

# The JSPS Research Fellowship for Young Scientists: A program ideal for students aiming to become a research/development leader in the future

# 1. What the JSPS Research Fellowship for Young Scientists Is:

The "Research Fellowship for Young Scientists" is one of the researcher-fostering programs run by the Japan Society for the Promotion of Science (JSPS). From among doctoral course students (DC) and postdoctoral fellows (PD), this program adopts "JSPS Fellows", who possess excellent research capabilities and wish to dedicate themselves to conducting research at universities or other research institutes and provides them with supplies research-encouragement funding.

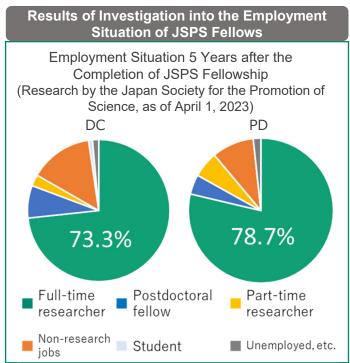
In addition to research-encouragement funding (Stipends), those adopted under this program can receive a Grant-in-Aid for JSPS Fellows (research grant), thereby being able to stably conduct their research activities.

By providing gifted young researchers with an opportunity to focus on a freely chosen research topic based on their own innovative ideas, this program ultimately aims to contribute to the fostering and securing of creative researchers who can forge the future of academic research in Japan.

Therefore, it is a national investment in distinguished human resources for the future, rather than just providing grants for research themes.

Accordingly, the program allows researchers to hold an extremely high status, since simply being adopted as JSPS Fellows indicates that they were recognized as being worthy of a national investment and they can state their statuses as such on their curriculum vitae in the search for employment.

In fact, as shown in the pie chart on the right, of all JSPS Fellows, DCs and PDs who were later employed as full-time researchers account for as many as about 73% and 79%, respectively. Indeed, it is not too much to say that they are the **chosen young researchers**.



# Tenure, Stipend, and Research Grant

Category	Tenure	Stipend (Monthly FY2024 Amount)	Research Grant (Total Amount During Tenure)		
DC1	3 Yrs.	200 000 von	Up to 4.5 million yen		
DC2	2 Yrs.	200,000 yen	Up to 3.0 million yen		
PD	3 Yrs.	362,000 yen *	Up to 4.5 million yen **		
RPD	3 Yrs.	362,000 yen *	Up to 4.5 million yen **		
CPD (As of September 1, 2024, applications are currently stopped.)	5 Yrs. (Including PD period)	446,000 yen *	Up to 15 million yen **		

<sup>\*</sup> JSPS implements the "Support Program for Employment of Young Researchers to Improve the Research Environment". Under this program, PD, RPD, and CPD employed by research institutes registered "Employment System Introduction Institution" will receive a salary equivalent to or greater than the above stipend from institutes.

\*\* 30% of indirect expenses are also separately provided.

#### <Definition of each category>

DC1 · · · Doctoral course students with three more years to complete the course

DC2 · · · Doctoral course students with up to two more years to complete the course

PD · · · Postdoctoral fellows with less than five years having elapsed since receipt of the doctoral degree

RPD · · · Postdoctoral fellows who resumed research suspended due to child-bearing and/or infant-nursing

CPD · · · Those who adopted as PD can apply for CPD. After adoption, he conducts his research overseas for 3 years.

# 2. Supports Available to You If Selected as a JSPS Fellow

In addition to the offering of stipend and Grant-in-Aid for JSPS Fellows, the following supports, which form the attraction of the program, will be available to you if adopted as a JSPS Fellow.

#### (1) Overseas travels during the JSPS Fellowship period

institutions.

If so required by your research, you may conduct it temporarily at overseas research institute(s). This fellowship program allows you to undertake international travels for a maximum and total of two-thirds of your fellowship period by using the research grants, etc., thereby building up research experience abroad over a long period of time. In addition, JSPS also provides overseas travel support for JSPS Fellows in cooperation with corresponding overseas

#### (2) Suspension and extension of fellowship for child-bearing and/or infant-nursing

As an effort to promote environment where not only female researchers but also young researchers can work comfortably, the fellowship may be suspended and extended in cases where child-bearing and/or infant-nursing would make it difficult for either female or male Fellows to focus on research.

#### (3) Receipt of other research funds than Grant-in-Aid for JSPS Fellows

A JSPS Fellow may receive a donation from a host research institution, financial assistance equivalent to living expenses from an alumni association, scholarships and grants from local governments and private companies, etc. within the scope of the research-only obligation during your JSPS Fellowship period. If your research topic chosen in your capacity as a JSPS Fellow is expected to develop beyond its initial scope, you will be able to receive other research funds than Grant-in-Aid for JSPS Fellows to pursue such research.

#### (4) (PD, RPD, CPD only) Employment at research institutions

When PD, RPD, and CPD selects a research institution registered as an "Employment System Introduction Institution" under the "Support Program for Employment of Young Researchers to Improve the Research Environment" implemented by JSPS as a host institution, he/she will be employed at the research institution in a full-time equivalent position. Tohoku University is registered as one of these institutes and provides support for young researchers by adding 82,000 yen/month to the salary of PD, RPD and CPD, combining the support provided by this program with the University's own support.



TU Research Promotion Division website



# 3. Preparations Toward Your Application If You Have Become Interested

You now understand from Items 1 and 2 how captivating and important the JSPS Research Fellowship for Young Scientists is to those aiming to become researchers. At the same time, however, the chances of being adopted are not high at all. For this reason, you must start collecting relevant information and making other preparations of your own toward filing an application early enough, e.g., during your fourth year of the undergraduate school or first year of master's course.

#### Selection of JSPS Fellows for FY2024

The numbers of applicants and adopters by research area and selection ratio by category

(Research by the Japan Society for the Promotion of Science, as of July 1, 2024)

Category		Humanities	Social Sciences	Mathematical and Physical Sciences	Chemistry	Engineering Sciences	Informatics	Biological Sciences	Agricultural/ Environmental Sciences	Medical, Dental and Pharmaceutical Sciences	Selection Ratio
DC1	Applicants	435	415	639	469	798	376	449	414	596	15.1%
	Adopters	61	61	98	73	119	57	71	65	89	
DC2	Applicants	594	675	859	530	1,216	509	524	578	882	17.1%
	Adopters	102	113	148	92	205	88	92	99	152	
PD	Applicants	284	210	320	42	101	32	162	158	180	23.4%
	Adopters	64	47	68	6	22	4	44	40	54	

# Prep.1: Produce as many research achievements as possible on your strengths up until the filing of your application

In the screening process for JSPS Research Fellowship for Young Scientists, the following criteria will be evaluated: (1) "conception and originality of the research plan" and (2) "qualifications as a researcher. For this reason, the application form is divided into two main sections: "Research plan" and "Selfanalysis of research execution" section, which will be used to judge whether or not you are qualified as a researcher to carry out the research plan, you need to describe your "strengths in research (e.g., independence in research, ability to think and solve problems)" and " what you consider to be the factors necessary for further development as a researcher in the future". In order to make these statements convincing, it is essential that they be based on evidence. The most important evidence is the research achievements you have made up to that point.

Therefore, if you want to be JSPS Fellow, you should consult with your academic advisor as soon as possible about what theme you would like to research as a JSPS Fellow and make your research achievements that you can show that as much as possible before the application. In doing so, particularly important elements include; writing papers as a lead author, writing peer-reviewed papers, rather than non-peer-reviewed ones; and providing presentations at international conferences (taking the podium as a lead author).

### **Examples of Research Achievements:**

- Papers published in academic journals, etc.
- Presentations at international conferences
- Presentations at domestic conferences, symposiums, etc.
- An excellent history of awards received



## Prep. 2: Start early on preparations for application-writing

In preparing an application, it is essential to elaborate a research plan independently and seek advice from and discuss with your academic advisor and seniors in your laboratory. As a matter of special importance, you must formulate in your own words the cores of your application: "Positioning of the Research", "Research objectives, methods, and description", "Research plan (what you aim to establish, and to what extent during the JSPS Fellowship period)", and "distinctive and creative features", have them reviewed by your academic adviser and seniors in your laboratory; and hone them over and over again.

While it is still early stage, you should actively consult with reliable people, such as your academic adviser and seniors in your laboratory and ask them to share past applications for your perusal. Since some departments have a system to allow access to past applications, you should ask your departments administrative staff about that.

You can check past adopted research topics at List of adopters\*.

\* https://www.jsps.go.jp/j-pd/pd saiyoichiran.html (in Japanese only)

The content of the application form is reviewed slightly each year. It is essential to obtain the latest application form from the JSPS website as soon as the application form for the year in which you are applying is released, analyze what kind of information is required, and respond to it.

Tohoku University holds in-campus explanatory sessions concerning the call for applications, etc. regarding the JSPS Research Fellowship for Young Scientists and individual consultations where you can directly talk with and seek advice from current JSPS Fellows regarding your application and other relevant matters. You are strongly encouraged to actively participate in such events and gather useful information.

### List of supports offered by the Tohoku University

- Explanatory sessions concerning the call for applications, etc. regarding the JSPS Research Fellowship for Young Scientists (You Tube, distributed around March)
- Individual consultations (Zoom, around March)
- Distribution of Tips to Considerably Boost Your Chance of Becoming a Fellow under the JSPS Research Fellowship for Young Scientists (around March)
- Distribution of checkpoint and checklist for Preparing Application Forms for Research Fellowship for Young Scientists (around March)
- Viewing past applications

# 4. Voices of adopters for the JSPS Fellowship

# Benefits of Becoming a JSPS Fellow and What I Focused on in Preparing my ApplicationExploring Your Research Through the JSPS Fellowship Application

JSPS Fellow under DC1 category for FY2024 Tomomi Kubota, Graduate School of Education

Research Topic: Construction of an innovative decision-making method for interprofessional collaboration in schools and elucidation of its effectiveness

One of the best things about being a JSPS Fellow is getting more research colleagues. In June 2024, I participated in the event (Friendship Meeting) where people from all over the country who had been employed as

a JSPS Fellow for the first year gathered. There, I interacted with people from various fields, gained knowledge about my research, and had interesting discussions about research. I think that doctoral students tend to stay in the laboratory, so I think it is a good opportunity to expand my network of people outside the laboratory.

One important point I emphasized in the application process was to have many people read my application. I started preparing my application around February and received advice from my advisor and other graduate students. I also asked my family and friends who were not involved in research to read my application, because many JSPS reviewers are not experts in my field. I think it is very important to "write in a way that people without background knowledge of the research can understand. I wish you all the best.



JSPS Friendship Meeting

# Conveying the appeal of research to people outside your field of expertise

JSPS Fellow under DC2 category for FY2024 Daichi Sugo, Graduate School of Engineering

Research topic: The creation of a large-area landslide prediction system combining immediacy and precision based on a mechanical model

If you are selected as a JSPS Research Fellow, you can receive support for cost of living and research expenses. The main reason I wanted to become a fellow was to receive support for my living expenses and to alleviate my financial worries. The research expenses can be used for materials necessary for research (in my case, a high-performance PC mainly used for numerical simulations) and for participating and presenting at international conferences (see photo). These gave me a big advantage allowing for the smooth and steady progress of my research.

During the preparation of my application, I tried to present the impact of my research more generally, in a way that would be well understood by people outside my field of expertise. Sometimes, the easy-to-understand expressions lose their strict 'engineering/scientific' meaning, but I think it is important to strike a good balance between the smooth communication and accurate articulation of our research. Writing an application is a repetitive and difficult process that involves many revisions, nonetheless I believe that this is a very good training for better communicating and presenting the appeal and significance of your research to a much wider audience. I wish you all the best in your endeavors.



Presentation at an international conference (Firenze, Italy)

For more details, visit the websites of the JSPS and the Tohoku University.

JSPS http://www.jsps.go.jp/j-pd/





Research Promotion Division, Tohoku University https://c.bureau.tohoku.ac.jp/kensui-top/3jsps/