

Call for Selection for PhD Candidates Support Project

Graduate School of Medicine, Science and Technology, Shinshu University **Sustainable Society AI Project**

(JST BOOST: Broadening Opportunities for Outstanding young researchers and doctoral students in Strategic areas)

Application Guidelines for April 2025

[Important]

This recruitment guideline is intended for selecting program students under the following admission categories.

Recruitment for the fiscal year 2024 is limited to this occasion only.

Recruitment Category	Number of Recruits	Target Applicants *
Support starts in April 2025	2	Those who will enroll in the doctoral program of this graduate school in April 2025 and engage in research in the field of next-generation AI.

*Please make sure to check the details of the eligibility requirements before applying.

Additionally, it allows concurrent application with the following doctoral student support program at our university:

JST SPRING: Support for Pioneering Research Initiated by the Next Generation (SPRING) program SHINSHU University “Next Generation Advanced Human Resources/Regional Innovators Development Program”

Please also review the recruitment guidelines for the SPRING Program.

Please refer to the separate document regarding concurrent applications.

Shinshu University starts providing salary-style support consisting of a stipend to defray living expenses along with research funding to talented students enrolled in doctoral programs under “BOOST: Broadening Opportunities for Outstanding young researchers and doctoral students in Strategic program of JST” (<https://www.jst.go.jp/jisedai/en/outline/index.html>).

An overview of the project follows. These guidelines summarize the requirements for selection of this project.

Program Objectives

- Supporting research in the field of AI by doctoral students, as well as research in emerging and converging areas within the AI field.
- To provide an environment in which students can focus on research by providing research incentives
- Cultivating talent to become leading scientists in the next-generation AI field, which is a strategic area for our country. Aim to foster innovation and enhance industrial competitiveness in our country.

Shinshu University initiative “Sustainable Society AI Project”

Program career and personal development content

We aim to foster doctoral candidates who will lead the next generation of AI by implementing cross-disciplinary guidance provided by a diverse team with various expertise, offering special lectures in the field of next-generation AI, coordinating the utilization of the university's data assets, and enabling participation in

career development and educational content in SPRING, thus expanding career paths and student interactions.

Program Website: <http://www.shinshu-u.ac.jp/graduate/spring/>

1. Eligibility

Applicants must have been enrolled in the Shinshu University Graduate School of Medicine, Science and Technology, and recognized as outstanding students. Students who further intend to become leading scientists in the field of next-generation AI.

However, the following individuals are not eligible, regardless of whether they meet the above requirements:

Ineligible individuals
<ol style="list-style-type: none"> 1. Students who have been selected as a special fellow (DC) by the Japan Society for the Promotion of Science (JSPS) 2. International students who are being supported by a Japanese government (Monbukagakusho: MEXT) scholarship (Including "JICA") 3. International students who are receiving scholarship or other support from their home country 4. Students with a stable income in the form of salary or director remuneration from a company or other organization that provides sufficient funds to cover their living expenses (amount of ¥2.4 million or more per year) 5. Recipients of other scholarships (including those who are in the process of applying) who are not allowed to receive the scholarship together with this project. However, this does not include the application to JSPS DC. 6. Students who are on a leave of absence 7. Students who are planning to withdraw before completing their doctoral program 8. Students who have been enrolled for longer than the standard term of study

*After applying for or being accepted into this project, if any of the following conditions apply during enrollment, you will lose eligibility.

2. Application Requirements

The person eligible for support shall meet all of the following criteria

- **Enrolling in this graduate school in April 2025 (*1)**

- The research field must be related to next-generation AI (including both established and emerging/converging fields within AI), and the student must engage in AI-related research during their doctoral studies.
- Applicants should have the ambition to shape the future of science, technology, and innovation in Japan and be able to produce research results, such as conference presentations and papers, annually. Furthermore, during the support period, it is mandatory to present their AI research at academic conferences and through paper publications. (*2)
- For international students, demonstrating an intention to contribute to innovation creation and enhancement of industrial competitiveness in Japan's national strategy.

(*1): BOOST prioritizes the systematic development of next-generation AI researchers and thus targets doctoral students who commence their studies at an early stage (from the early stages of the doctoral program).

(*2): As the definition of "Artificial Intelligence: AI" is diverse, specific research areas are not explicitly stated. Applicants should ensure that their application materials enable reviewers to determine suitability for support as researchers in the next-generation AI field.

According to JST, the target student profile for this program is as follows:

<p>The program aims to bolster the next-generation AI researcher base to foster innovation creation and enhance industrial competitiveness in Japan. To achieve this, the program aims to increase the number of students</p>

specializing in AI fields entering the doctoral program and to train students from other disciplines to become researchers with expertise in AI.

Regarding the specialized expertise in AI expected from students majoring in other disciplines, we aim to foster students to meet the following criteria by the completion of the doctoral program (upon completion of this program):

- It is desirable for recipients to become next-generation AI researchers contributing to innovation creation and enhancement of industrial competitiveness in Japan after obtaining their doctoral degrees.
- Recipients should possess skills as AI engineers and data scientists, leveraging these skills to conduct their own research (proficiency in programming, machine learning algorithms, databases, mathematics, statistics, etc.).
- Recipients should be able to catch up with rapidly evolving AI technologies and introduce optimal AI into their research.
- It is desirable for recipients' research to contribute to the advancement of AI and its application to other fields.
- Presenting research findings related to their AI studies at academic conferences and through paper publications during the support period is mandatory.
- Although presenting papers at information science conferences and academic conferences is highly desirable, it is not mandatory.

3. Number of Places

Support starts in April 2025 : 2 students

*Based on the results of the selection process, if the number of students meeting the recruitment criteria is insufficient, we may conduct additional recruitment.

■Reference: Relationship between the Number of Recruits and the Selection Based on the Support Start Period

Support Start Period	April 2025	April 2026
Number of Recruits	2	3
Selection Process	This Selection Process	2025 Selection Process

4. Research Incentives

Total annual amount: ¥3.9 million (stipend of ¥3 million and research funding of ¥900,000),
50% tuition fee waiver.

5. Funding Period

Within the standard period of study.

If the period of enrollment exceeds the standard length of study, any subsequent period will not be eligible for support.

Additionally, the funding period may be shortened if certain conditions under which funding may be canceled or terminated are satisfied.

✕The amount of support for research encouragement stipend, etc. may change depending on the status of budgetary measures from JST or government.

6. Application Documents

Prepare the prescribed slides, videos and documents explaining your research and submit them after obtaining approval from your faculty advisor. Please prepare documents in Japanese or English.

(*Selection will be canceled if a student is found to have included false information on his or her application documents.)

Among the application materials, slides and videos are common to both BOOST and SPRING. For applicants applying to both programs, these materials will also be used in the SPRING evaluation. The explanatory materials on utilizing AI in research within the application documents will be used exclusively for the BOOST evaluation.

7. Submission Information

Applicants must submit the following 3 files, prepared entirely by themselves.

Your score will be deducted if the documents are incomplete.

- (1) Application document (Specified format. One -page slide document describing your research.

PDF file format. Within 10MB)

[Common to SPRING and BOOST]

Formats can be obtained from (.pptx file is downloaded):

https://www.shinshu-u.ac.jp/graduate/sogoiriko/slide_ID_name.pptx

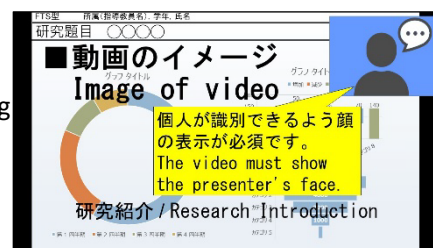
Slides should be concise and easy to understand with figures and tables.

- (2) 2 minutes-video presentation file. (MP4 file format. Within 100MB)

[Common to SPRING and BOOST]

Please create video files using tools such as PowerPoint or Zoom's recording feature.

- *The video must show the presenter's face so that he/she can be identified.



- (3) Explanation materials on the utilization of AI in your own research (Specified format. One -page text documents. PDF file format. Within 2MB)

[Only BOOST]

Formats can be obtained from (.docx file is downloaded):

https://www.shinshu-u.ac.jp/graduate/sogoiriko/document_ID_name.docx

File-name:

- 1) One-page slide document file: slide_Student(examinee's) ID_your name. pdf
- 2) Two- minutes video presentation file: movie_Student(examinee's) ID_your name. mp4
- 3) One-page text document file: document_Student(examinee's) ID_your name. pdf

Three files must be submitted via the application form below.

If you are applying for both SPRING and BOOST, you can also use this form.

<https://forms.gle/9ujpx8Kh74FNK2T16>

- *If you are unable to submit documents via this form, please contact us via email at shin-jisedai@shinshu-u.ac.jp

(Graduate School Office, Division of Student Affairs)

- *If you are applying to both BOOST and SPRING, please make sure to review and submit the application Guidelines for BOOST as well. In the case of applying to both SPRING and BOOST, the slides and video will be evaluated together. Different slides and videos cannot be submitted for SPRING and BOOST.

At BOOST, in addition to slides and videos, submission of documents explaining AI is required.

Please check the recruitment guidelines for SPRING and create the documents, taking into account whether it is FTS (Future Technology Science) type or CDS (Curiosity-Driven Science) type.

8. Submission Period

Thursday, July 25, 12:00 p.m. - Thursday, August 1, 12:00 p.m. (Japan time)

9. Screening Method

(1) Document screening (primary screening)

Application documents submitted by applicants will be screened.

(2) Interview screening (secondary screening)

Applicants who pass the document screening will move on to an interview screening (online).

The interview screening will be conducted on **Thursday, August 29**, at 5:00 p.m. (Japan time).

Details will be provided to eligible applicants as they become available.

We cannot accommodate changes in interview times, so please secure your schedule.

10. Selection

Applicants will be notified if they were selected by email in September.

If any candidates withdraw, we may offer admission to the next qualified applicants.

11. Obligations of Selected Students

(1) Requirements

- Please fully understand the purpose and objectives of this project and engage in research related to the next-generation AI field. If your research theme is not related to AI, you will not be eligible for support.
- Program students must take an e-learning course on research ethics through the APRIN e-learning program (eAPRIN).
- Program students must submit an activity report on a regular basis.
- Program students are required to present at academic conferences and publish papers on AI research during the support period.
- Program students must consent to the sharing by SHINSHU University of their email address with JST.
- Registration for the "Job-type Research Internship (Coop-J internships)" program.
- Registration with the Japan Graduates Database (JGRAD). Cooperation in surveys regarding post-graduation career paths and research achievements.
- Proper execution of research funds in accordance with the rules.
- Cooperation in promotional activities within the scope that does not pose any hindrance.
- Submit a pledge form.

(2) Recommendations

Program students will be expected to take the initiative to actively pursue career development opportunities, for example by participating in the following initiatives:

- Participation in the career development and training content of the SPRING program, as well as interdisciplinary exchanges with other doctoral students.
- Participation in a long-term internship at a company or other entity or in work as a research staff member at a company or other entity
- Participation in exchanges hosted by JST for doctoral students from various universities
- Active participation in other activities as instructed by the program's leadership

12. Cancellation/cessation of support

(1) If the student fails to satisfy the requirements set forth in "1. Eligibility", your program support will be terminated.

(2) In the event it determines any of the following has occurred, the program's supervision will either provide guidance so that the student can improve his or her conduct or, if it determines that such improvement will not be forthcoming, cancel the student's selection for participation in the program. And then, you might have to refund your money which we paid such as research financial incentive.

- If the above-mentioned mandatory requirement under 11.(1) is not fulfilled, or if there is an apparent lack of enthusiasm toward the recommended action under 11.(2) in this program
- If the student fails without a legitimate reason to implement the research plan he or she submitted at the time of application for research incentives

- If the student is subjected to disciplinary action as stipulated in the Shinshu University Graduate School Regulations.
- (3) In the event a student is found to have conducted fraudulent research or included false information on his or her application, his or her selection will be canceled, and he or she will be required to repay research incentives already received.

*You must be in Japan to receive aid.

13. Other

1. JST requires that universities conduct a survey to track selected students' careers for at least 10 years after graduation. Successful applicants are required to cooperate with this tracking survey and report associated information to the University. Be sure to register with the Japan Graduates Database (JGRAD).
2. The names and other information of students selected to receive research incentives will be published on the University's website and in other materials.
3. Since the stipend portion of the research incentive is considered miscellaneous income, successful applicants will need to pay tax on those funds by filing their income taxes the year after they are received. Applicants who are listed as a dependent of a taxpayer (for example, a parent) should inform that person that they will be receiving a stipend that is treated as miscellaneous income and seek instructions from the person responsible for tax issues at that person's employer.
4. Program students who newly become JASSO Type 1 Scholarship recipients from FY2023 are not eligible for the "Return Exemption System for Particularly Meritorious Achievements" in the doctoral program.
5. This recruitment is not for the doctoral program entrance examination at Shinshu University. To enroll in our doctoral program, you must pass a separate entrance examination conducted by the graduate school.

Reference

1. Under Japan's Income Tax Act, if a dependent of a family member such as a parent earns more than ¥380,000 after necessary expenses are subtracted from stipend payments received from January through December, that family member may not be able to claim the student as a dependent, and the student will be subject to income tax. In addition, the dependent will have to pay resident tax the following tax year based on his or her income during the year in question.
2. For the purpose of health insurance and mutual-association insurance, students who expect to receive stipend payments of greater than ¥1.3 million during the year may not be classified as dependents. Since the amount of the stipend is determined at the outset, students who do not meet the requirements for being classified as a dependent are responsible for registering for National Health Insurance (Kokumin Kenko Hoken).
3. Although the manner, in which household income is calculated for students who are exempt from tuition payments depends on their particular circumstances, successful applicants may not qualify for a tuition exemption as a result of their income.

<p>■Contact: Shinshu University Program Office shin-jisedai@shinshu-u.ac.jp</p>

Application for JST Doctoral Student Support Programs SPRING and BOOST

Shinshu University has been selected for two doctoral student support projects: SPRING and BOOST.

- JST SPRING: Support for Pioneering Research Initiated by the Next Generation (SPRING) program- SHINSHU University "Next Generation Advanced Human Resources/Regional Innovators Development Program"
- JST BOOST: Broadening Opportunities for Outstanding young researchers and doctoral students in Strategic areas SHINSHU University "Sustainable Society AI Project"

Both SPRING and BOOST are support programs for doctoral students, so recruitment and selection will be conducted integrally. Depending on your research field and academic year, the selection criteria you can apply for may vary. Additionally, applicants may apply to both SPRING and BOOST simultaneously.

Please review the respective recruitment guidelines and submit your application accordingly.

■Summary of the Differences between SPRING and BOOST

(Please refer to the recruitment guidelines for details).

item	SPRING	BOOST
Your research field	Without conditions	The research field is in next-generation AI, AI-related, and AI-integrated areas.
Research Incentives	Total annual amount: ¥2.7 million (stipend of ¥2.4 million and research funding of ¥300,000) 50% tuition fee waiver	Total annual amount: ¥3.9 million (stipend of ¥3 million and research funding of ¥900,000) 50% tuition fee waiver
Career support	A wide range of career development and training content centered around Shinshu Tamon Juku is implemented	Training programs related to AI research are conducted.
Project Purpose	To broadly nurture doctoral talents who can contribute to Japan's science, technology, and innovation across diverse careers.	To cultivate talents who will become leading scientists in the next-generation AI field, a strategic area of focus for our nation.

■Types of Positions You Can Apply For

You can apply for recruitment categories where both Condition 1 and Condition 2 in the table below are marked with a checkmark (○).

Condition / Recruitment Category			SPRING			BOOST
			Category(1) Support starts in October 2024	Category(2) Support starts in April 2025	Category(3) Support starts in April 2026 (Reserve admission for M1 students at Shinshu Univ.)	Support starts in April 2025
Condition 1	Your research field	Related to AI	○	○	○	○
		Not related to AI	○	○	○	×
You can apply to recruitment categories marked with a circle in both Condition 1 "Your research field" ↑ and Condition 2 "Current grade" ↓						
Condition 2	Current grade	First year of master's student	×	×	○ (Shinshu Univ.)	×
		Second-year master's student scheduled to graduate in September.	○	○	×	×
						*If you enter in April, it's acceptable.

	Second-year master's student scheduled to graduate in March.	X	o	X	o
	Current doctoral students *In the standard period of enrollment.	o	o	X	X

*We plan to establish a system where individuals who have been accepted for SPRING reservations in their first year of the master's program can apply for BOOST selection during their second year of the master's program.