's research priorities, successful PhD. students seeking to pursue a graduate degree in Turkey in the primary fields determined by TÜBİTAK administrative council are granted monthly scholarship to continue and complete their education.

Further information:

<https://tubitak.gov.tr/tr/burslar/lisansustu/egitim-burs-programlari/icerik-2211-yurt-ici-doktora-bursprogramlari>

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An International Research Fellowship Programme for PhD Students -Turkey

To be gain research experience abroad at the beginning of their academic careers of PhD students and develop their thesis.

With the programme, doctoral students are supported to conduct research related to their dissertations in a research environment abroad and to contribute to their careers.

Further information:

<https://tubitak.gov.tr/en/scholarship/undergraduatesgraduates/national-programmes/content-2214-ainternational-research-fellowship-programme-for-phd-students>

Rana MOLBAY bideb2214@tubitak.gov.tr

National Postdoctoral Research Fellowship Program for Turkish Citizens - Turkey

To contribute to the science-based knowledge and technology production of our country and the development of qualified human resources needed for this, we offer post-doctoral studies to researchers who have a doctorate degree or a specialty in medicine, dentistry, pharmacy and veterinary medicine or proficiency in art or who will have a relevant degree.

Researchers make their post-doctoral studies at state or private higher education institutions, 6550 within the scope of the research infrastructure has received qualification, public research institutes, R&D or in the private sector has a design center or technoparks in Turkey. If study takes places in R&D or private sector, then they fund study with an amount of %25 of the scholarship. In other scenarios, TÜBİTAK is the only partner that funds research study.

Further Information:

<https://tubitak.gov.tr/en/content-evaluation-procedure-0>

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International Postdoctoral Research Fellowship Program for Turkish Citizens – Turkey

The Scientific and Technological Research Council of Turkey grants fellowships for scientists/researchers planning to do research abroad in the areas of Natural Sciences, Medical Sciences, Social Sciences and Humanities, and Engineering and Technological Sciences. Maximum duration of the fellowship is 12 months. Fellows are required to use their fellowships within 12 months after notification of the fellowship.

Supporting scientists is the key element for the achievement of economic development goals of countries and the increasing global competitiveness among them. After undergraduate level, scientists join the scientific community by producing original and valuable post-graduate research, after master and doctoral degree. It stands out as the mission of our institution to support the national science, technology, and innovation ecosystem of our country and to ensure the production of qualified knowledge and the development of qualified human resources for these purposes. Providing the necessary support for scientists has been among the aims and duties of TÜBİTAK since its establishment in 1963.

TÜBİTAK Science Fellowships and Grant Programme Directorate (BİDEB) conducts 2219-International Postdoctoral

Research Fellowship Program for Turkish Citizens for support scientists with PhD, MD and proficiency in art degrees to carry out their studies abroad.

Further Information:

<https://tubitak.gov.tr/en/scholarship/postdoctoral/national-programmes/content-2219-international-postdoctoralresearch-fellowship-program-for-turkish-citizens>

Zeynep ATALAY bideb2219@tubitak.gov.tr

International Fellowship for Outstanding Researchers and International Fellowship for Early-Stage Researchers -Turkey

In order to contribute to projects that will be executed in research fields that are of strategic importance for our country within the scope of the programme, it is aimed to promote qualified researchers, particularly Turkish scientists, who have come to the fore with top level scientific and/or technological achievements in their fields and who have experience to work in an international environment, to conduct their research in Turkey, and to provide support for them to pursue their work in leading state or foundation universities, research infrastructures deemed competent within the scope of Law no. 6550, public research institutes, private sector companies with R&D or design centres or equity companies settled in Turkey within the bodies of techno parks.

Fellowship period is minimum 24 months and maximum 36 months. To carry out a project that will receive support, an acceptance/invitation must be received from a university/institution/organization in Turkey.

Further Information:

<https://www.tubitak.gov.tr/en/scholarship/postdoctoral/international-programmes/content-2232-a-international-fellowship-foroutstanding-researchers>

<https://www.tubitak.gov.tr/en/scholarship/postdoctoral/international-programmes/content-2232-b-international-fellowship-forearly-stage-researchers>

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National Leadership Researcher Program – Turkey

The scope is to provide support for projects which having groundbreaking goals, offering the opportunity to meet significant gaps at scientific and technological areas and providing new perspective to researchers, and/or having potential of important discovery and/or inventions at every single area of science and technology; and for researchers working on these projects in Turkey.

Applicants apply with their project proposals. Grant support is provided for the machinery/equipment, consumables, fellowship, service procurement and travel expenses.

The PI is expected to successfully complete a European Research Council (ERC) project to benefit from 2247 support again.

Further information:

<https://www.tubitak.gov.tr/en/scholarship/postdoctoral/national-programmes/content-2247-a-national-outstandingresearchers-program>

<https://www.tubitak.gov.tr/en/scholarship/postdoctoral/national-programmes/content-2247-d-national-early-stageresearchers-program>

<https://www.tubitak.gov.tr/en/content-2247-b-european-research-council-erc-support-program>

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C STAR-Intern Researcher Scholarship Programme - Turkey

Within the scope of this call, it is aimed for undergraduate students to take part in scientific research projects by observing scientific ethical rules and to develop their creativity, engineering, problem solving and intellectual skills in addition to their education. Undergraduate students who take part in research projects carried out in TÜBİTAK Centers and Institutes or supported by TÜBİTAK will be given scholarships.

Further information:

<https://www.tubitak.gov.tr/en/scholarship/undergraduatesgraduates/national-programmes/content-2247-c-star-internresearcher-scholarship-programme>

<https://www.tubitak.gov.tr/tr/burslar/lisans/burs-programlari/icerik-2247-c-stajyer-arastirmaci-burs-programi-star>

<https://star.gsb.gov.tr/>

<https://star.tubitak.gov.tr/>

Burcu Çalışkan Kara star@tubitak.gov.tr

Public Policy deliberation in S&T workforce development approaches

Institutional Gender Policy – Chile

The objective is to achieve greater gender equity in the National System of Science, Technology and Innovation, through actions that address gaps, barriers and inequities involving both male and female users and staff members, through the processes for the provision of goods and services, strategic processes and support processes.

The main benefit is to achieve greater gender equality in science and technology that can lead to economic development of the country.

Gender diversity contributes to strengthening teams and, therefore, to the excellence and quality of scientific, technological and innovation activities.

Insertion of women's talent in R&D activities is a growth opportunity for the country and it is significant for reducing salary gaps in the world of work.

Further Information:

<https://www.anid.cl/>

<https://www.anid.cl/blog/2021/04/05/politica-institucional-de-equidad-de-genero-en-cyt/>

Marcela Oñate, (monate@anid.cl)

Supporting the community adoption of R4R-like narrative CVs: a comprehensive and collaborative R&I sector approach – United Kingdom

In July 2021 the UK Government's People and Culture Strategy committed to drive adoption of the 'Résumé for Researchers' narrative CV, which broadens the range of experiences and accomplishments that are recognized. This aligned with international movements to reform research assessment by groups such as DORA and Science Europe and complemented the need for economies to attract the best R&I talent and ideas. The traditional academic CV, with its focus on publications and grants, limited what was visible.

UKRI, along with other funders, established the Joint Funders Group to explore aligned approaches to the adoption of R4R-like CVs. This ambition was outlined in the Joint Funder Statement. The group has since grown and published resources to support widespread adoption of R4R-like CVs in the Résumé Library. The potential for these CVs goes beyond funding decisions, and in partnership with Universities UK (UUK), the Alternative Uses Group (AUG) is being developed to explore the use of these CVs in recruitment, promotion, mentoring etc. to help collectively and comprehensibly shift what is visible and valued in research and innovation culture.

Further information:

<https://www.ukri.org/wp-content/uploads/2021/07/UKRI-2307214995CommsResumeJointFundersStatement-Final.pdf>

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Frances Downey, Head of Research & Innovation Culture, UKRI. Frances.Downey@ukri.org

Integrated public, private, academia, key stakeholders' initiatives in STEM

SAGA UNESCO Chile – Chile

STEM and Gender Advancement (SAGA) is a UNESCO project that aims to contribute with improvements to the measurement of indicators for decision-making on plans and policies that allow contributing to improve the situation of women and reduce the gender gap in science, technology, engineering and mathematics (STEM) fields in all countries at all levels of education and research. UNESCO states that the SAGA Project helps countries to:

- Strengthen capacities for the collection of data disaggregated by sex in STEM.
- Identify the gaps in STI policies with a gender approach and help decision makers to improve the design of evidence-based policies with a gender approach.
- Improve the measurement and evaluation of the situation of women and girls in science.
- Increase the visibility, participation, and recognition

Further Information

<https://minmujeryeg.gob.cl/wp-content/uploads/2021/08/Diagnostico-indicadores-politicas-genero-desarrolladas-Estado-STEM.pdf>

<https://www.minciencia.gob.cl/genero/#tab-37826>

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Japan High School Science Championships and Japan Junior High School Science Championships – Japan

With an eye to producing outstanding science and technology human resources who can play an active role in the international community and increasing the number of students who are interested in science, the government has built platforms for highly motivated and competent junior and senior high school students to compete against each other and thereby mutually improve their science and technology abilities.

JST holds a nationwide, team-based science tournament as an opportunity for school students to compete between schools by testing students' knowledge and technical skills in multiple areas in science, technology, and mathematics. The tournament is designed to broaden the base of science enthusiasts as well as to increase the academic achievement of the top students. "Japan High School Science Championships (JHSSC)" established in 2011 is for high school students, and "Japan Junior High School Science Championships (JJHSSC)" started in 2013 is for junior high school students. The teams compete not only in written exams but also experiments and hands-on games for the prizes.

JHSSC is held for four days annually. Representative teams from each prefecture tournament consists of 8 high school students. A Championship team of JHSSC earns a right to participate in the Science Olympiad, a science competition for American junior and senior high school students.

[Example Schedule]

Day 1: Opening Ceremony, Orientation, Written Exam, Meetup Event

Day 2: Practical Exams (3 exams)

Day 3: Special Symposium, Award Ceremony, Booth Exhibition, Farewell Party

Day 4: Excursion, Break up

JJHSSC is held for three days annually. Representative teams from each prefecture tournament consists of 6 junior high school students.

[Example Schedule]

Day 1: Opening Ceremony, Orientation, Meetup Event

Day 2: Written Exam, Practical Exams (2 exams), Farewell Party

Day 3: Award Ceremony, Booth Exhibition

JST collaborates with a local government where the national tournament will be held. Through the partnerships with sponsor companies, JHSSC and JJHSSC promotes a new model for human resource development in science and technology that brings together industry, academia, and government.

Further Information:

koushien@jst.go.jp , koushien-jr@jst.go.jp (Okada Keiichi, Department for Promotion of Science Education, JST)

Undergraduate Scholarship Program – Turkey

The purpose of the program; to encourage orientation to basic sciences, social and human sciences, to support students who have been successful in science Olympiads and project competitions conducted by TUBITAK, to reveal their creative and investigative aspects and to ensure their development and to provide undergraduate education scholarships in order to enable them to grow up as future scientists by developing their predisposition to thinking and research.

Within the scope of 2205-Undergraduate Scholarship Program, support is given for a Turkish Citizens who received medals in the National Science Olympiads, the International Science Olympiads, the National Project Contest and the International Project Contest as well as having undergraduate education on basic science and social sciences programs determined by TÜBİTAK.

Further Information:

<https://www.tubitak.gov.tr/en/scholarship/undergraduatesgraduates/nationalprogrammes/content-2205-undergraduate-scholarship-program>

Ayşe Merve TELİS

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Overseas Graduate Scholarship Program (Only PhD.) – Turkey

The purpose of the program is to support individuals who would like to pursue their doctorate degrees abroad for those have bachelor's degree on condition that they come back to Turkey.

The students who plan to pursue a PhD program abroad in the scientific fields determined by the Board of Science, Technology and Innovation Policies and the TÜBİTAK Board of Directors are awarded a scholarship provided that they enrolled in a PhD program abroad.

Further information:

<https://www.tubitak.gov.tr/en/scholarship/undergraduatesgraduates/nationalprogrammes/content-2213a-overseas-graduate-scholarship-program-only-phd>

Open discussion platform for research facilities and public – Japan

Miraikan connects citizens and researchers and brings awareness to both sides. It creates opportunities for citizens to think about science and technology personally. Miraikan is promoting activities to broaden the base of people involved in science and technology.

As online has become the 'new normal', Miraikan hosted a series of online discussion sessions to raise awareness of researchers through dialogue with citizens and researchers in different fields. The discussion sessions were open to the public and welcomed diverse participants including researchers from different fields, institutions, and projects. Together participants discussed specific research themes in collaboration with science communicators and projects housed in the research area of Miraikan.

Further Information:

Session information links (Japanese only)

“How can I be more satisfied with my online experience?”

<https://www.miraikan.jst.go.jp/events/202006121162.html>

“Is a "face" really necessary for communication?”

<https://www.miraikan.jst.go.jp/events/202008071467.html>

“Can technology satisfy the "desire to touch"?”

<https://www.miraikan.jst.go.jp/events/202009191552.html>

“Can we figure out how to "read the air"?”

<https://www.miraikan.jst.go.jp/events/202010301614.html>

“How can you achieve the "touch and feel" you desire?”

<https://www.miraikan.jst.go.jp/events/202106161980.html>

“How does non-verbal information change communication?”

<https://www.miraikan.jst.go.jp/events/202202272335.html>

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Industrial Ph.D. Fellowship Program - Turkey

Within the scope of this program, fellowships for Ph.D. students and employment grants devoted to the private sector have been provided to promote the employment of more researchers in the private sector. Thus, the technological transformation will be enabled which has been targeted by the grants, support, and investments. Besides, human resources, which are vital to attaining the desired levels in the value chain, will be improved in terms of quality and quantity. In this sense, the needs of the companies will be focused and the development of human resources holding Ph.D. will be assured.

Further information:

<https://tubitak.gov.tr/en/scholarship/undergraduatesgraduates/national-programmes/2244/content-terms-of-application>

<https://tubitak.gov.tr/en/scholarship/undergraduatesgraduates/national-programmes/2244/content-terms-of-application>

bideb2244@tubitak.gov.tr

Integrated Public Partnership Partnerships (PPPs) – Zimbabwe

- Providing access to finance for researchers
- Capacity building and development of research management skills of researchers and program managers.
- Production of goods and services from the established innovations
- Catalyzing innovation in the Zimbabwean education system

Further Information:

<http://www.rcz.ac.zw/2021-heritage-based-call-for-research-proposals-in-energy-production-and-delivery-and-energy-storage/>

Dr Timothy Marango
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Resourcing (including funding) for STEM education and development

Fostering Next-Generation Scientists Program – Japan

For the development of outstanding human resources who will drive science and technology innovation, through the learning of STEAM fields, etc., this initiative supports the finding of elementary and junior high school students with high motivation and outstanding ability and develops a systematic development plan that further expands their ability.

In FY2021, 30 organizations proceeded their initiatives.

Five-year support period and up to ten million per organization / year.

Elementary and junior high school students who want to participate (targeted from 5th grade of elementary school to 3rd grade of junior high school) can apply to each organization through recommendations from their boards of education or schools, self-recommendation, etc., and each organization selects about 40 students. Each organization provides the 40 students lectures, experiments, and tours of research facilities as the first step, and encourages the discovery of fields of their own interest. Next, each organization selects about 10 students from 40, and provides them individual guidance for research, writing papers, etc., to develop their creativity and ability to focus on issues in specialized fields as well as to foster a multifaceted perspective and career awareness through guidance by university student mentors and exchanges with international students.

For the purpose of training each other, students from each organization once a year participate in the “Student Presentations” in which the students make research presentations and join other learning opportunities. In addition, a “liaison council” is held once a year to collect the representatives of the organizations in order to share their good practices and discuss common issues.

For the graduates, JST actively promotes connections to related initiatives such as “Super Science High School” and “Global Science Campus” in the high school to support the continuation of students’ efforts.

Further Information:

fsp@jst.go.jp (Kamei Takanori, Department for Promotion of Science Education, JST)

Global Science Campus (GSC) - Japan

JST supports universities’ projects which develop advanced, systematic and educational programs in the field of science and technology that include international activities and allow students to attend these educational programs by recruiting and selecting high school students possessing distinguished levels of motivation and ability from the local areas around each university with the aim of cultivating science and technology human resources that are capable of future success on the global stage. These educational programs are required to incorporate personalized initiatives for developing talents as well as initiatives to improve and cultivate students in line with their diverse natures.

Each year, universities shall recruit around 40 high school students to attend (primary screening). Universities shall seek to uncover human resources in line with the ideal type of

human resources that the university wishes to cultivate by establishing a unique set of selection standards. To develop capable personnel in the fields of science and technology, universities shall implement commonly shared initiatives targeting large numbers of students as well as initiatives for developing talents in line with students' personal characteristics while keeping in mind the goals of engendering diversified outlooks and bestowing an international mindset. Universities shall further select around 15 students from among the attending students (secondary screening) and conduct activities with a focus on research. Universities shall appropriately ascertain the extent to which students have improved in ability by establishing evaluation criteria corresponding with the ideal type of human resources that the university wishes to cultivate. Universities shall utilize this information in follow-up guidance and project improvement.

Universities shall work as local centers for education and improvement to cultivate students' talents in cooperation with the entire local community by organizing consortiums in association with regional and prefectural boards of education, a city designated by ordinance boards of education, other universities, private enterprises, etc. Universities shall promote projects that integrate multiple different fields and utilize the unique characteristics of the local area. Projects shall be centrally managed by the university headquarters to enable active participation by the individuals responsible for implementation (such as the university president) and implementation within a comprehensive system of cooperation involving the entire university.

In FY2021, 14 organizations proceeded their initiatives.

Four-year support period and up to thirty million yen per organization / year.

Further Information:

gsc@jst.go.jp (Kamei Takanori, Department for Promotion of Science Education, JST)

Supporting Student Contests in Science and Technology – Japan

With an eye to producing outstanding science and technology human resources who can play an active role in the international community and increasing the number of students who are interested in science, the government builds platforms for highly motivated, competent junior and senior high school students to compete against each other and thereby mutually improve their science and technology abilities.

“Supporting Student Contests in Science and Technology” is an initiative which promotes students' interest and ability in science, technology, and mathematics and fosters future leaders of science and technology at international levels. Student Contests in Science and Technology can provide the next generation with opportunities for more challenging studies as well as for fostering enjoyment of scientific thinking.

JST supports contest committees to send Japanese national teams to international science and technology contests (dispatch and training of national team members) and to hold domestic contests (hosting, PR, fostering motivation for participation, etc.).

Supported contests include the following:

[subject-based]

- Japan Mathematical Olympiad
- High School Chemistry Grand Prix
- Japan Biology Olympiad
- Japan Physics Olympiad
- Japanese Olympiad in Informatics
- Japan Earth Science Olympiad
- Japan International Geography Olympiad

[project-based]

- Japan Students Science Award

JST also supports contest committees to hold international contests in Japan. At the same time as the 2020 Tokyo Olympic and Paralympic Games, International Science Olympiads have been held or are scheduled to be held in Japan successively.

- International Earth Science Olympiad in 2016 (Mie prefecture)
- International Olympiad in Informatics in 2018 (Ibaraki prefecture)
- International Biology Olympiad in 2020 (hosted remotely by Japan due to COVID-19)
- International Chemistry Olympiad in 2021 (hosted remotely by Japan due to COVID-19)
- International Physics Olympiad in 2023 (Tokyo)
- International Mathematical Olympiad in 2023 (Chiba prefecture)

Participation in International Science Olympiads will be an advantage for university entrance examinations. About 40 universities and 80 faculties offer special selection for students with outstanding results in each contest.

Further Information:

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Super Science High School (SSH) – Japan

To develop future international science and technology personnel, since 2002, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) has designated high schools that carry out advanced science and mathematics education as Super Science High Schools (SSH) and provides necessary support to promote their own activities.

The number of designated schools was 218 in FY2021, which means MEXT supports about 4% of high schools in Japan (number of high schools in Japan: 4,856 (from “Fundamental Survey on Schools in FY2021” conducted by MEXT)).

In the SSH designated schools, a wide range of initiatives are implemented such as 1) curriculum development and practice not based on the ministry’s curriculum guideline, 2) experiential learning, promotion of subject research, 3) science classes in English, presentation exercises, 4) development of teaching methods and teaching materials to enhance students’ creativity and originality, and 5) dissemination of results to other schools.

The number of primarily targeted students for all SSH designated schools was 136,873 (FY 2020 results).

JST organizes Super Science High School Students Fair (presentation competition on students' research) and annual conference for information exchange, in which principals and teachers among SSH designated schools participate. In addition, JST contributes financial assistance for SSH designated schools.

Further Information:

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Support for Girl Students in Choosing Science Courses – Japan

Background: As women are expected to lead the next generation and to play an active role in the future of science and technology innovation, more efforts are required to understand the interest and motivations for junior and senior high school girls, their parents and teachers. We must encourage girls, their parents and teachers to increase awareness about the merits of choosing science and engineering, work styles and contents of work in the science and engineering fields, and careers of those who are from science and engineering faculties.

To raise interest of junior and senior high school girls in science and engineering and to support their journey in these fields, this initiative provides opportunities for them to interact with female researchers / engineers, university students, etc. who are active in the field of science and technology, through symposiums and on-site classes. In addition, JST supports organizations such as universities and technical colleges that carry out initiatives in cooperation with local communities and companies. The initiative started in 2006.

Two-year support period and up to three million yen per organization/year.

As additional efforts aimed at junior and senior high school girls in all prefectures, the initiative promotes close collaboration with junior high schools, accelerates activities at local school sites, and strengthens the approach to the junior high school stage.

In FY2021, 17 organizations were part of the initiative.

6,266 students participated in this initiative in FY2020.

Further Information:

jyoshi@jst.go.jp (Kamei Takanori, Department for Promotion of Science Education, JST)

Research & Industry Oriented Project Support Programme for Undergraduate Students – Turkey

The aim of the program is to encourage students to research through projects and therefore they gain a project preparation culture before completing their undergraduate education.

University students apply with their project proposals. Grant support is provided for the machinery/equipment, consumables, travel and service procurement expenses required by the research projects prepared by the university students.

Further Information:

<https://www.tubitak.gov.tr/en/scholarship/undergraduatesgraduates/nationalprogrammes/content-2209-a-research-project-support-programme-for-undergraduatestudents>

<https://www.tubitak.gov.tr/en/scholarship/undergraduatesgraduates/national-programmes/content-2209-b-industry-orientedresearch-project-support-programme-for-undergraduatestudents>

Yasin SUBAŞI

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A Grant Program for Scientific Training - Turkey

Become widespread, the approach is event arrangement, its partnerships or collaborations is with the academia and to apply is needed two-year degree, license, postgraduate student and researchers are the participants and beneficiaries.

Further information:

<https://2237.tubitak.gov.tr/>

<https://tubitak.gov.tr/tr/destekler/bilimsel-etkinlik/etkinlik-duzenleme-destekleri/icerik-2237-abilimsel-egitim-etkinlikleri-destegi>

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MSc/MA Scholarship Programs – Turkey

This scholarship aims to support successful students attending a thesis-based master's program in Turkey. MSc/MA students benefit from the program if they can meet the requirements below.

Terms of Application

- To be a Turkish citizen or to hold Blue Card
- To be enrolled in a master's degree program in Turkey (special students are not acceptable)
- To be registered at least 3rd semester
- Students who are enrolled in master's degree programs without thesis are not acceptable
- To be not supported before as a master's student by this program

Further information:

<https://www.tubitak.gov.tr/en/scholarship/undergraduatesgraduates/nationalprogrammes/content-22102211-mscmaphd-scholarship-programs>

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Human Capital Scholarships – Zimbabwe

To reward high-achieving students and to invest in human capital development in areas of;

- Engineering and Technology
- Natural and Applied Sciences
- Medical and Health Sciences
- Social Sciences

Further Information:

<http://www.rcz.ac.zw/research-council-of-zimbabwe-human-capital-development-2021-scholarships-for-zimbabwean-citizens/>

<http://www.rcz.ac.zw/research-council-of-zimbabwe-rcz-would-like-to-extend-its-congratulations-to-rcz-scholarship-recipient-ms-jean-tsitsi-chigova-for-graduating-with-a-masters-degree-in-chemical-and-environmen/>

Dr Timothy Marango
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International cooperation and partnerships to promote the development of the STEM workforce

Frontiers of Science (FoS) Symposiums – Japan

In FoS symposiums, talented young researchers from Japan and the counterpart country or countries lodge together to concentrate their time and effort on advancing cross-disciplinary discussions on leading-edge scientific topics across a spectrum of research domains. Cosponsored by partner organizations, these symposiums are carried out via collaborative frameworks.

While working to broaden the scientific perspectives of the participating young researchers, FoS symposiums also spur free thinking and new ideas unencumbered by precepts of existing academic disciplines, thus contributing to pioneering new interdisciplinary domains and building networks among future generations of leaders.

Further Information:

<https://www.jsps.go.jp/english/e-fos/index.html>

HOPE Meetings – Five Days with Nobel Laureates – Japan

To advance science and technology within the Asia-Pacific and African regions, it will be necessary to foster talented young researchers who have wide perspectives that transcend their individual disciplines and possess lofty values derived from the region's inherent cultures.

To foster such researchers, HOPE Meetings have been organized by the Japan Society for the Promotion of Science since 2008. The title "HOPE" signifies the promise held for young scientists and optimism for a bright science and technology future in the Asia-Pacific and African regions.

Further Information:

<https://www.jsps.go.jp/english/e-hope/index.html>

Fellowships for Visiting Scientists and Scientists on Sabbatical Leave – Turkey

By encouraging scientists, especially Turkish scientists, who are pioneers in their fields working in the universities or research institutions abroad, to come to Turkey, and to provide support for the realization of all kinds of academic and R&D activities such as conducting research, working in the laboratory, product development, organizing conferences/ congresses, giving seminars, providing part-time education, and writing a joint project.

Applicants apply with their project proposals. Grant support is provided for the health insurance, daily/monthly support and travel expenses.

Further Information:

<https://tubitak.gov.tr/en/scholarship/postdoctoral/international-programmes/content-2221-fellowships-for-visiting-scientists-and-scientists-on-sabbatical-leave>

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Diversity and inclusivity (ensuring the contributions of individuals from groups that have been historically underrepresented-such as women and early career researchers and underserved in the STEM enterprise)

Policies to promote diversity and inclusion of female researchers in the STEM workforce – China

Since 2010, NSFC has introduced a series of policies to promote diversity and inclusion of female researchers in the STEM workforce.

- (1) In making funding decisions, female applicants will be given more opportunity under equal conditions.
- (2) The age limit for female applicants is raised for applying for the Talents Programs (Young Scientists Fund and Excellent YSF) to the age of 40 (35 and 38 for men).
- (3) Considering the fact that female researchers may require a longer time to finish their research projects during pregnancy, nursing, and childcare, they can apply for an extension of the project implementation for a maximum of 24 months.
- (4) The proportion of female experts has been increased to include more female perspectives in the panel review and consultation.

Grant-in-Aid for Research Activity Start-up - Japan

The Grants-in-Aid for Scientific Research (KAKENHI) are Japan's core competitive research funds aimed at spawning marked advancement of research carried out based on the free ideas of researchers themselves. They support research across all fields of the humanities, social sciences and natural sciences in ways that will contribute to the advancement of science in Japan.

Among the various research categories provided based on the objective and nature of the research, the Grant-in-Aid for Research Activity Start-up works to support research conducted by a single researcher who has been freshly appointed to a research position or who has returned from maternity, childcare or other kinds of leave.

Further information:

<https://www.jsps.go.jp/english/e-grants/index.html>

https://www.jsps.go.jp/j-grantsinaid/22_startup_support/data/r04/r4_kensta_koubo_e.pdf

Increasing the Ratio of Female Committee Members – Japan

We are taking the following initiatives to bolster our efforts to achieve the government's objectives (30% women by 2020).

- (1) Setting targets for the ratio of female members on various committees etc. within JST.
- (2) Creating and sharing a list of the members of various committees etc. within JST.
- (3) Collecting and sharing information on female candidates for committee memberships.

Further Information:

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The Brilliant Female Researchers Award (The Jun Ashida Award) – Japan

As part of our efforts to promote the active participation of female researchers, JST set up this awards program to commend female researchers working on outstanding research that contributes to a sustainable future society; organizations supporting female researchers' activities.

The Ashida Fund* will cooperate to provide a supplementary prize of 1 million yen.

*The Ashida Fund was established in 1994 by the late fashion designer Jun Ashida for the purpose of nurturing the younger generation.

- The Award for a Brilliant Female Researcher (The Jun Ashida Award)

Celebrates brilliant female researchers working on outstanding research that contributes to a sustainable future (female researchers under 40 years of age are considered in principle but pauses in research due to life events are recognized.)

Focuses also on activities other than research or research outcomes that have a positive impact on society.

Will be presented to individuals across all the fields relating to science and technology

- The Award for an Organization Supporting Brilliant Female Researchers (The Jun Ashida Award)

This award celebrates progressive organizations that carry out initiatives contributing to the greater involvement of female researchers, thus serving as a model for other organizations.

Further Information:

https://www.jst.go.jp/EN/about/president/pressconference/pdf/conference_2010.pdf

https://www.jst.go.jp/pdf/pc202010_1.pdf

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Marie Skłodowska Curie Award – Japan

JST and the Embassy of the Republic of Poland have established the “Maria Skłodowska Curie Award” commending young female researchers who aim to be active on the global stage.

JST recognizes the importance of initiatives designed to promote the activities of female researchers in science, technology and innovation fields and support them particularly in their late twenties and early thirties, when they are most expected to be active as a researcher and at the same time deal with many life events.

Maria Skłodowska Curie, a world-renowned researcher from Poland who discovered the two novel elements: “polonium” at age 31 and “radium” at age 32. She is the first woman to win a

Nobel Prize, and the only person to win a Nobel Prize in the two different scientific fields, Chemistry and Physics.

The Award honors her great contribution and achievements to the development of science and technology across the world and will inspire more active participation by Japanese young female researchers.

The Embassy of the Republic of Poland and the Polish Academy of Sciences will give a Grand Prize winner opportunity to visit Polish universities and research institutes, some related to Marie, and have discussions with various researchers there. By receiving a first taste of the European R&D environment in Poland, the winner is expected to “make a leap forward” in their career prospects and gain new opportunities for international activities in their future as a researcher.

JEOL Ltd., one of the supporters of the Award, will offer a Grand Prize winner 500k yen and two Inspiration Prize winners 250k yen each.

-Eligibility

Early career female researchers who have obtained a PhD within the last five* years including postdoc as of April 1, 2022, PhD students, and those who are equivalent to them.

* Periods away from research due to life events (e.g., maternity leave) are excluded from this total.

Any research discipline related to science and technology.

Country of Citizenship: Japan, regardless of place of residence.

Further Information:

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

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

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Moonshot MILLENNIA Program – Japan

MILLENNIA was designed to create new research goals for the Moonshot R&D Program, a flagship JST scheme that looks ahead to the year 2050 and promotes disruptive technology related to AI and robotics, quantum computing, and more. Specifically, MILLENNIA invited teams of young researchers to brainstorm goals that were ambitious, unconventional and more suited to societal needs in the with/post-corona ‘new normal’. Priority was given to early-career researchers whose work tackles challenges in innovative ways that transcend academic boundaries. It therefore welcomed research talent from a variety of academic and occupational backgrounds, with more gender and lifestyle diversity than prior Moonshot calls for proposals.

A total of 21 MILLENNIA teams were selected, and for six months were funded by JST to perform preliminary investigative research into their original ideas. Japan’s young researchers can tend to be myopic in pursuit of specific topics they are passionate about, lacking perspective on their place in the research ecosystem, so the program encouraged them to view their

research in relation to future goals and ‘back cast’ to determine an appropriate course of action. The researchers received frequent individual team-level mentorship from Moonshot’s ‘visionary leaders’, a group of prominent academia and industry representatives headed by former president of Toyota Corporation Mr. WATANABE Katsuaki. JST also held special presentation and Q&A workshops with these visionary leaders, as well as with special guests including Taiwan’s Digital Minister Ms. Audrey Tang. We also facilitated international researcher-researcher connections, setting up ad hoc consultation/discussion sessions between MILLENNIA and overseas researchers on an individual team basis. We believe the opportunities provided for interaction and sharing of insights allowed the MILLENNIA participants to approach their research challenges with a more open perspective and mindset.

At the end of the six months, the teams each submitted a report that was evaluated by JST. We then preselected suitable candidate goals, two of which were officially adopted as new Moonshot goals by Japan’s Council for Science, Technology and Innovation (CSTI). Research into these goals, headed by directors selected from within the MILLENNIA teams, will commence in Spring 2022. For those teams whose ideas were not selected: we hope they understand that the achievement of truly ambitious goals must be a collaborative effort, and that the connections made during the program will facilitate future joint research.

Further Information:

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Researcher Support System for Birth, Childrearing and Nursing Care, and Guidelines for the Use of Research Funds – Japan

Researcher support system for birth, childrearing, and nursing care

JST wants to support researchers at various stages of life (when giving birth, raising children and providing nursing care) to ensure they can continue their research activities without interrupting their careers. Or, if a temporary interruption is unavoidable, they can resume their research activities whenever they wish. To that end, JST operates a support system to help researchers combine research and family life (support in the form of gender equality promotion fund grants that can be used to support individuals’ research activities and reduce their burdens).

(Types of researchers receiving support through this system)

Researchers who are already full-time employees of JST or who will be in that position during the period for which support is requested, whose pay comes from the research funds (direct expenses) of a JST project, and who cannot easily continue their research activities because they are pregnant, raising a child under nine years old, or providing nursing care.

(Details of support provided)

After applying and passing an evaluation, researchers who experience a life event receive a “gender equality promotion fund” grant.

-Maximum amount: JPY 300 000/month x the number of months supported

-Funds can be used to employ research assistants at research and development institutions, purchase goods and equipment to support research and development, support the research activities of the researcher in question, and reduce his or her burden.

Support period: Up to 12 months (researchers who require further assistance can apply again the following year)

Further Information:

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Support for Pioneering Research Initiated by the Next Generation (SPRING) – Japan

Today's PhD students are expected to shoulder the responsibility for future science, technology and innovation. However, in recent years, the number of students enrolling in doctoral courses is declining due to financial difficulties and concerns over employment prospects.

There is an urgent need to (1) strengthen financial support for excellent aspiring PhD students and (2) promote the development of diverse and engaging graduate career paths. Japan's doctoral education system also faces a structural problem, in that it has not been sufficiently promoting strategic reform based on changes in social needs. As a result, it is not encouraging challenging and interdisciplinary research that goes beyond existing frameworks.

To improve this situation, Support for Pioneering Research Initiated by the Next Generation (SPRING) supports universities or colleges that have the ability and motivation to independently carry out (1) and (2) above, beyond the boundaries of their own graduate schools and laboratories. Each university or college will designate a program officer to select PhD students, and JST will support their efforts to provide and develop various types of PhD student care.

The chosen PhD students can devote themselves to unrestricted, challenging and interdisciplinary research projects, while also being free to change their affiliations and continue receiving support. The program also helps cover students' research and living expenses and provides career development training. Topics in the latter include international mindset cultivation, interdisciplinary research, transferable skills, internships, and more.

Each program officer forms a management team to make sure their activities are carried out effectively.

Further Information:

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

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Practice-to-Science – Switzerland

The SNSF's Practice-to-Science grants are aimed at making use-inspired research in Switzerland more competitive, and to help qualified experts with certified practical experience to return to academia and assume a temporary position as tenure-track professor (or equivalent).

The SNSF awards Practice-to-Science grants to qualified experts with proven practical experience who wish to join a university of applied sciences or a university of teacher education as a professor, and to newly appointed professors at a university of applied sciences or a university of teacher education who wish to strengthen the academic component of their dual scientific-practical skill profile. The time-limited positions offer the opportunity of obtaining higher qualifications and converting to a permanent position.

Further Information:

<https://www.snf.ch/en/X7wQPXdwrBsOZD0f/funding/careers/practice-to-science>

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Diversity and inclusivity (focus on women) – Turkey

The purpose of the “3501 - Career Development Program (CAREER)”, the one of the funding programs funded by TUBITAK, is to encourage the studies of scientists with PhD degree, who have just started their careers by providing project support. It is a program aimed at supporting the work of the young researchers who will take the academic leadership of the 21st century, as well as maintaining the careers of the young scientists in the best way as researchers and lecturers, as well as improving our scientific level and increasing the role of science in the development of the country.

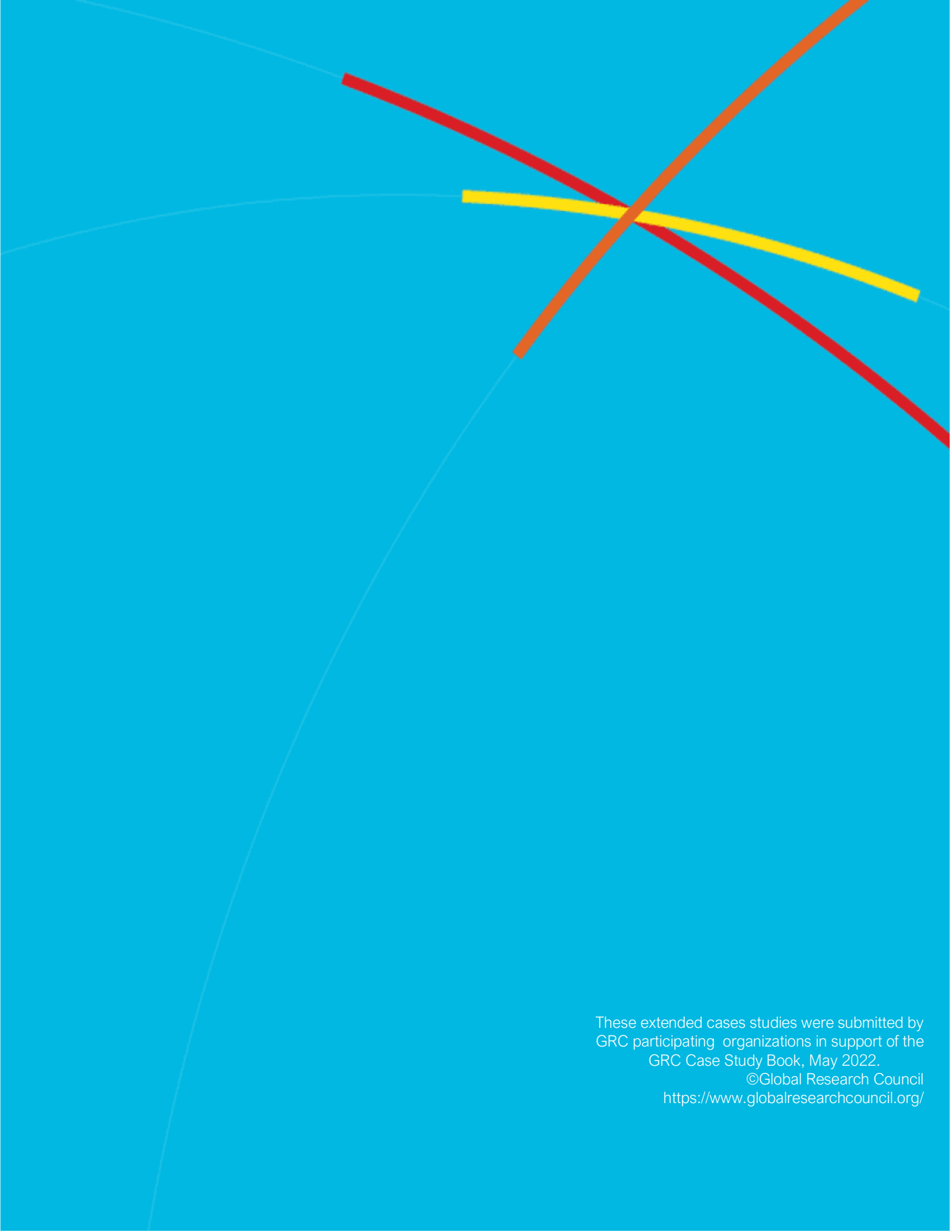
In this funding program, principal investigators should apply the program within 7 years following the date of doctorate degree / specialty in medicine / proficiency in art. However, women principal investigators giving birth are given an extra year for each birth to apply this funding program. The objective of the initiative is to support women giving birth during their academic career.

Further information:

<https://tubitak.gov.tr/en/funds/academy/national-support-programmes/3501/content-who-can-apply>

<https://www.tubitak.gov.tr/en/news/policy-principles-for-increasing-the-participation-of-women-researchersin-tubitak-processes-are>

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