### The Graduate University for Advanced Studies, SOKENDAI 2024 - 2025

### SOKENDAI

- ••• Anthropological Studies
- ••• Japanese Studies
- •• Japanese History
- ••• Japanese Literature
  - • Japanese Language Sciences
- ••• Informatics
- •• Statistical Science
- ••• Particle and Nuclear Physics
- ••• Accelerator Science
  - •• Astronomical Science
- ••• Fusion Science
- •• Space and Astronautical Science
- ••• Molecular Science
- ••• Materials Structure Science
- ••• Global Environmental Studies
- ••• Polar Science
- ••• Basic Biology
- ••• Physiological Sciences
- ••• Genetics
- •• Integrative Evolutionary Science

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SOKENDAI

### Message from the President

The Graduate University for Advanced Studies, SOKENDAI was established to cultivate the future generation of doctoral researchers. SOKENDAI offers educational opportunities for graduate students in collaboration with national research institutions known as "inter-university research institutes." Since its inception in 1988 as the first national graduate university in Japan, SOKENDAI has awarded roughly 2,500 doctoral degrees in various fields of fundamental science.

There are 19 inter-university research institutes in Japan that comprise a group of top researchers and offer access to large-scale experimental facilities, cutting-edge research equipment, and valuable research materials. The research facilities and materials at the inter-university research institutes attract scholars from Japan and other countries who engage in collaborative projects with the institute members. These institutes serve as the leading hubs for advancing research across a broad spectrum of disciplines, from humanities to high-energy physics. The most distinctive feature of SOKENDAI is that we offer graduate education at institutions that conduct cutting-edge basic research.

The social landscape surrounding universities has undergone significant transformations in the last two decades, as dramatic advances in ICT have enabled the dissemination of vast amounts of information that transcends constraints such as geographical, generational, gendered, and linguistic boundaries, as well as temporal and spatial dimensions, and have presented a new paradigm for society, one that fuses virtual space and real space. However, considering the current state of affairs, humanity appears to be facing unprecedented challenges. One may find it difficult to envision the future of humanity in the next decade or two.

In light of this, what role should universities fulfill? While the significance of fundamental science and research fostered by universities is widely recognized, the situation in the world is not as straightforward as to assume that the outcomes of intellectual endeavors based on the pure curiosity of individual researchers will contribute to the collective wisdom of humanity and guide society toward a better direction. Given the prevailing uncertainty of our times, the world requires individuals who can be entrusted with its future. A university, as a hub of knowledge, is expected to meet this requirement. Universities must address this expectation as the locus of learning.

SOKENDAI has implemented a major reform of its educational organization and curricula to offer a 20-program system at Graduate Institute for Advanced Studies starting from April 2023. The new curriculum encompasses 20 programs that span a broad spectrum of academic disciplines, such as elementary particles, materials, life, space, information, history, and culture. The curriculum aims to equip students with foundational knowledge and education in their respective fields of specialization while fostering their autonomy and flexibility in conducting research beyond their own domains. The Diploma Policy of SOKENDAI outlines five competencies: "academic expertise", "creativity", "broad perspective", "global competence", and "research integrity" for doctoral candidates who aspire to become independent researchers who can tackle any challenge with confidence.

SOKENDAI strives to make a significant contribution to society by envisioning the role of academia in advancing human society in the long run. It aims to nurture doctoral students who can excel and innovate in academia that supports the intellectual foundations of society, lead advanced research and development, and generate new intellectual value.

April 1, 2024

Nagata, Takashi Ph.D. President The Graduate University for Advanced Studies, SOKENDAI

magata



#### NAGATA Takashi

D. Sc. in Chemistry, Graduate School of Science, the University of Tokyo(1982).

He has served as Assistant Professor, Lecturer, and Associate Professor at the Faculty of Science, the University of Tokyo, Associate Professor at the Faculty of Liberal Arts, the University of Tokyo, Associate Professor at the Institute for Molecular Science, Professor at the Graduate School of Arts and Sciences, the University of Tokyo, Vice President of the University of Tokyo, and Professor and Director at the Research Department, the National Institution for Academic Degrees and Quality Enhancement of Higher Education. Since 2017, he has been the **Director and Vice President** of the Graduate University for Advanced Studies, SOKENDAI, and he has held his current position since April 2023.

#### Purpose of Establishment

The Graduate University for Advanced Studies, SOKENDAI, was founded in 1988 as the first independent graduate university in Japan with the principle of contributing to the creation and development of culture through education and research in academic theory and application. As a world-class international graduate university, SOKENDAI operates in close partnership and collaboration with the inter-university research institutes (parent institutes).

Based on this principle, SOKENDAI aims to foster researchers with broad perspectives and advanced research capabilities that are globally accepted in fundamental academic fields. It promotes international academic research extending beyond the borders of traditional academic fields through interdisciplinary fusion and pioneers new interdisciplinary and cutting-edge fields of study.

Inter-University Research Institutes The inter-university research institutes (parent institutes) provide researchers with research resources that individual universities cannot afford, such as large-scale facilities and equipment, vast amounts of data and valuable materials. They serve as the core center established for shared usage and collaborative research that considers the demands of researchers in the relevant fields, as well as research bases that lead cutting-edge academic research in Japan through diverse collaborative research with researchers in Japan and around the world. SOKENDAI provides advanced specialized education and research guidance by leveraging the excellent research environment provided by its parent institutes as a place for education, with the faculty consisting of a rich pool of researchers from various fields.

# Features of SOKENDAI

SOKENDAI has 20 programs in collaboration with the inter-university research institutes (parent institutes) under Graduate Institute for Advanced Studies. This provides an educational environment transcending academic boundaries and flexibly offering the diverse educational resources of the inter-university research institutes. SOKENDAI fosters independent researchers with "Advanced Specialty and Expertise", "Broad Perspective" and "International Competitiveness" backed by five competencies.

#### Five Competencies $\supset$

Academic Expertise	Ability to ac available in to promote
Creativity	Ability to d research, ta ideas, and d
Broad Perspective	Ability to wo broad perspo range of aca
Global Competence	Ability to dis based on un country, regi
	Ability to re

Research

Integrity

SOKENDAI offers

both five-year and

three-year doctoral

program.

bility to acquire the knowledge and methodologies vailable in the academic field and apply them o promote advanced research.

Ability to deeply understand phenomena through research, tackle unexplored issues based on free deas, and create new intellectual value.

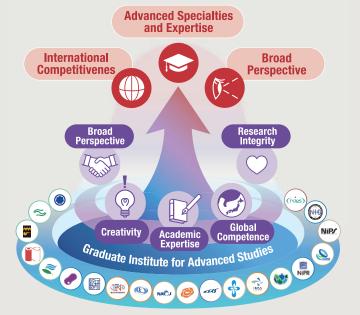
Ability to work on issues in surrounding areas from an proad perspective and contribute to the progress of a wide ange of academic fields, based on one's own expertise.

Ability to disseminate highly universal academic results based on understanding and collaboration regardless of country, region, language, culture, gender, religion, etc.

Ability to recognize the social significance and position of academic research and act ethically and responsibly as a researcher.

5

Ph.D



#### Doctoral program

2

1

Undergraduate

Master's program

program



Research

Dispatch

Support

Student support

SOKENDAI financially supports excellent students' research activities through the Research Assistant System, the Tuition Waiver System, and the SOKEN-DAI Special Researcher Program.

SOKENDAI supports excellent students who engage in long-term joint research activities in Japan and abroad through the SOKENDAI Student Dispatch Program and the SOKENDAI Dual Degree Program.



For more information, please click the URL

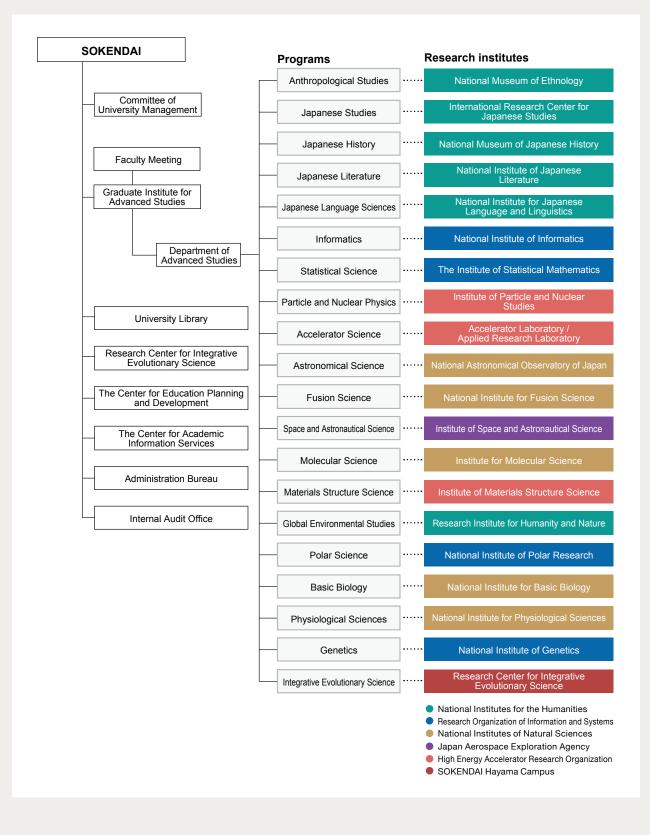
> https://www.soken.ac.jp/en/features/

### **Research and Education System**

SOKENDAI has established the Graduate Institute for Advanced Studies as a basic educational and research organization equivalent to a graduate school.

The Graduate Institute for Advanced Studies has 20 programs with a wide variety of specialties, which are developed in the research environment of four Inter-University Research Institute Corporations and Japan Aerospace Exploration Agency.

In addition, the University Library, the Research Center for Integrative Evolutionary Science, The Center for Education Planning and Development and The Center for Academic Information Services have been established as university-wide facilities.



### Organization



NAGATA Takashi

YAMAMOTO Satoshi

KURUSHIMA Noriko

OKAMURA Sadanori

YAMAMOTO Satoshi KURUSHIMA Noriko

**ARIKAWA Kentaro** 

FUJISAWA Hironori

MICHIZONO Shinichiro

INAGAKI Masato (The above are corporate members)

#### Administrative Board =

President Executive Director **Executive Director** Auditor Auditor

Vice President Vice President Executive Officer President's Executive Officer President's Assistant

#### **Graduate Institute for Advanced Studies**

	•
Dean, Graduate Institute for Advanced Studies	SAKAKIBARA Satoru
Chair, Anthropological Studies	NIWA Norio
Chair, Japanese Studies	ENOMOTO Wataru
Chair, Japanese History	MIKAMI Yoshitaka
Chair, Japanese Literature	SAITO Maori
Chair, Japanese Language Sciences	MATSUMOTO Yo
Chair, Informatics	TAKEDA Hideaki
Chair, Statistical Science	YOSHIMOTO Atsushi
Chair, Particle and Nuclear Physics	HARA Takanori
Chair, Accelerator Science	KAMITANI Takuya
Chair, Astronomical Science	SEKII Takashi
Chair, Fusion Science	SAKAKIBARA Satoru
Chair, Space and Astronautical Science	YAMADA Toru
Chair, Molecular Science	IINO Ryota
Chair, Materials Structure Science	SETO Hideki
Chair, Global Environmental Studies	TAYASU Ichiro
Chair, Polar Science	HIRAWAKE Toru
Chair, Basic Biology	NIIMI Teruyuki
Chair, Physiological Sciences	FURUSE Mikio
Chair, Genetics	IWASATO Takuji
Chair, Integrative Evolutionary Science	KUTSUKAKE Nobuyuki
University Library	
Director	KURUSHIMA Noriko
Deputy Director	YAGYU Shuji
Research Center for Integrative Evolution	,
Director	INNAN Hideki
The Center for Education Planning & De	velopment
Director	YAMAMOTO Satoshi
The Center for Academic Information Se	ervices
Director	KURUSHIMA Noriko
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Secretary-General	SATO Akihiro
Manager, General Planning Division	MOCHIZUKI Tsuyoshi
Manager, General Affairs Division	HORIUCHI Shinya
Manager, Financial Affairs Division	YAGI Yuichiro
Manager, Academic and Students Affairs Division	ion UMENO Kenichi

#### Education and Research Council —

President

NAGATA Takashi Executive Director (Vice President) YAMAMOTO Satoshi

Executive Director (Vice President)	KURUSHIMA Noriko
Chair, Graduate Institute for Advanced Studies	3
Chair, Fusion Science	SAKAKIBARA Satoru
Chair, Anthropological Studies	NIWA Norio
Chair, Japanese Studies	ENOMOTO Wataru
Chair, Japanese History	MIKAMI Yoshitaka
Chair, Japanese Literature	SAITO Maori
Chair, Japanese Language Sciences	MATSUMOTO Yo
Chair, Informatics	TAKEDA Hideaki
Chair, Statistical Science	YOSHIMOTO Atsushi
Chair, Particle and Nuclear Physics	HARA Takanori
Chair, Accelerator Science	KAMITANI Takuya
Chair, Astronomical Science	SEKII Takashi
Chair, Space and Astronautical Science	YAMADA Toru
Chair, Molecular Science	IINO Ryota
Chair, Materials Structure Science	SETO Hideki
Chair, Global Environmental Studies	TAYASU Ichiro
Chair, Polar Science	HIRAWAKE Toru
Chair, Basic Biology	NIIMI Teruyuki
Chair, Physiological Sciences	FURUSE Mikio
Chair, Genetics	IWASATO Takuji
Chair, Integrative Evolutionary Science	KUTSUKAKE Nobuyuki

#### Administrative Council >=

President	NAGATA Takashi
Executive Director (Vice President)	YAMAMOTO Satoshi
Executive Director (Vice President)	KURUSHIMA Noriko
Professor, Program of Japanese Literature	
Director General, National Institute of Japanese Literature	WATANABE Yasuaki
Professor, Program of Molecular Science	
Director General, Intitute for Molecular Science	WATANABE Yoshihito
Professor, Program of Particle and Nuclear Physics Director, Institute of Particle and Nuclear Studies	SAITO Naohito
Professor, Program of Genetics	
Director-General, National Institute of Genetics	HANAOKA Fumio
Director General, High Energy Accelerator	
Research Organization	ASAI Shoji
Outside Director, East Japan Railway Company	AMANO Reiko
President, Eikei University of Hiroshima	ARINOBU Mutsuhiro
President, Hanazono University	ISODA Fumio
Professor, Faculty of Letter, Konan University	INOSE Kumie
President, National Institutes of Natural Science	s KAWAI Maki
President, Research Organization	
of Information and Systems KI	TSUREGAWA Masaru
President, National Institutes for the Humanities	KIBE Nobuko
Senior Corporate Adviser, Mitsubishi Estate Co., Lt	d. KIMURA Keiji
Executive Director, Institute of Space and Astronautic	al
Science, Japan Aerospace Exploration Agency	KUNINAKA Hitoshi
Representative Director & President,	
Sumika Technical Information Service, Inc.	SEKINE Chizu
President, Akita Prefectural University	FUKUDA Hiroo
President, Akita International University	MONTE Cassim
President, Japan Agency for Marine-Earth	
Science and Technology	YAMATO Hiroyuki

### Inter-University Research Institutes participating in SOKENDAI

#### SOKENDAI

The Center for Education Planning and Development The Center for Academic Information Services • University Library Shonan Village, Hayama, Kanagawa, 240-0193 Japan TEL: +81-46-858-1500 URL: https://www.soken.ac.jp/en/

#### Research Center for Integrative Evolutionary Science

Integrative Evolutionary Science TEL: +81-46-858-1577(RCIES admin.office) URL: https://rcies.soken.ac.jp/

#### National Institutes for the Humanities National Museum of Ethnology **2**

Anthropological Studies 10-1 Senri Expo Park, Suita, Osaka, 565-8511 Japan TEL: +81-6-6878-8236 URL: https://www.minpaku.ac.jp/

National Institutes for the Humanities

#### for Japanese Studies Japanese Studies 3-2 Oeyama-cho, Goryo, Nishikyo-ku, Kyoto, 610-1192 Japan TEL: +81-75-335-2222

URL: https://www.nichibun.ac.jp/en/

#### National Institutes for the Humanities National Museum of Japanese History 4

Japanese History 117 Jonai-cho, Sakura-shi, Chiba, 285-8502 Japan TEL: +81-43-486-0123 URL: https://www.rekihaku.ac.jp/



Japanese Literature 10-3, Midori-cho, Tachikawa, Tokyo, 190-0014 Japan TEL: +81-50-5533-2900 URL: https://www.nijl.ac.jp/en/

#### National Institutes for the Humanities National Institute for Japanese Language and Linguistics o

Japanese Language Sciences 10-2 Midori-cho, Tachikawa City, Tokyo, 190-8561 Japan TEL: +81-570-08-8595 URL: https://www.ninjal.ac.jp/english/

#### National Institutes for the Humanities Research Institute for Humanity and Nature 7

Global Environmental Studies 1457-4 Motoyama, Kamigamo, Kita-ku, Kyoto, 603-8047 Japan TEL: +81-75-707-2152 URL: https://www.chikyu.ac.jp/rihn\_e/

#### National Institutes of Natural Sciences Institute for Molecular Science (3)

Molecular Science 38 Nishigonaka, Myodaiji, Okazaki, 444-8585 Japan TEL: +81-564-55-7000 URL: https://www.ims.ac.jp/en/

#### National Institutes of Natural Sciences National Institute

Basic Biology 38 Nishigonaka, Myodaiji, Okazaki, 444-8585 Japan TEL: +81-564-55-7000 URL: https://www.nibb.ac.jp/en/

#### National Institutes of Natural Sciences NIP National Institute for Physiological Sciences (1)

Physiological Sciences 38 Nishigonaka, Myodaiji, Okazaki, 444-8585 Japan TEL: +81-564-55-7000 URL: https://www.nips.ac.jp/eng/

#### National Institutes of Natural Sciences National Astronomical Observatory of Japan fi

Astronomical Science 2-21-1 Osawa, Mitaka, Tokyo, 181-8588 Japan

TEL: +81-422-34-3600 URL: https://www.nao.ac.jp/en/

#### NAOJ Mizusawa campus 🔞

2-12 Hoshigaoka, Mizusawa, Oshu, Iwate, 023-0861 Japan TEL: +81-197-22-7111

#### Nobeyama Radio Observatory 🔞

462-2 Nobeyama, Minamimakimura, Minamisaku, Nagano, 384-1305 Japan TEL: +81-267-98-4300

#### Subaru Telescope

650 North A'ohoku Place, Hilo, Hawaii 96720 U.S.A. TEL: +1-808-934-7788

#### NAOJ Chile Observatory

Los Abedules 3085, Oficina 701, Vitacura, Santiago, Chile TEL: +56-2-2656-9253

National Institutes of Natural Sciences
National Institute
for Fusion Science

#### Fusion Science 322-6, Oroshi-cho, Toki, Gifu, 509-5292 Japan TEL: +81-572-58-2222 or 2042 URL: https://www.nifs.ac.ip/en/

Japan Aerospace Exploration Agency

#### and Astronautical Science Space and Astronautical Science 3-1-1, Yoshinodai, Chuo-ku, Sagamihara, Kanagawa, 252-5210 Japan TEL: +81-42-759-8012

URL: https://www.isas.jaxa.jp/en/

#### High Energy Accelerator Research Organization Tsukuba Campus (B)

Accelerator Laboratory • Applied Research Laboratory Accelerator Science

https://www2.kek.jp/accl/eng/ https://www2.kek.jp/arl/en/home-en/

### Institute of Materials Structure Institute

Materials Structure Science https://www2.kek.jp/imss/eng/

### Institute of Particle and Nuclear Studies

Particle and Nuclear Physics https://www2.kek.jp/ipns/en/

1-1 Oho, Tsukuba, Ibaraki, 305-0801 Japan TEL: +81-29-864-1171 or 5128 URL: http://www.kek.jp/

#### Tokai Campus (9)

203-1 Shirakata, Tokai, Ibaraki, 319-1106, Japan

#### Research Organization of Information and Systems The Institute of Statistical Mathematics 20

Statistical Science 10-3 Midori-cho, Tachikawa, Tokyo, 190-8562 Japan TEL: +81-50-5533-8500 URL: https://www.ism.ac.in/index\_e.html

#### Research Organization of Information and Systems NIPR of Polar Research @

Polar Science 10-3 Midori-cho, Tachikawa, Tokyo, 190-8518 Japan TEL: +81-42-512-0612 URL: https://www.nipr.ac.jp/

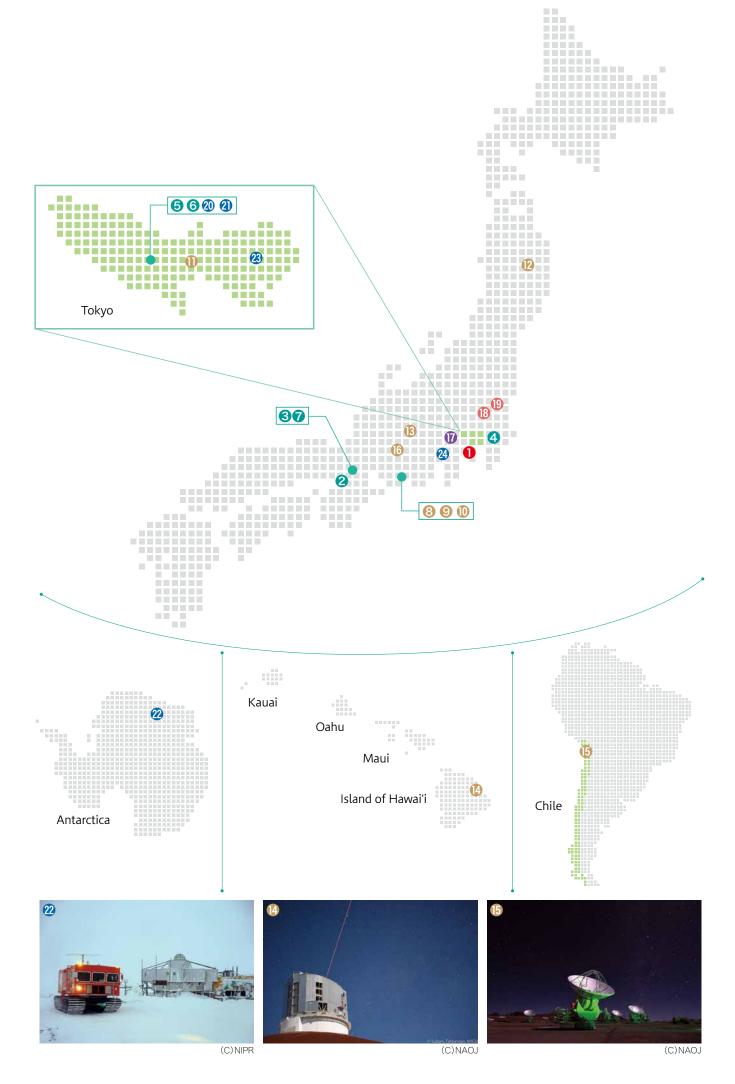
#### Syowa Station (Antarctica) 🕲



Informatics 2-1-2 Hitotsubashi, Chiyoda-ku, Tokyo, 101-8430 Japan TEL: +81-3-4212-2110 URL: https://www.nii.ac.jp/en/

#### Research Organization of Information and Systems National Institute of Genetics @

Genetics 1111 Yata, Mishima, Shizuoka, 411-8540 Japan TEL: +81-55-981-6720 URL: https://www.nig.ac.jp/



Overview

An informal committee of the directors general of international university research institutes issues an appeal for the introduction of post-graduate courses in the institutes.	June 1982 April 1986
An informal committee of the directors general of inter-national university research institutes produces a summary of the basic concepts of a postgraduate school for advanced studies based on the results of an investigation by a working group set up to investigate issues related to postgraduate schools. An Office and Committee for the Investigation of the Preparation of the Establishment of a Postgraduate School for Advanced Studies are established at	
Okazaki National Research Institutes.	
The Committee for the Investigation of the Preparation of the Establishment of a Postgraduate School for Advanced Studies produces a summary of the basic concepts of a postgraduate school for advanced studies.	March 1987
An Office and Committee for Preparation of the Establishment of a Postgraduate School for Advanced Studies are established at Okazaki National Research Institute.	Мау
The Committee for Preparation of the Establishment of a Postgraduate School for Advanced Studies produces an interim summary on the preparation of the establishment of a tentatively named Graduate University for Advanced Studies.	July
An Office and Committee for Preparation of the Establishment of the Graduate University for Advanced Studies are established at Okazaki National Research Institute.	April 1988
The "Law to amend part of the National School Establishment Law" (Law No. 63, 1988), which stipulates the establishment of the Graduate University for Advanced Studies, is announced and enacted.	Мау
The Committee for Preparation of the Establishment of the Graduate University for Advanced Studies produces a summary of the preparation of the establishment of the Graduate University for Advanced Studies.	September
The Graduate University for Advanced Studies is inaugurated. The central administration office is established at the Tokyo Institute of Technology (Nagatsuda Campus).	October
Scool of Mathematical and physical Science         School of Life Science           •Department of Statistical Science         •Department of Genetics           •Department of Scynchrotron Radiation Science         •Department of Molecular Science           •Department of Structual Molecular Science         •Department of Physiological Science           •Department of Functional Molecular Science         •Department of Physiological Science           •Department of Functional Molecular Science         •Department of Physiological Science	of Technology's Nagatsuda campus. 1988. 10. 1
Dr.Saburo Nagakura is appointed as the first President of the University.	
The School of Cultural and Social Studies is established with the Department of Regional Studies and Department of Comparative Studies. The University commences matriculation of students for the three schools.	April 1989
Dr.Eizi Hirota is appointed as the first Vice President of the University.	January 1990
The Coordination Center for Research and Education is established.	April 1991
The Department of Japanese Studies (School of Cultural and Social Studies), and the Departments of Astronomical Science and Fusion Science (School of Mathematical and Physical Science) are established; matriculation begins.	April 1992
The Department of Polar Science (School of Mathematical and Physical Science) is established; matriculation begins.	
Land in Hayama, Kanagawa (27,000m <sup>2</sup> ), is donated by Mitsui Fudosan Ltd. to allow the construction of the University's central administration office, as a result of the mediation services of the Kanagawa prefectural government.	February 1994
Construction of the central administration office (4,205m <sup>2</sup> ) begins at the Hayama Campus. The Information Center for Research and Education is established.	March June
Administrative functions are transferred from Nagatsuda Campus to	February 1995
Hayama; construction is completed on the central administration building. Dr.Eizi Hirota is appointed as the second President. Dr.Kazuo Moriwaki is appointed as the second Vice President.	April
The School of Advanced Sciences, with the Department of Biosystems Science, is established at the Hayama Campus (matriculation begins in April 1999).	April 1997
The Department of Photoscience (School of Advanced Sciences) is established (matriculation begins in April 1999). The Department of Synchrotron Radiation Science changes its name to "The Department of Materials Structure Science".	April 1998
Construction of the School of Advanced Sciences building for research (3,060m <sup>2</sup> ), begins at the Hayama Campus.	September
The School of Cultural Studies changes its name to "The School of Cultural and Social Studies". The Department of Japanese History is established in the School of Cultural and Social Studies, and The Department of Particle and Nuclear Physics is established in the School of Mathematical and Physical Science; matriculation begins in both new Departments. The School of Advanced Sciences matriculation.	April 1999
Construction completed on the research building for the School of Advanced Sciences.	June

# 2024

#### History of SOKENDAI Presidents

The 1st	Saburo, Nagakura (DSc)
President	Oct.1988 to Mar.1995
The <b>2</b> nd	<b>Eizi, Hirota (Dsc)</b>
President	Apr.1995 to Mar.2001
The <b>3</b> rd	Keiichi, Kodaira (DSc)
President	Apr.2001 to Mar.2008
The <b>4</b> th	Naoyuki, Takahata (Dsc
President	Apr.2008 to Mar.2014
The <b>5</b> th	Yasunobu, Okada (мв)
President	Apr.2014 to Mar.2017
The <b>6</b> th	<b>Mariko, Hasegawa</b> (Dsc)
President	Apr.2017 to Mar.2023
The 7th	Takashi , Nagata (DSc)
President	Apr.2023 to present

April 2001	Dr.Keiichi Kodaira is appointed as the third President. Dr.Naoyuki Takahata is appointed as the third Vice President. The Department of Cyber Society and Culture (School of Cultural and Social Studies) is established; matriculation begins.				
July	Construction begins on the Hayama Campus Library (1,427m <sup>2</sup> ).				
oruary 2002	Library construction completed.				
April	The Department of Informatics established in the School of Mathematical and Physical Science; matriculation begins.				
April 2003	The Department of Japanese Literature (School of Cultural and Social Studies), and the Department of Space and Astronautical Science (School of Mathematical and Physical Science) are established; matriculation begins.				
October	"The National University Corporation Law (Law No. 112 of 2003)" is promulgated and enforced.				
April 2004	Reformation into the National University Corporation, Graduate University for Advanced Studies Dr. Sc. Keiichi Kodaira is reappointed as the President of the University. The School of Mathematical and Physical Science is reformed into three schools: the School of Physical Science (including the departments of Structural Molecular Science, Functional Molecular Science, Astronomical Science, Fusion Science and Space and Astronautical Science), the School of High Energy Accelerator Science (including the departments of Accelerator Science, Materials Structure Science, Particle and Nuclear Physics), and the School of Multidisciplinary Science (including the departments of Statistical Science, Polar Science and Informatics). The School of Life Science has reformed a three-year doctoral program into a five-year doctoral program.				
April 2005	The name of the Department of Molecular Biomechanics at the School of Life Science has changed to the Department of Basic Biology.				
April 2006	The School of Physical Sciences, the School of High Energy Accelerator Science, and the School of Multidisciplinary Sciences have implemented the five-year doctoral program system. The Schools have begun to accept students.				
April 2007	The School of Advanced Sciences is reorganized to establish the Department of Evolutionary Studies of Biosystems (providing a five-year doctoral program), in stead of its two existing departments, the Department of Biosystems Science and the Department of Photo Science (providing three-year doctoral programs), matriculation begins.				
April 2008	Dr. Naoyuki Takahata has been appointed as the fourth President.				
April 2009	The Department of Cyber Society and Culture has stopped accepting new students.				
March 2010	Construction of the Center for the Promotion of Integrated Sciences (1,033m <sup>2</sup> ) begins at the Hayama Campus.				
April	The name of Hayama Center for Advanced Studies has changed to the Center for the Promotion of Integrated Sciences.				
nuary 2011	Construction of the Center for the Promotion of Integrated Sciences is completed.				
April 2013	Information Services and Technology Center is established.				
April 2014	Dr.Yasunobu Okada has been appointed as the fifth President.				
July 2015	The Center for Academic Information Services is established by unification of the University Library and the Information Services and Technology Center.				
March 2017	Department of Cyber Society and Culture abolished. (Dept. operation period from 2001.4.1 to 2017.3.31)				
April	Dr. Mariko Hasegawa has been appointed as the sixth President.				
March 2018 April	The Center for Educational Development is established. The Center for the Promotion of Integrated Sciences is abolished. SOKENDAI Tokyo Branch is established (Minato-ku, Tokyo)				
March 2022 April	Tokyo branch abolished. Research Center for Integrative Evolutionary Science is established.				
April 2023	Dr. Takashi Nagata has been appointed as the seventh President. Graduate Institute for Advanced Studies is established, matriculation begins. The Center for Educational Development is reorganized to establish The Center for Educational Planning Development. School of Cultural and Social Studies, School of Physical Science, School of High Energy Accelerator Science, School of Multidisciplinary Science, School of Life Sciences, School of Advanced Sciences abolished.				



### Anthropological Studies

National Museum of Ethnology National Institutes for the Humanities



Three-year doctoral program Doctor of philosophy



A distinctive feature of the program is the production of a doctoral thesis with an ethnographic description based on fieldwork, irrespective of the region or theme under research. We want students to be generalists with knowledge of a wide range of cultural phenomena, as well as specialists in a particular region or theme. To this end, students can make use not only of the program's lectures and seminars but also of the museum's resources, research projects, academic conferences, exhibitions, and lectures for general visitors, performances, and film shows.

The Anthropological Studies Program is offered by National Museum of Ethnology. Students will conduct research on the diverse cultures of humankind in various parts of the world from prehistoric times to the present. From the perspective of cultural anthropology, ethnology, and related fields, student will be instructed in ethnographic research that describes and analyzes specific cultures and in cross-cultural research that compares cultures from specific perspectives. The goal is for students to complete their dissertation by utilizing data obtained through field research as well as specimens, audio-visual materials, and literature of the National Museum of Ethnology.

This program consists only of a three-year doctoral program for students who have obtained a master's degree or those who are recognized as having equivalent to master's degree or higher academic ability. Students will study at the National Museum of Ethnology, located in Suita City, Osaka.



Picking tea leaf at a tea garden that was originally a slush-burn field (Shizuoka City, 2021 / photo by Kaori Kawakami)



Students having a lively discussion



Shearing and Branding 2-year-old camels. (Alxa League, Inner Mongolia, China, 2021 / photo by Wu Wuyunga)

#### Career Options for Graduates in this Program

- Researchers at universities and research institutes, museums and other institutions of higher education in cultural anthropology.
- Past graduates of the program have been employed by Osaka University, Ritsumeikan University, Tokyo University of Foreign Studies, etc.



National Museum of Ethnology

10-1 Senri Expo Park , Suita City, Osaka 565-8511, Japan https://www.minpaku.ac.jp/en

### Japanese Studies

#### International Research Center for Japanese Studies

National Institutes for the Humanities



Three-year doctoral program Doctor of philosophy





Those who enroll in this course can gain research abilities with broad perspectives, under the guidance of multiple instructors, not merely their supervisor. Each instructor is an expert in their field, can manage various research fields in a cross-sectional manner. With such a favorable international and interdisciplinary environment, we consider it the mission of this course to cultivate researchers who will play an active role in both domestic and international academic societies in the future. We welcome applicants who aspire to undertake innovative research with a global perspective.

This program provides education and research on Japanese culture from a global perspective, to promote international and interdisciplinary Japanese studies across the humanities, social sciences, and natural sciences. The goal is to foster researchers in Japan and abroad who will lead the next generation of global Japanese studies. The program will cultivate an interdisciplinary spirit that deals with cross-cutting issues, multifaceted perspectives, a wide range of interdisciplinarity, and a high level of international reach and originality.

The program offers only a three-year doctoral program for students who have obtained a master's degree. Doctoral candidates who belong to this program will study and conduct research at the International Research Center for Japanese Studies, located in Kyoto, Kyoto Prefecture.



Library of the International Research Center for Japanese Studies



Graduate student project presentation meeting organized by the students themselves



Kanei gyoukou zukan (The Illustrated Record of Emperor Go-mizuno-o's Formal Visit to Nijo Castle)



International symposium offering graduate students an opportunity to present their research



Japanese ceremonies: wedding and funeral



Miyako nenju gyoji gajo [Picture Album of Annual Festivals in Miyako]

#### Career Options for Graduates in this Program

- Researchers in humanities, social sciences, and natural sciences at national level research institutes or private companies; faculty members in humanities, social sciences, and natural sciences departments at universities; researchers conducting cutting-edge project-based research at private companies
- Specialized historians at universities and research institutes; or faculty engaged in education and research on Japanese and regional cultures at universities and other institutions of higher education; researchers and curators at museums, etc.
- Researchers in the private and public sectors in the fields of humanities, social sciences, natural sciences, etc.



### International Research Center for Japanese Studies

3-2 Oeyama-cho, Goryo, Nishikyo-ku, Kyoto 610-1192 Japan https://www.nichibun.ac.jp/en/

### Japanese History

National Museum of Japanese History National Institutes for the Humanities

Three-year doctoral program

Doctor of philosophy





Program Outline

The Japanese History Program, based at the National Museum of Japanese History (Rekihaku), allows students to pursue historical research using a variety of approaches, including history, archaeology, folklore, art history, informatics, and analytical science. One of the main features of this program is that students can conduct practical research using the vast historical and cultural materials in Rekihaku's collection and the latest analytical equipment. We also aim to collaborate with 19 other programs of SOKENDAI, covering various academic fields in the humanities and sciences. We welcome all students who are engaged in the study of history from a wide range of interests.

This program aims to nurture researchers who can conduct advanced and cutting-edge research in the Japanese history field in the broad sense of the term, with a specialized, international, and interdisciplinary perspective, and who can contribute to society through their advanced research skills and expertise.

This program consists of a three-year doctoral program for students who have obtained a master's degree.

Students in this program will study and conduct research activities at the National Museum of Japanese History, located in Sakura City, Chiba Prefecture. With full use of the museum's vast collection and state-of-the-art analytical techniques, the student's doctoral dissertation will have fruition in the highest level of material-based research.



This is a lecture scene in the exhibition room of the National Museum of Japanese History (in front of the "Naumann Elephant"). The museum houses approximately 300,000 materials on history, archaeology, and folklore.

#### Career Options for Graduates in this Program

Career Opportunities:

Researchers for specialized fields such as history, folklore, and archaeology at universities and research institutes; researchers and curators for museums; etc.



Lecture in front of a model of an authorized trading ship with a vermilion seal in Exhibition Room 2.



#### National Museum of Japanese History

117 Jonai-cho, Sakura City, Chiba Prefecture 285-8502 https://www.rekihaku.ac.jp/english/index.html

### Japanese Literature

#### **National Institute** of Japanese Literature

**National Institutes for the Humanities** 



Three-year doctoral program Doctor of philosophy





In this course, under the guidance of multiple faculty members, students can acquire the skills and research capabilities to work with primary sources related to Japanese literature from various perspectives. The National Institute of Japanese Literature's extensive collection of Japanese classical and modern texts, documents, and image resources, along with its domestic and international research network, serves as a superb research resource. Additionally, there are opportunities to engage in cutting-edge research projects. We look forward to welcoming those eager to pursue original research in Japanese literature and who value their intellectual curiosity.

This program, with the National Institute of Japanese Literature as its parent institute, fosters students to become leaders in the new development of Japanese literature. Specifically, this program aims to enable students to acquire specialized research techniques and comprehensive analytical skills and knowledge by focusing on primary sources as research subjects, mainly literature, among cultural resources. The program fosters logical thinking and writing skills, creative and interdisciplinary perspectives, as well as the ability to

tackle issues in peripheral fields, to nurture researchers with a broad perspective who can tackle issues in surrounding fields and play an active role both domestically and internationally.

students in this program will study and conduct research activities at the National Institute of Japanese Literature, National Institutes for the Humanities, located in Tachikawa City, Tokyo.

This program consists of only the doctoral program, and



Closed stacks at the National Institute of Japanese Literature



Graduate School Library



Lectures using materials in the collection



#### National Institute of Japanese Literature

10-3 Midori-cho, Tachikawa city, TOKYO 190-0014, Japan https://www.nijl.ac.jp/en/

#### Career Options for Graduates in this Program

Career Opportunities:

Specialized researchers of Japanese literature at universities and research institutions, faculty members engagedin education and research of Japanese literature at universities and other institutions of higher education, curators at art galleries and museums, etc.

### Japanese Language Sciences

### National Institute for Japanese Language and Linguistics

National Institutes for the Humanities

Program Outline Three-year doctoral program Doctor of philosophy



The Japanese Language Sciences Program has a notable feature among graduate programs in Japan that focus on the study of language: It allows students to conduct research on language in an environment where a wide range of research activities are being conducted, not only in the field of humanities, but also in the field of mathematical and information sciences. This is the reason why the program is named "Japanese Language Sciences," rather than Japanese linguistics or Linguistics. The Program in Japanese Language Sciences welcomes young researchers who are willing to take on the challenge of conducting original linguistic research.

The Japanese Language Sciences program aims to foster the future generation of researchers who can analyze the Japanese language objectively and quantitatively based on data, utilizing the linguistic resources and research network accumulated by the National Institute for Japanese Language and Linguistics. The program will cultivate the ability and skills of students to conduct linguistic analysis using new methods, such as theoretical investigations, experiments, fieldwork, social surveys, and computer simulations, in addition to conventional analytical methods.

This program is a three-year doctoral program for students who have obtained a master's degree. Students in this program will study and conduct research activities at the National Institute for Japanese Language and Linguistics, located in Tachikawa City, Tokyo.



The World Atlas of Transitivity Pairs (WATP)

Possible career paths for graduates:

- i) University faculty members and researchers who conduct research using Japanese language information processing and data science in the fields of Japanese language studies and Japanese language education;
- ii ) Data scientists and natural language processing engineers who are active in the information processing industry using their linguistic expertise;
- iii) Curators, archivists, and local government officials with linguistic expertise;
- iv) Researchers and educators who teach the Japanese language in Japan and abroad;
- v) Developers of digital teaching materials related to Japanese language for native speakers and Japanese as a foreign language.





"Kenshukuryōko-shū" published in 1695 about kana orthography of "じぢずづ."





#### National Institute for Japanese Language and Linguistics

10-2 Midori-cho, Tachikawa City, Tokyo, 190-8561 https://www.ninjal.ac.jp/english/

### Informatics

#### **National Institute of Informatics**

Research Organization of Information and Systems



Program Outline Five-year doctoral program / Three-year doctoral program Doctor of philosophy



Informatics is a comprehensive academic field including computer sciences, information engineering, artificial intelligence, and mathematics—which are necessary for data scientists. In addition, it includes humane and social informatics, which focus on humans and their society.

This program aims to nurture outstanding researchers and highly skilled professionals by conducting research and education in the various phases of basic, applied, and practical informatics, and train and develop leaders who are able to hold international leadership.

The informatics program aims to nurture researchers who will make new, cutting-edge contributions to the field of informatics, an interdisciplinary field that crosses a wide range of disciplines from information science and information engineering to humanities and social informatics, for the further development of the information society. This program has a five-year doctoral program for bachelor's degree holders and a three-year doctoral program for master's degree holders. Students enrolled in this program conduct academic and research activities at the National Institute of Informatics, located in Chiyoda-ku, Tokyo.



Socializing in the 16th floor lounge









National Institute of Informatics

2-1-2 Hitotsubashi, Chiyoda-ku, Tokyo, 101-8430 Japan https://www.nii.ac.jp/en/

#### Career Options for Graduates in this Program

- Researchers and engineers engaged in the field of informatics (basic theory and application of information technology (IT), basic and applied AI and data sciences, etc.) at domestic and overseas universities, public research institutions, and private companies
- Faculty in the department of informatics at universities and other institutions
- Researchers and engineers who can conduct project-based research on informatics at companies and universities

### Statistical Science

#### The Institute of Statistical Mathematics

Research Organization of Information and Systems

Program Outline

Five-year doctoral program / Three-year doctoral program Doctor of philosophy



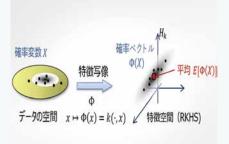
The Institute of Statistical Mathematics provides an environment that allows smooth access to cutting-edge research. This environment enables graduate students to come into contact with cutting-edge research easily. Various research projects are in progress, and graduate students can participate in any that interest them. The graduate students are guided by primary supervisors and sub-supervisors, and various courses are offered to help the graduate students acquire basic skills. The Statistical Science program is considered the best environment in Japan for studying and researching statistical science.

5

To realize the extraction of information and knowledge from real-world data, this program conducts education and research related to data collection design, modeling, inference and prediction, as well as their fundamentals in mathematics and practical application. The program aims to develop researchers who are equipped with creative research skills that contribute to solving various intricately intertwined important issues. This program consists of two programs: a five-year doctoral program for bachelor's degree students and a three-year doctoral program for master's degree students. Students enrolled in this program will conduct academic and research activities at the Institute of Statistical Mathematics, located in Tachikawa city, Tokyo.



Library of the Institute of Statistical Mathematics





Supercomputer System for Data Assimilation (HPE Superdome Flex)

Kernel method

#### **Career Options for Graduates in this Program**

 Local and foreign universities, national and corporate research institutes, private companies (e.g., IT, manufacturing, financial, and pharmaceutical companies), etc.



### The Institute of Statistical Mathematics

10-3 Midori-cho, Tachikawa, Tokyo, 190-8562 Japan https://www.ism.ac.jp/index\_e.html

### Particle and Nuclear Physics

#### Institute of Particle and Nuclear Studies

High Energy Accelerator Research Organization



Five-year doctoral program / Three-year doctoral program Doctor of philosophy



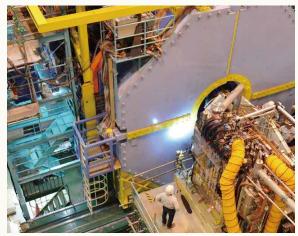


KEK has been playing a central role in exploring the frontiers of particle and nuclear physics as one of the leading research institutes in the world such as CERN in Europe. SOKENDAI students belong to either theoretical or experimental group in KEK and are involved in a cutting-edge research project, which enables them to acquire all the skills and capabilities required to become a researcher by the time they get Ph.D. There are indeed many people who are already working worldwide after finishing the program. We welcome all the students who wish to become a researcher in this extraordinary environment for research and education.

We aim to foster the next generation of researchers who will explore the origin and structure of the universe. They will study how the universe works at the very smallest and largest levels—exploring elementary particles and atomic nuclei, alongside options to study cosmology and other related fields. We will give researchers a broad perspective and high level of expertise, which will allow them to actively contribute to the future of research across many interrelated fields of science.

We offer two programs: a five-year doctoral program for

students with a bachelor's degree and a three-year doctoral program for students with a master's degree. Students will belong to either the Theoretical Research Group or the Experimental Research Group of the Institute of Particle and Nuclear Studies (IPNS) at the High Energy Accelerator Research Organization (KEK). They will conduct their studies and research activities at KEK's Tsukuba Campus, Tokai Campus, the Wako Nuclear Science Center, or at experimental facilities located worldwide.



The Belle II detector that started operation with the aim of discovering new physics  $@\mathsf{KEK}$ 



### Institute of Particle and Nuclear Studies

1-1 Oho, Tsukuba, Ibaraki, 305-0801 Japan https://www2.kek.jp/ipns/en/



T2K near detector ©KEK



Daily discussions in the theory group by SOKENDAI students and their supervisor ©KEK

#### Career Options for Graduates in this Program

Career Opportunities: Researchers and university faculty members in particle physics, nuclear physics, cosmology and related fields; researchers and engineers who carry out cutting-edge projectbased research at companies and national laboratories; and researchers and engineers in the private and public sectors in the fields of nuclear power, radiation, information processing, electricity, electronics, and communications.

### Accelerator Science

### Accelerator Laboratory / Applied Research Laboratory

High Energy Accelerator Research Organization

Program Outline Five-year doctoral program / Three-year doctoral program Doctor of philosophy





In the Accelerator Science Program, the world's most advanced large accelerators of the High Energy Accelerator Research Organization (KEK) are in operation close at hand, and students can carry out research in an environment where advanced technological development and research in various scientific and technological fields of the accelerators are being conducted. Students learn basic knowledge about accelerators and gain practical experience using a compact accelerator for educational purposes, before carrying out doctoral research in their specialized field. We welcome those who are willing to find and solve problems on their own while collaborating with others.

High-energy accelerators are large experimental machines for the cutting-edge research on the various components in each level of nature, from elementary particles and atomic nuclei to molecules consisting of matter including life. In recent years, accelerator science has made remarkable progress in applications that directly benefit society, such as industry and medicine. It is a complex science that consists of essence of the most advanced science and technology for the fundamental research and development of accelerators. Students in the accelerator science program acquire practical knowledge of accelerator science and conduct research from both theoretical and experimental perspectives. They can choose to study and conduct research also in the fields of radiation science, computer science, superconducting cryogenics, and mechanical engineering, which support accelerator science. Students in this program aim to become researchers who will be responsible for the future of accelerator science and contribute to promoting natural science through accelerator science.

This program consists of two programs: a five-year doctoral program for bachelor's degree holders and a three-year doctoral program for master's degree holders. Students will study and conduct research at the Accelerator Laboratory and Applied Research Laboratory of the High Energy Accelerator Research Organization (KEK), which has two large campuses in Tsukuba City and Tokai Village, Ibaraki Prefecture.



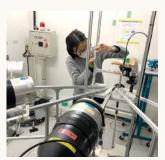
Superconducting magnets in the J-PARC Neutrino Experimental Facility



Assembling work of fast beam kicker



Beam study at Photon Factory (PF) electron storage ring



Installation of detectors for photoneutron measurement

#### Career Options for Graduates in this Program

 Researchers at domestic and foreign accelerator related research institutes and private companies



Accelerator Laboratory / Applied Research Laboratory

1-1 Oho, Tsukuba, Ibaraki, 305-0801 Japan https://www2.kek.jp/accl/eng/ https://www2.kek.jp/arl/en/home-en/

### Astronomical Science

### National Astronomical Observatory of Japan

**National Institutes of Natural Sciences** 



Five-year doctoral program / Three-year doctoral program Doctor of philosophy





In Astronomical Science Program, of the Graduate University for Advanced Studies, students are engaged in astronomical research through theory, observations, or development of new observational instruments. National Astronomical Observatory of Japan, with many researchers in diverse fields, provides an auspicious setting where many graduate students can study and pursue their own research. Are you good at math and physics? Do you enjoy programming? Does actually observing the universe thrill you like nothing else? Do you get excited putting together instruments and apparatuses? If your answer is yes for any of these, there is a place here for your activities. Please come and study at the Astronomical Science Program.

Astronomical Science Program offers advanced education and research through a wide range of observational and theoretical studies with state-of-theart optical-infrared and radio telescopes. This program covers the development and application of advanced new technologies fundamental to astronomical observation; the design, fabrication, and experimentation of new observational instruments; the development of data acquisition and analysis methods; the development of technologies ranging from basic to advanced observational astronomy; as well as observational research using these technologies and theoretical research using supercomputers.

The program offers a five-year doctoral program for bachelor's degree holders and a three-year doctoral program for master's degree holders.

Graduate students enrolled in the program will conduct their studies and research activities at the National Astronomical Observatory of Japan (NAOJ), based in Mitaka City, Tokyo.





ATERUI II, a supercomputer for astronomy

ALMA ©X-CAM/ALMA (ESO/NAOJ/NRAO)



National Astronomical Observatory

2-21-1 Osawa, Mitaka, Tokyo, 181-8588 Japan https://www.nao.ac.jp/en/

#### Career Options for Graduates in this Program

 Research and education staff in astronomical sciences and related fields at universities and research institutes in Japan and abroad; engineers at private companies; and science communicators



#### National Institute for Fusion Science

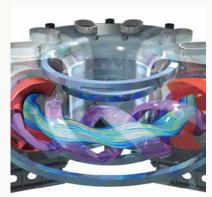
National Institutes of Natural Sciences

Program Outline Five-year doctoral program / Three-year doctoral program Doctor of philosophy

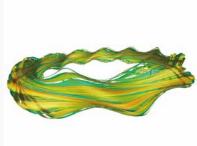


The Fusion Science Program seeks students who are actively engaged in unexplored research subjects such as understanding of plasma physics, development of measurement devices, control technology, development and research of materials with excellent heat and radiation resistance required for reactors, and superconductivity technology, in order to realize a fusion reactor at an early date. Our goal is to develop general engineers who can be applied to any research field by honing their own skills with fusion science research as their axis. We look forward to your challenge.

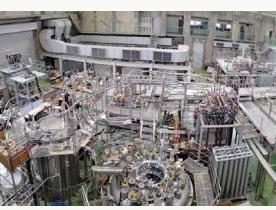
The Fusion Science program fosters integrated science and engineering scholars who have a systematic understanding of the wide range of science and engineering fields required for the early realization of fusion reactors and who are capable of working in a variety of research fields. By conducting advanced research (experimental, theoretical, etc.), rationally understanding research results, and taking on unexplored research challenges, our students acquire new technologies and skills with high value and contribute to the realization of fusion energy and other human developments. This program consists of a five-year doctoral program for bachelor's degree holder and a three-year doctoral program for master's degree holder. Students will conduct their studies and research activities at the National Institute for Fusion Science (NIFS), located in Toki City, Gifu Prefecture.



The simulation of microscopic instability in core plasmas of large helical devices using a gyrokinetic particle code



Simulation of turbulence from LHD first-principles



Superconducting conductor test facilities in Superconducting Magnet System Laboratory

#### Career Options for Graduates in this Program

Career Opportunities for Graduates Engineers and researchers in fusion and related fields at national laboratories; faculty members in fusion studies (plasma experiments, theory, materials engineering, superconducting engineering, etc.) at universities; engineers and researchers who carry out cutting-edge project-based research at companies; etc.



National Institute for Fusion Science

322-6, Oroshi-cho, Toki, Gifu, 509-5292 Japan https://www.nifs.ac.jp/en/

### Space and Astronautical Science

Institute of Space and Astronautical Science Japan Aerospace Exploration Agency

Program Outline Five-year doctoral program / Three-year doctoral program Doctor of philosophy





The Space and Astronautical Science Program leverages the collaboration with Institute of Space and Astronautical Science, JAXA, to provide advanced education and research guidance by researchers who are actively involved in conducting research and projects at the forefront of space science. We encourage students to delve into learning and researching new fields of science and engineering in the vast expanse of space utilizing various means such as space telescopes and experiments, spaceraft for scientific exploration of the solar system, nano-satellites, balloon experiments, rockets. We look forward to the aspirations of motivated students who wish to contribute to the future of space science research and development, as well as the future utilization of space.

The Space and Astronautical Science Program provides advanced education and research guidance through theoretical research, analysis of observational data, and practical research and development in astrophysics, solar system science, and space engineering. The program fosters researchers with a broad perspective and internationally advanced abilities, as well as individuals who contribute to society with advanced expertise. In particular, through close contact with cutting-edge, large-scale space projects, the program cultivates not only a rich academic background in space science but also the ability to plan space projects. This program consists of two programs: a five-year doctoral program for bachelor's degree holder and a three-year doctoral program for master's degree holder. Students will conduct their studies and research activities at the Institute of Space and Astronautical Science (ISAS) located in Sagamihara, Kanagawa Prefecture.



Data analysis of satellite observation



Smart Lander for Investigatin Moon(SLIM) realized a high-precision landing on the Moon. ©JAXA/TOMY/Sony Group Corporation/Doshisha University



An laboratory experiment



X-ray Imaging and Spectroscopy Mission (XRISM), which will unveil the mysteries of the universe ©JAXA



#### Institute of Space and Astronautical Science

3-1-1 Yoshinodai, Chuo-ku, Sagamihara, Kanagawa, 252-5210 japan https://www.isas.jaxa.jp/en/





Epsilon rocket on a launch pad ©JAXA

Participation in the sounding rocket experiment as the Field works course

#### **Career Options for Graduates in this Program**

Researchres in the field of space science (astrophysics, solar system science, space engineering) at universities, national laboratories, etc.; engineers and researchers in space development and related fields at private companies and national laboratories; engineers who carry out cutting-edge project-based research at private and public companies, etc.

### Molecular Science

Institute for Molecular Science National Institutes of Natural Sciences

Program Outline Five-year doctoral program / Three-year doctoral program Doctor of philosophy





Molecular science covers a wide range of natural sciences such as chemistry, physics, and life sciences. In this course, students will learn under the careful guidance of faculty members who are researchers in the above fields and their interdisciplinary areas, and will promote research using facilities and equipment not available at ordinary universities. Research keywords include quantum technology, spectroscopy, imaging, superconductivity, chirality, spin, topology, material conversion, energy conversion, catalysis, enzymes, proteins, etc. We welcome your enrollment.

The Molecular Science Program establishes a systematic understanding of molecules, the basic building blocks of matter, and trains the next generation of researchers to unravel the wide variety of phenomena exhibited by matter. We aim to produce graduates who can conduct advanced research (e.g., experiments, measurements, theory), rationally understand research results, challenge unexplored issues from free inspiration, pursue new intellectual values and universal truths, and contribute to human development based on molecular science. This program consists of two programs: a five-year doctoral program for bachelor's degree holders and a three-year doctoral program for master's degree holders. Students will conduct their studies and research activities at the National Institute for Molecular Science, located in Okazaki, Aichi Prefecture.



UVSOR Synchrotron Facility



photoelectron spectroscopy



Purification of proteins by high-performance liquid chromatography

#### Career Options for Graduates in this Program

 Career Opportunities for Graduates: Researchers and faculty members in the field of molecular science at universities and national and public research institutes; Researchers and engineers who pursue advanced research challenges through public research projects and in private research institutes.



#### Institute for Molecular Science

38 Nishigonaka, Myodaiji, Okazaki, Aichi, 444-8585 Japan https://www.ims.ac.jp/en/

### **Materials Structure Science**

#### Institute of Materials Structure Science

High Energy Accelerator Research Organization



Five-year doctoral program / Three-year doctoral program Doctor of philosophy





In The Materials Structure Science Program, cutting-edge scientific research is conducted using quantum beams such as synchrotron radiation, neutrons, muons, and slow positrons obtained from large accelerators. In this context, the program fosters researchers who will lead sciences and technologies on the structure and function of materials in a wide range of research fields. Graduates of the program are expected to become not only core researchers at domestic or overseas quantum beam facilities, but also power users who promote research using quantum beams.

The Materials Structure Science program conducts cutting-edge scientific research using quantum beams, such as synchrotron radiation, neutrons, muons, and slow positrons obtained from advanced accelerators. In this program, we train researchers who will pioneer fundamental and cutting-edge research to elucidate the structure and function of materials in an extremely wide range of research fields, including physics and chemistry, materials science, life science, medicine, environmental science, and earth science. By promoting research on further advancement of quantum beam generation and utilization technologies, this program aims to produce PhDs who will contribute to the development of a new frontier in materials structure science.

We offer two programs: a five-year doctoral program accepting bachelor's degree holders and a three-year doctoral program accepting master's degree holders. Students will conduct their studies and research activities at the High Energy Accelerator Research Organization (KEK) Institute of Materials Structure Science, located in Tsukuba and Tokai, Ibaraki Prefecture.



Synchrotron Radiation Facility, Photon Factory (PF) ©IMSS



Biological macromolecular X-ray crsytallography experiment using synchrotron rad



Muon D1 Instrument of MLF ©IMSS



Four kinds of quantum beams



Experimental hall of PF ©IMSS

#### **Career Options for Graduates** in this Program

Career Opportunities:

Engineers and researchers at domestic and overseas quantum beam facilities; faculty members and researchers in material sciences and life sciences departments at universities and public research institutions; engineers and researchers who carry out and lead cutting-edge project-based research at public and private companies.



#### Institute of Materials Structure Science

1-1 Oho, Tsukuba, Ibaraki, 305-0801 Japan https://www2.kek.jp/imss/eng/

### Global Environmental Studies

### Research Institute for Humanity and Nature

National Institutes for the Humanities

Program Outline Three-year doctoral program Doctor of philosophy





The Program in Global Environmental Studies is newly established in SOKENDAI in FY2023. RIHN offers a range of unique opportunities in global environmental research, including making use of RIHN's interdisciplinary research projects and the related expertise of individual faculty members. We look forward to meeting applicants who strive to promote unique research perspectives, and who will benefit from the wide range of lectures and seminars in Global Environmental Studies offered at RIHN.

The Global Environmental Studies Program is based on international research projects promoted by the Research Institute for Humanity and Nature (RIHN). This interdisciplinary research with elements of transdisciplinarity utilizes a problem-solving approach in collaboration with society. The program is designed for students to gain knowledge and methodologies accumulated in the academic fields that constitute Global Environmental Studies and to become independent researchers who will engage in solving global environmental issues with their expertise. The program provides small-group education and research training in an environment conductive for cutting-edge research. This program offers a three-year doctoral program for students who have obtained a master's degree. Students in this program will study and conduct research at the Research Institute for Humanity and Nature (RIHN) in Kyoto.



Project laboratory which reflects a research environment that allows for debates and mutually inspiring interactions without being bound by traditional laboratory setting

Career Opportunities for Graduates

organizations, and NGOs.

Career Options for Graduates in this Program

 Faculties engaged in education and research on environmental studies at universities and other institutions of higher education.

Engineers, researchers, and support staff in environment

related fields at companies, government offices, national and public research institutes, local governments, international

Researchers and curators at museums and other institutions.



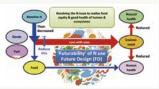
Graduate interns and RIHN researchers discussing field work results (FairFrontiers Project, implementation period: FY2020–2025)



TD training course co-hosted by RIHN and the Future Earth Asia Regional Center (TERRA School 2019)



One of the best analytical research environments for stable isotope analysis in Japan



Towards sustainable use of nitrogen (Sustai-N-able Project, FY2022-2027)



"Mizu-no-wa Classroom" in Yaese Town, Okinawa. Springwater survey with local children (LINKAGE project, implementation period: FY2022–2026)



#### Research Institute for Humanity and Nature

457-4 Motoyama, Kita-Ku, Kyoto, 603-8047 https://www.chikyu.ac.jp/rihn/ education/public\_E/

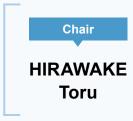
### **Polar Science**

### National Institute of Polar Research

Research Organization of Information and Systems



Program Outline Five-year doctoral program / Three-year doctoral program Doctor of philosophy



The Polar Science Program conducts education and research focused on natural phenomena occurring in the regions of the North and South Poles, embracing a view of the Earth as a global-scale environment. Through these activities, we strive to cultivate outstanding researchers equipped with advanced research and the ability to work as "field scientists". The program welcomes students with the desire to take up the emerging challenges of polar science in a new era.

The Polar Science Program aims to nurture outstanding researchers equipped with advanced research capabilities in space and planetary science, solarterrestrial physics, meteorology, glaciology, atmospheric science, oceanography, geoscience, solid earth science, bioscience, and related fields, to explore universal principles and laws that govern various natural and physical phenomena in the polar regions and high mountains. The program also expects students to elucidate the role of polar regions in the global environmental changes and the earth and planetary systems, as well as the geological and natural history of polar regions.

We offer two programs (curriculums): five-year and three-year doctoral program that accepts bachelor's degree holders and master's degree holders, respectively. Students in the program will conduct their studies and research activities at the National Institute of Polar Research, located in Tachikawa, Tokyo.



Aurora Borealis in Antarctica (photo by Hidehiko Suzuki, M.S. Polar Science)



Photo taken from the Antarctic Observation Ship, Shirase (photo by Keigo Takahashi, Department of Polar Science)



Penguins in Antarctica (photo by Moto Kawamata, M.S.Polar Science)



#### National Institute of Polar Research

10-3 Midori-cho, Tachikawa, Tokyo, 190-8518 Japan https://www.nipr.ac.jp/english/

#### Career Options for Graduates in this Program

 Researchers and engineers in the field ofearth and planetary sciences and other related science and engineering fields atuniversities, national laboratories, private companies, etc.

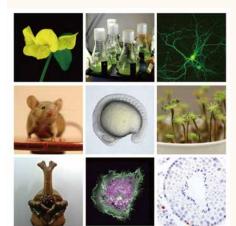




In the Basic Biology program, we challenge innovative biology by harnessing the unique traits of diverse organisms and employing cutting-edge technologies. Our goal is to foster students' distinct problem-finding and problem-solving abilities and to develop the qualities of researchers who can lead future biological research. Together, let's collaborate and embark on the exciting journey of exploring new frontiers in biology.

At the National Institutes for Basic Biology, the parent institute for the Basic Biology Program, we conduct research aimed at elucidating the common and fundamental mechanisms that underlie all living organisms, that contribute to biological diversity, and that enable organisms to adapt to their environment. The Basic Biology Program seeks to cultivate researchers capable of identifying fundamental and pressing question in the biological science through research activities and coursework.

This program offers both a five-year and a three-year doctoral program for students with a bachelor's degree and a master's degree, respectively. Students primarily conduct their academic studies and research activities at the National Institute for Basic Biology, located in Okazaki, Aichi Prefecture.



A variety of model organisms and novel model organisms under study



At the Laboratory



National Institute for Basic Biology, Myodaiji area





National Institute for Basic Biology, Yamate area



Graduation ceremony at the National Institute for Basic Biology

#### **Career Options for Graduates in this Program**

Faculty members and researchers in life science and related fields at universities and research institutes; skilled professionals in charge of research and development at companies that engage life sciences, chemical sciences, pharmaceuticals, medical sciences, and other related fields



#### National Institute for Basic Biology

38 Nishigonaka, Myodaiji, Okazaki, 444-8585 Japan https://www.nibb.ac.jp/en/

### Physiological **Sciences**

#### **National Institute** for Physiological Sciences

**National Institutes of Natural Sciences** 

#### Program Outline

Five-year doctoral program / Three-year doctoral program Doctor of philosophy





The Physiological Sciences Program promotes research that leads to a better understanding of how the human body works and its mechanisms, with a particular focus on the brain, nerves, and the functions of organ systems interconnected with the brain. Research on the mechanisms of our body is directly related to maintaining health and understanding pathological conditions. Students who are interested in the human body in life science are invited to join us in the Physiological Sciences Program, which offers an excellent research environment.

Physiological science is a field of study that elucidates the functions and mechanisms of the body. It not only contributes to the development of life science but also provides scientific guidelines for people to lead healthy and fulfilling lives and information that is fundamental to understanding the mechanisms of disease. The Physiological Science Program aims to contribute to the accumulation of new knowledge in the life sciences by working to elucidate issues in the field of physiological science related to the role of the brain and nervous system and biological homeostasis, and to produce researchers and specialists with the foresight to pioneer this field. This program is offered as a five-year doctoral program accepting bachelor's degree holders or a three-year doctoral program accepting master's degree holders. Students in this program will conduct their studies and research activities at the National Institute for Physiological Sciences (NIPS) in Okazaki, Aichi Prefecture.



Careful research guidance in small groups



Presentation and discussion of research findings at an international meeting



Magnetic resonance imaging of human brain



A scene from the degree conferment ceremony



Three-dimensional imaging of living neurons in the brain



Research environment with access to advanced equipment

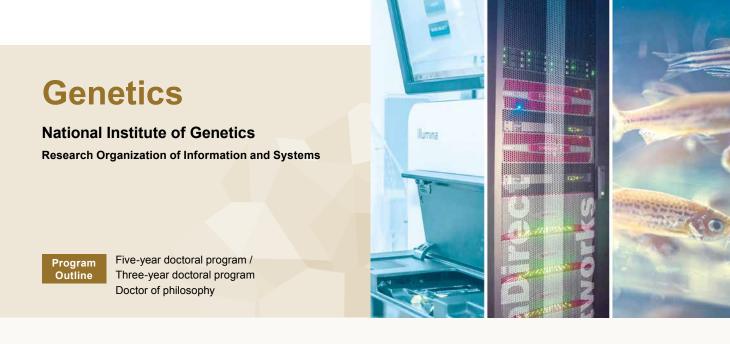


#### National Institute for **Physiological Sciences**

38 Nishigonaka, Myodaiji, Okazaki, 444-8585 Japan https://www.nips.ac.jp/eng/

#### Career Options for Graduates in this Program

 Academic research institutions, life science-related companies, etc.





Graduate students in the Genetics Program participate as active research members in the enriched environment of the National Institute of Genetics (NIG). NIG has more faculty than students, allowing students to select Progress Committee members from various labs and seek research advice from them at any time. The Progress Committee system helps students broaden the scope of their research through guidance from faculty with diverse areas of expertise. Alumni trained as researchers at NIG go on to serve society in diverse fields in both academic and non-academic roles.

The Genetics Program fosters researchers who have deep insight and knowledge of the field of life sciences and can foresee future research.

This program consists of two programs: a five-year

doctoral program and a three-year doctoral program. Students in this program will conduct their research activities primarily at the National Institute of Genetics in Mishima, Shizuoka Prefecture.



Access to research facilities with advanced technoloav



At poster presentations students can discuss their At poster presentations students can discuss their research progress with numerous faculty and researchers the world in a wide variety of related fields from the institute



Develop ability to think and debate logically through practical discussion





Students may choose how deeply to immerse themselves in research

#### **Career Options for Graduates in this Program**

Researchers at universities / research institutes / private companies both in Japan and abroad, engineers in information technology / intellectual property management, and publishers



National Institute of Genetics

1111 Yata, Mishima, Shizuoka, 411-8540 Japan https://www.nig.ac.jp/nig/

### Integrative **Evolutionary Science**

**Research Center** for Integrative Evolutionary Science



Five-year doctoral program / Three-year doctoral program Doctor of philosophy





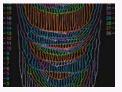
What is the driving force of our research? Because we want to know more. Because we are interested in. Because we have curiosity. Because we want to solve an unsolved problem. Because we want to make a great discovery. The driving force must be different among researchers but we all share the same feeling-we like research. The Integrated Evolutionary Science Program is for students who have such feelings. We look forward to studying with students who like evolution and science & society.

Integrative Evolutionary Science is a new academic field that aims not only for the development of biology but also for elucidating the nature of human beings and solving social issues, through a comprehensive understanding of the change of living organisms, transition of human activities, and progression of global issues from an evolutionary perspective. The Integrative Evolutionary Science Program, in collaboration with the Research Center for Integrative Evolutionary Science, aims to pursue and share truths with society, produce future leaders in this field, and to contribute broadly to the development of science and society. Students in this program will conduct their studies and research activities at the Research Center for Integrative Evolutionary Science, located in Hayama, Kanagawa Prefecture.

This program consists of two programs: a five-year doctoral program for students with a bachelor's degree and a three-year doctoral program for students with a master's degree.



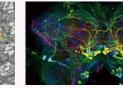
Two species of corals, from the genus Acropora grown from larvae at SOKENDAI



Evolutionary simulations of adaptive radiation and extinction: why are there "living fossils"?



sequenced (photo:courtesy of Dr. Naotaka Ishiguro)



Octopaminergic neurons in the cricket brain



Wild Bornean Orangutans in Danum Valley (Malaysia)

#### **Career Options for Graduates** in this Program

#### **Research Center for Integrative Evolutionary Science**

Shonan Village, Hayama, Kanagawa, 240-0193 Japan https://rcies.soken.ac.jp/

An electron micrograph of the

visual center of the swallowtail

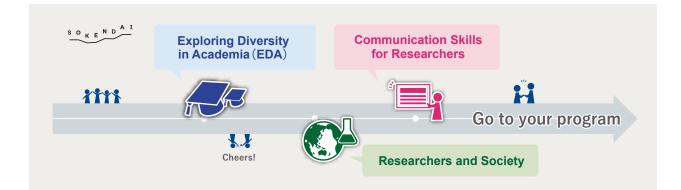
butterfly

Researchers in the field of life sciences (evolutionary) biology, molecular biology, genetics, ecology, medicine, etc.) or in the field of science and society (history of science, philosophy of science, science and technology studies, bioethics, etc.) at universities, research institutes, private companies, NGOs, and government agencies; science communicators

### **Educational Programs**

#### **SOKENDAI Freshman Course**

The Freshman Course is an intensive course for newlyenrolled students of SOKENDAI. It is a unique program that intends to provide our new students with fundamental knowledge and skills for a researcher; and, is also an opportunity to learn about the breadth of academia through interactions with peer students and researchers coming from different fields. The Freshman Course is partly held for a few days long at our Hayama campus. It consists of three sessions: "Exploring Diversity in Academia(EDA)", "Researchers and Society" and "Communication Skills for Researchers".



First Semester 2023 (Japanese Course)		Date: April 4-7, 2023	
Second Semester 2023 (English Course)	Þ	Date:October 10-13, 2023	
First Semester 2024 (Japanese Course)	Þ	Date: April 9-12, 2024	
Second Semester 2024 (English Course)	►	Date:October 8-11, 2024	



#### **SOKENDAI Special Researcher Program**

The SOKENDAI Special Researcher Program is designed to foster future talents in academic research by appointing SOKENDAI students as Special Researchers and providing financial support and support programs for their career paths in the following two categories.

#### Field-Specific Type

To support students conducting research in the field of information / AI and the field of "large-scale advanced science" using cutting-edge research facilities in the inter-university research institutes.

#### **Pioneering Research Type**

To support students who independently conduct original and challenging research that is not bound by the framework of existing research fields, departments, schools or other organizations.

### The number of SOKENDAI Special Researcher

Year	Field- Specific Type	Pioneering Research Type	
2021	9	10	
2022	24	16	
2023	36	20	

#### **SOKENDAI Student Dispatch Program**

This program encourages SOKENDAI students to seek a short-term research opportunity abroad and/or a long-term collaborative research project in and outside Japan that may lead to their career in the future. The program follows the educational goals of SOKENDAI, "advanced specialties and expertise", "broad perspective", and "international competitiveness", and intends to financially support such research opportunities of SOKENDAI students.

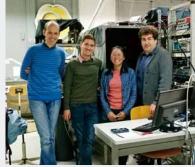
#### 2023

 Category 1 (Short-term Abroad Program)
 ▶ Number of students supported:28

 Category 2 (Long-term Abroad Program)
 ▶ Number of students supported:11

 Category 3 (Long-term Domestic Program)
 ▶ Number of students supported: 3

# Number of students supported:28 Number of students supported:11 Number of students supported: 3



#### International collaborative degree program

SOKENDAI is promoting the "International Collaborative Degree Program". This is an agreement with an overseas institution of higher education to provide joint thesis supervision to one student by faculty members from both institutions, thereby broadening the range of thesis and further increasing the international mobility of young human resources.

Overseas higher education institutions that have concluded agreements with SOKENDAI for international collaborative degree programs

Nation	Institution	
Thailand	Vidyasirimedhi Institute of Science and Technology	
Georgia	Georgian Technical University	
France	École Centrale de Nantes	
France	Université Paris-Saclay	
France	Sorbonne Université	
Italy	Università di Bologna	
China	Southwest Jiaotong University	





Research society in France



Paris student residence

#### Life Science Retreat

Life Science Retreat invites biology faculties and students for academic interactions, through which it aims to foster talents with a broader grasp of biological science and the capacity to contribute to the development of the field.

English is used throughout the conference to improve the participants' international caliber. Students plan and coordinate research presentations (oral and poster) and opinion exchanges. In the project, student organizers are expected to polish planning skills through the preparation and exercise presentation skills.

#### November 21-22, 2023 at Yamanashi Prefecture



In 2023, it was held over 2days at Yamanashi Prefecture. A total of about 70 students/faculty members participated and discussed their research enthusiastically.

### Society and Community Outreach Activities

#### **Community Programs**

We communicate the outcomes of the University's educational and research activities and give back to the community, with the aim to promote and spread the arts and sciences, as well as promote excellent research findings.

#### **SOKENDAI Outreach Activities**

- Challenges in the Exploration of the Unknown: Cutting-edge Studies Young Researchers Discuss 2023 SAKAMOTO Minoru (Professor, Department of Japanese History) November 5-7,2023
- "Tan-Q" Science education and outreach program using compact cosmic-ray detector MIHARA Satoshi (Professor, Department of Particle and Nuclear Physics) February 17,2024
- Collaboration with KOSEN via fabrication of compact accelerators by students OTANI Masashi (Assistant Professor, Accelerator Science) February 21,2024







Collaboration with KOSEN via fabrication of compact accelerators by students

### The Graduate University for Advanced Studies, SOKENDAI, in collaboration with Japan Society for the Promotion of Science

 Commemorative Symposium for the 39th International Prize for Biology Richard Durbin (University of Cambridge. Professor)
 December 16.17 2023



#### "Yokoko Academia" with Kanagawa Prefectural Yokosuka High School

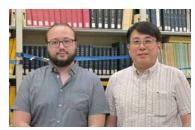
We supported the academic program, "Yokoko Academia" organized by Kanagawa Prefectural Yokosuka High School to contribute to local educational institutes and foster future generations. The school is designated as a Super Science High School by the Ministry of Education, Culture, Sports, Science and Technology.

#### **JSPS Summer Program**

This program, which is carried out in partnership with Japan Society for the Promotion of Science (JSPS), offers opportunities to practice research at inter-university research institutes (IURIs) or universities to young researchers who have undertaken or just completed doctoral programs for two months during the summer.

	3 51	
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Orientation program in 2023



At the host institute in 2023

#### **Press Release** https://www.soken.ac.jp/en/news/?key=press

2024.01.10

Structures

2024.01.18

M87\* One Year Later:

Research in 2023 published on the following papers are press released and subsequently appeared in newspapers and various media:

#### 2023.04.06

Condensed but liquid-like domain organization of active chromatin regions in living human cells

#### 2023.04.27

Astronomers image for the first time a black hole's accretion flow together with a powerful jet

#### 2023.05.10

Evolutionary stability of cooperation in indirect reciprocity under noisy and private assessment

#### 2023.08.11

Genome sequencing reveals the genetic architecture of heterostyly and domestication history of common buckwheat

#### 2023.09.07

Grouping rule in tadpole : is quantity more or size assortment more important?

#### 2023.09.28

Two-decade monitoring of M87 unveils a precessing jet connecting to a spinning black hole

#### 2023.10.30

Clocks of adaptive evolution run more slowly in ecological and geographical peripheries: The adaptation front equation explains how species flows in geographical timescale generate living fossils

#### 2023.12.18

Human diet of premodern mainland Japan: a meta-analysis of carbon and nitrogen stable isotope ratios

#### 2023.12.26

Speed consensus and behavioural coordination of Adélie penguins traveling on sea ice in groups





Breakthrough in Designing Complicated All-a Protein

Proof of a persistent black hole shadow

Locating Transition States by Variational Reaction Path Optimization with an Energy-Derivative-Free Objective Function



a supporter

#### **SOKENDAI** Fund

**SOKENDAI** Newsletter

SOKENDAI Fund has been established to support SOKENDAI Students. For the details, please visit our website.

You can find it online on our university website. (Japanese text only)



About Sokendai Fund https://www.soken.ac.jp/donation/





SOKENDAI Newsletter https://www.soken.ac.jp/outline/pr/publicity/newsletter/

SOKENDAI Newsletter covers ongoing activity information at the university such as various events in our campuses, research findings released to media, and awards.

Education & Research Activities

## Research Center for Integrative Evolutionary Science

#### The only research center in Japan with "evolution" at its core

The Research Center for Integrative Evolutionary Science aims to develop a new research field, "integrative evolutionary science," to investigate both organismal evolution at multiple scales and scientific activities themselves and to apply the interdisciplinary expertise to help find solutions to various challenges in society. The Center fosters highly collaborative research among domestic and international communities.







Director, Research Center for Integrative Evolutionary Science INNAN Hideki

In April 2022, the Research Center for Integrative Evolutionary Science was established on the Hayama Campus. As the only research center in Japan with "evolution" at its core, the center aims to create a new academ ic field of "Integrated Evolutionary Science" in collaboration with domestic and overseas research institutions.

The word "evolution" evokes the evolution of living organisms, but technology, culture and society also evolve. We consider evolution in such a broad sense and try to address how the system of organisms was created and changed in the 3.8 billion years-long history of life, how human activities (society, psychology, language, culture, etc.) have changed, how global problems in the Anthropocene progress, and what possible solutions can be comprehensively examined from the perspective of evolution.

The Research Center for Integrative Evolutionary Science thus aims to reconsider the concept of "evolution" and create a new research field "Integrated Evolutionary Science", which not only advances the knowledge system of biology but also incorporates the findings of evolutionary science into human understanding and solutions to social issues.

## The Center for Education Planning and Development (CEPD)

"Advanced specialties and expertise," "Broad perspective," and "International competitiveness" are the educational goals of SOKENDAI, and they are the essential competencies for excellent researchers. In order to achieve these goals, we believe that the university-wide education that enhances the quality as an excellent researcher is necessary, in addition to specialized education carried out in each department. The missions of the CEPD are: to implement and support the university-wide education programs and projects; and, to assist in evaluation and analysis of the educational activities. We contribute to develop researchers rooted in our philosophy.

#### Education Development Section

Promotion of university-wide education

- Planning and implementation of university-wide educational courses and seminars Implementation of the Freshman Course / Planning and implementation of CEPD seminars
- Support for the implementation of university-wide educational projects
   Support for the implementation of inter-university education / Support for the implementation of international joint/double degree programs

#### Institutional Research and Planning Section

- Analysis of educational effects through the preparation and analysis of educational data and the implementation of student questionnaires
- Research performance analysis using literature databases and research ability analysis tools
- Planning and implementation of SD training

- Improving the quality of education and research guidance
- Planning and implementation of FD training
- Counseling from teachers related to education
- Support tailored to student needs
- Support for student learning, research activities, job hunting, and networking

#### **Human Resources Development Section**

 Cultivate "data scientist-type (DS-type) researcher human resources" who can promote data-driven research

# The Center for Academic Information Services

This Center was established to aim at effective management of academic information in SOKENDAI. Based on secure and resilient information infrastructure, it provides various academic information services to researchers and researchers-in-future who are both users and creators of academic information, and supports education, research and administration in SOKENDAI.

### **Division of Information Services and Technology**

Cooperating with the affiliated research institutes and museums, this division manages core information facilities and operates information systems located at the Hayama Campus.

#### [For inquiries or information] Academic Information

Service Office TEL : 81-46-858-1587, 1588 FAX : 81-46-858-1607 E-mail : istc.jimu@ml.soken.ac.jp

### Hayama Library

Hayama Library gathers, organizes and releases various academic materials to provide high-level research and education and to pioneer advanced academic fields.

Hayama Library is open around-the-clock to the faculty and students at the Hayama Campus for reading and borrowing.

It collects and makes available standard references and books that can be used in all program, as well as specialized books and journals related to studies in cutting-edge and/ or interdisciplinary research fields. Image and video documentation materials are available through in-house facilities.

In addition, Hayama Library offers SOKENDAI Institutional Repository, which allows free online access to doctoral dissertations and book/ journal publications at the University, as well as academic papers published by the faculty and students at the Hayama Campus.

The Library also provides database services, including OPAC (Online Public Access Catalog) for books and journals held by the Library.

These books and databases are also available to the general public. The venue effectively functions both as a place to collect research resources and a studying space. SOKENDAI staff and neighborhood residents can borrow books belonging to Kanagawa Prefectural Library (KL-NET Service). Furthermore, since 2015, it has been serving as a service counter of the National Diet Library to enable users to browse digital materials belonging to the National Diet Library.





#### Number of academic materials available at the Library As of April 1, 2024

Book	:( <i>Japanese</i> ) approx.22,600 titles
	(Non-Japanese) approx.24,600 titles
Journal	:(Japanese) approx.140 titles
	(Non-Japanese) approx.330 titles

E-book :approx.153,900 titles E-journal :approx.5,050 titles Institutional Repository:approx.5,550 titles

### University Library

The University Library consists of the Hayama Library and IURI libraries. The University Library gathers, organizes, and accumulates electronic materials. Under close cooperation with the Hayama Library and IURI libraries, the University Library aims to promote the education / research activities by performing required activities for the fasilitation of the use of academic information. It offers a large number of e-journals and e-books so that faculty and students of IURIs dotted around the country can use these materials in common.

In addition, the university introduces and offers the world's largest bibliographic / citation database "Scopus".

#### **Electronic Journals**

https://www.lib.soken.ac.jp

BioOne / JSTOR / Science Direct / Springer-LINK / Wiley-Blackwell / GeoScienceWorld / Scopus (Document/reference database search service)

※ In addition to the above, electronic journals for internal use at the Hayama Campus are available. [For inquiries or information] University Library TEL : 81-46-858-1528, 1540 FAX : 81-46-858-1607 E-mail : lib@ml.soken.ac.jp

# DATA BOOK

# **Nobel Prize Laureates from SOKENDAI**

Nobel Prize in Physics



Professor Emeritus, School of High Energy Accelerator Science

#### The 2008 -

for the discovery of the origin of the broken symmetry which predicts the existence of at least three families of quarks in nature

### **KOBAYASHI** Makoto

Professor Emeritus, SOKENDAI / Honorary Professor Emeritus, High Energy Accelerator Research Organization(KEK)

1999.4-2004.3Professor, School of Mathematical and Physical Science2004.4-2006.3Professor, School of High Energy Accelerator Science2003.4-2004.4Chair, Department of Particle and Nuclear Physics2008Order of Culture

### Professor Emeritus, School of Life Science

The 2016 -

Nobel Prize in Physiology or Medicine



# for his discoveries of mechanisms for autophagy

Recipients since 2015: job title and affiliation at time of award

## **OHSUMI** Yoshinori

Professor Emeritus, SOKENDAI / National Institute for Basic Biology

 1996.10-2009.3
 Professor, School of Life Science

 2008. 4-2009.3
 Dean, School of Life Science

 2006
 Japan Academy Prize

 2016
 Order of Culture

# [ Recipients of Award ]

#### Orders and Medals of Honor (after 2015)

		recipients since 2010, job the and anniation at time of award
Name	Affiliation	Prize
WATANABE Yasuaki (Professor)	Japanese Literature	Medal with Purple Ribbon (2023)
YAMADA Sakue (Professor Emeritus)	Dept. of Particle and Nuclear Physics	The Order of the Sacred Treasure, Gold Rays with Neck Ribbon (2022)
IYE Masanori (Professor Emeritus)	Dept. of Astronomical Science	The Order of the Sacred Treasure, Gold and Silver Star (2022)
ARIKAWA Kentaro (Professor)	Research Center for Integrative Evolutionary Science	Medal with Purple Ribbon (2022)
HASEBE Mitsuyasu (Professor)	Dept. of Basic Biology	Medal with Purple Ribbon (2022)
OHMORI Kenji (Professor)	Dept. of Functional Molecular Science	Medal with Purple Ribbon (2021)
KOMATSU Kazuhiko (Processors Emeritus)	Dept. of Japanese Studies	The Order of the Sacred Treasure, Gold and Silver Star (2020)
NAGAMINE Kanetada (Processors Emeritus)	Dept. of Particle and Nuclear Physics	The Order of the Sacred Treasure, Gold Rays with Neck Ribbon (2020)
KODAIRA Keiichi (Professor Emeritus, Former President)	Dept. of Astronomical Science	The Order of the Sacred Treasure, Gold and Silver Star (2017)
KAWAI Maki (Professor)	Dept. of Functional Molecular Science	Medal with Purple Ribbon (2017)
OHSUMI Yoshinori (Professor Emeritus)	Dept. of Basic Biology	Order of Culture (2016)
OHTA Tomoko (Professor Emeritus)	Dept. of Genetics	Order of Culture (2016)
SUEMATSU Yasuharu (Professor Emeritus)	Dept. of Informatics	Order of Culture (2015)

#### Person of Cultural Merit

Name	Affiliation	Research Theme
AGATA Kiyokazau (Director General)	National Institute for Basic Biology	Developmental biology (2023)
ISHIGE Naomichi (Emeritus Professors)	National Museum of Ethnology	Cultural anthropology (2021)
KAWAI Maki (Director General)	Institute for Molecular Science	Surface science (2021)
SUZUKI Atsuto (Emeritus Professors)	Dept. of Particle and Nuclear Physics	Particle physics (2021)
HOTTA Yoshiki (Emeritus Professors)	Dept. of Genetics	Genetics(2020)
INOKI Takenori (Professor Emeritus)	Dept. of Japanese Studies	Economy (2019)
KOMATSU Kazuhiko (Professor)	Dept. of Japanese Studies	Ethnology (2016)
OHSUMI Yoshinori (Professor Emeritus)	Dept. of Basic Biology	Cell Biology (2015)

#### Japan Academy Prize

Name	Affiliation	Year	Subject
MIYAZAKI Satoshi (Professor)	Astronomical Science	2024	Pioneering and Promoting Cosmological Research Using Gravitational Lensing Effects
KAWAI Maki (Professor)	Dept. of Functional Molecular Science	2020	Single Molecule Spectroscopy Elucidating Chemical Reactions at Solid Surfaces
KITSUREGAWA Masaru (Professor)	Dept. of Informatics	2020	Pioneering Research in the Theory and Application of Large-Scale High-performance Database Systems
TSUNETA Saku (Professor)	Dept. of Astronomical Science	2019	Studies of Solar Magnetohydrodynamic Phenomena through Satellite Observations
NAGAMINE Kanetada (Professor Emeritus)	Dept. of Materials Structure Science	2019	Exploration of Muon Radiography and its Application to Nondestructive Studies of Large-scale Matters
TAKASAKI Fumihiko (Professor Emeritus)	Dept. of Particle and Nuclear Physics	2017	Studies of CP Violation in the B-Meson System

#### Japan Academy Medal Prize

Name	Affiliation	Year	Subject
KOIBUCHI Michihiro (Associate Professor)	Dept. of Informatics	2020	Pioneering Research on Introducing Randomness for Interconnection Networks on Parallel Computer Systems
ISHIZAKI Akihito (Professor)	Dept. of Structural Molecular Science		Theoretical Development of Quantum Dissipative Dynamics and Its Application to Primary Processes of Photosynthesis

#### ■ JSPS Prize

Name	Affiliation	Year	Research Theme
	Dept. of Evolutionary Studies of Biosystems		Theoretical Study on Evolutionary Origin of Human Sociality

#### ■ JSPS Ikushi Prize

Name	Affiliation	Year	Research Theme
SAKAMOTO Takahiro	Dept. of Evolutionary Studies of Biosystems	2022	Theoretical population genetics of natural selection
KARIYAZONO Shiho	Dept. of Evolutionary Studies of Biosystems	2017	The genetic basis and the biological role of fluorescent proteins in Acropora species
KITAMURA Daichi	Dept. of Informatics	2016	Multichannel blind music source separation based on nonnegative matrix factor source model

### SOKENDAI Award

SOKENDAI Award is founded in 2018 to commend the students who have accomplished their outstanding research and have been conferred their degrees with the excellent doctoral thesis.

### The recipients of the 11th SOKENDAI Award (September 28, 2023)

Name	Affiliation	Doctoral thesis
LI ENHAO		Development of high-performance mid-infrared laser sources for isotope detection applications
OZAKI Ryoto	Dept. of Statistical Science	Information criteria for detecting change - points in the Cox proportional hazards model
HARSHA SOMASHEKAR		GLUCAN SYNTHASE-LIKE5 promotes anther callose deposition to maintain timely initiation and progression of meiosis in rice ( <i>Oryza sativa L.</i> )

#### The recipients of the 12th SOKENDAI Award (March 22, 2024)

Name	Affiliation	Doctoral thesis
YU XUEJIAN	Dept. of Japanese Studies	Adaptations of the Chinese Dream stories in Japanese Classical Literature
NAKAYAMA Tomonari	Dept. of Fusion Science	Modeling and co-simulation of global transport dynamics in turbulent plasmas
KAWASHIMA Takahiro	Dept.of Statistical Science	Probabilistic Models Characterized by a Kernel Matrix and Their Learning Methods
NISHIMURA Ruka	Dept. of Genetics	Ancient Viral Discovery and Characterization Using Ancient DNA Sequencing Data

# [ Academic Staff ]

(As of May 1, 2024)

Category	Member of the Board	Professor Associate	Professor	Lecturer	Assistant Professor	Others	Secretaria	Total
President	1							1
Executive Director	2							2
Auditor	2							2
Vice President	(2)							(2)
Graduate Institute for Advanced Studies								
Anthropological Studies		26	19					45
Japanese Studies		15	2					17
Japanese History		18	13					31
Japanese Literature		10	8					18
Japanese Language Sciences		11	7					18
Informatics		33	15		11			59
Statistical Science		22	21		6			49
Particle and Nuclear		29	39	20	17			105
Accelerator Science		48	47	21	51			167
Astronomical Science		29	37	5	43			114
Fusion Science		17	23		20			60
Space and Astronautical Science		22	38		14			74
Molecular Science		16	10		21			47
Materials Structure Science		20	20	4	20			64
Global Environmental Studies		13	4					17
Polar Science		14	14		17			45
Basic Biology		14	15		33			62
Physiological Sciences		15	11		17			43
Genetics		20	12		19			51
Integrative Evolutionary Science		(6)	(7)	(3)	(2)			(18)
Research Center for Integrative Evolutionary Science		6	7	3	2			18
The Center for Education Planning and Development	(1)		2			1		3 (1)
The Center for Academic Information Services	(1)						(1)	(2)
Secretariat etc.							40	40
Total	5 (4)	398 (6)	364 (7)	53 (3)	291 (2)	1	40 (1)	1152 (23)

\* The number of staff in parentheses indicates those who concurrently work in other section [not included in the total].

Faculty Directory A faculty directory is available on our website.



https://www.soken.ac.jp/en/faculty-directory/index.html



# [ Students ]

#### (As of May 1, 2024)

		1st yea	r	ć	2nd Yea	ar		3rd Yea ∣st Year			4th Yea Ind Year			5th Yea 3rd Year			Total	
		Femals	Int'l Students		Femals	Int'l Students		Femals	Int'l Students		Femals	Int'l Students		Femals	Int'l Students		Femals	Int'l Students
Graduate Institute for Advanced Studies	74	23	13	45	17	2	54	19	14	34	12	6	0	0	0	207	71	35
Anthropological Studies							2	1		4	2					6	3	0
Japanese Studies							1	1		3	3	2				4	4	2
Japanese History							1			1	1					2	1	0
Japanese Literature							1		1	2	1					3	1	1
Japanese Language Sciences							4	3	1	4	2	3				8	5	4
Informatics	7	1	2	8			4	2	2	5		1				24	3	5
Statistical Science				1			6			6	1					13	1	0
Particle and Nuclear Physics	7	1	1	8	4		3		3							18	5	4
Accelerator Science	2		2	1	1					1						4	1	2
Astronomical Science	6	2		4	1		3	1	2	1						14	4	2
Fusion Science	2	1		2			1		1							5	1	1
Space and Astronautical Science	6			3	1		6		1	1						16	1	1
Molecular Science	6		1	3			3	1	1	2	1					14	2	2
Materials Structure Science	1															1	0	0
Global Environmental Studies							6	4								6	4	0
Polar Science	4	4		2	2	1	3	1		1						10	7	1
Basic Biology	13	5	2	3	1		3	2	1	2	1					21	9	3
Physiological Sciences	7	4	2	2	1		1	1	1							10	6	3
Genetics	7	3	2	4	3	1	4	1								15	7	3
Integrative Evolutionary Science	6	2	1	4	3		2	1		1						13	6	1
School of Cultural and Social Studies*1	0	0	0	0	0	0	0	0	0	0	0	0	41	23	11	41	23	11
Regional Studies													10	6	5	10	6	5
Comparative Studies													8	5	1	8	5	1
Japanese Studies													9	5	5	9	5	5
Japanese History													10	5		10	5	0
Japanese Literature													4	2		4	2	0
School of Physical Sciences*1	0	0	0	0	0	0	17	3	1	15	1	5	35	5	9	67	9	15
Structural Molecular Science							2	1					5	2	1	7	3	1
Functional Molecular Science							3						6	1	4	9	1	4
Astronomical Science							5	1		7	1	2	10		1	22	2	3
Fusion Science							3		1	6		3	6		3	15	0	7
Space and Astronautical Science							4	1		2			8	2		14	3	0
School of High Energy Accelerator Science*1	0	0	0	3	0	3	10	3	5	14	2	3	16	3	4	43	8	15
Accelerator Science				1		1	3	2	2	2	1	1	4	1		10	4	4
Materials Structure Science	[						2	1	1				2		1	4	1	2
Particle and Nuclear Physics	[			2		2	5		2	12	1	2	10	2	3	29	3	9
School of Multidisciplinary Sciences*1	0	0	0	6	1	4	12	0	2	24	1	9	50	11	17	92	13	32
Statistical Science							1			8			12	2	1	21	2	1
Polar Science							3			1			5			9	0	0
Informatics				6	1	4	8		2	15	1	9	33	9	16	62	11	31
School of Life Science*1	0	0	0	4	3	3	15	6	8	11	5	6	28	10	10	58	24	27
Genetics				2	1	2	10	4	6	7	4	6	12	3	6	31	12	20
Basic Biology				1	1		1			1			12	5	3	15	6	3
Physiological Sciences				1	1	1	4	2	2	3	1		4	2	1	12	6	4
School of Advanced Sciences*1	0	0	0	0	0	0	2	2	0	3	2	0	6	3	0	11	7	0
Evolutionary Studies of Biosystems							2	2		3	2		6	3		11	7	0

\*1 These schools stopped accepting applications on March 31, 2023.
\*2 The number of female students and international students is included in the total.
\*\* The year of a 3-year doctoral program

# [ Applicants and Enrollments ]

(As of April 1, 2024)
-----------------------

		ota										Back	ground			
Program		ber of ts to be	Appl	icant	Pas	sser	Adm Stuc			Ger	nder		Intern	ational	lobh	older
FIOgraffi	acce	pted)							Ma	ale	Fen	nale	Stuc	dents		IUIUEI
	5-year	3-year	5-year	3-year	5-year	3-year	5-year	3-year	5-year	3-year	5-year	3-year	5-year	3-year	5-year	3-year
Graduate Institute for Advanced Studies	58	62	144	56	81	43	66	41	46	26	20	15	5	10	3	13
Anthropological Studies		(4)		5		3		2		1		1		0		0
Japanese Studies		(3)		4		1		1		0		1		0		0
Japanese History		(3)		4		1		1		1		0		0		0
Japanese Literature		(2)		2		1		1		1		0		1		0
Japanese Language Sciences		(3)		5		4		4		1		3		2		3
Informatics	(8)	(12)	10	1	6	1	5	1	4	1	1	0	0	1	1	0
Statistical Science	(2)	(6)	2	5	0	3	0	3	0	3	0	0	0	0	0	2
Particle and Nuclear Physics	(6)	(1)	23	0	11	0	6	0	6	0	0	0	0	0	0	0
Accelerator Science	(2)	(1)	2	0	1	0	0	0	0	0	0	0	0	0	0	0
Astronomical Science	(5)	(1)	27	3	9	3	6	3	4	2	2	1	0	2	0	0
Fusion Science	(3)	(2)	3	0	2	0	2	0	1	0	1	0	0	0	0	0
Space and Astronautical Science	(4)	(3)	21	6	7	6	6	6	6	6	0	0	0	1	1	2
Molecular Science	(7)	(5)	7	3	7	3	6	3	6	2	0	1	1	1	0	0
Materials Structure Science	(2)	(1)	2	0	1	0	1	0	1	0	0	0	0	0	0	0
Global Environmental Studies		(2)		6		6		6		2		4		1		4
Polar Science	(2)	(1)	6	3	4	3	4	3	0	2	4	1	0	0	0	1
Basic Biology	(5)	(3)	13	4	12	3	12	3	8	1	4	2	1	1	0	0
Physiological Sciences	(3)	(6)	7	0	6	0	6	0	3	0	3	0	1	0	0	0
Genetics	(6)	(2)	11	3	8	3	6	3	3	2	3	1	1	0	1	1
Integrative Evolutionary Science	(3)	(1)	10	2	7	2	6	1	4	1	2	0	1	0	0	0

#### Admission of the 2024

#### Japanese National Universities

Hokkaido University	2
Hokkaido University of Education	1
Muroran Institute of Technology	1
Hirosaki University	1
Tohoku University	1
Yamagata University	1
Ibaraki University	1
University of Tsukuba	3
Saitama University	2
Chiba University	1
The University of Tokyo	4
Tokyo University of	
Agriculture and Technology	1
The University of	_
Electro-Communications	2
Hitotsubashi University	1
Yokohama National University	2
University of Yamanashi	1
Shizuoka University	3
Nagoya University	4
Nagoya Institute of Technology	1
Mie University	1
Kyoto University	9
Osaka University	1
Kobe University	2
Nara Women's University	1
Nara Institute of	
Science and Technology	2
Okayama University	
Kochi University	2
Kumamoto University	2

Chitose Institute of Science and	
Technology	1
Gifu Pharmaceutical University	1
Nagoya City University	2
The University of Shiga Prefecture	1
Sanyo-Onoda City University	1

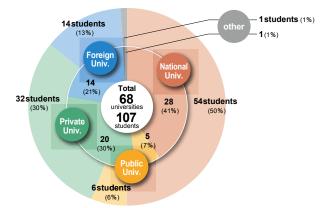
### Japanese Private Universities

Osaka Medical and Pharmaceutical University	1
Okayama University of Science	1
Kanagawa Institute of Technology	1
Kwansei Gakuin University	1
Kyoto Sangyo University	1
Kindai University	1
Keio University	2
International Christian University	1
Komazawa University	1
Chuo University	1
Tokyo City University	1
Tokyo University of Agriculture	1
Tokyo University of Science	3
Doshisha University	1
Nagahama Institute of	
Bio-Science and Technology	1
Nara University	1
Hosei University	2
Meiji University	1
Ritsumeikan University	2
Waseda University	8



#### Ot

National Institute of Technology, Gunma College 1



# [ Degrees Awarded ]

	For the perior 1991~201			2019			2020			2021			2022			2023			Total	
Doctor of Philosophy	2097 [151]	(259)	72	[8]	(3)	87	[9]	(7)	82	[4]	(3)	97	[12]	(5)	80	[8]	(10)	2515	[192]	(287)

\*1 [ ]: The number of those who were granted the Ph.D. within a specified time after leaving the university.

\*2 ( ): The number of those who were granted the Ph.D. by way of Dissertation (not included in the total).

# [ Career Tracking / Data of the 2023 ]

#### Universities / Research institutes,etc

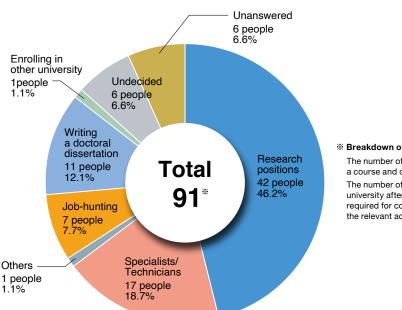
Research Center for Integrative Evolutionary Science, SOKENDAI The University of Tokyo Tohoku University Nagoya University Toyo University Ritsumeikan University Okinawa Institute of Science and Technology National University of Singapore The University of Melbourne National Astronomical Observatory of Japan High Energy Accelerator Research Organization (KEK) National Institute of Polar Research

National Institute of Informatics National Institute for Basic Biology National Institute for Physiological Sciences Japan Aerospace Exploration Agency Japan Atomic Energy Agency National Institutes for Quantum Science and Technology Max Planck Institute for Plant Breeding Research Shanghai Institute of Optics and Fine Mechanics (SIOM) The Chinese Academy of Social Sciences (CASS) Bank of Japan Toshima City Office

#### Private companies / Public service corporation

Institute for Global Environmental Strategies Mitsubishi Electric Corp. ONO PHARMACEUTICAL CO., LTD. Otsuka Chemical Co., Ltd. CHUGAI PHARMACEUTICAL CO., LTD. Toray Industries, Inc. Metal Technology Co. Ltd. SMBC Nikko Securities Inc. Daiwa Securities Co. Ltd. KONICA MINOLTA, INC. CellSource Co., Ltd. Japan Digital Design, Inc. KPMG Consulting Co., Ltd.

#### ADK Holdings Inc. RevComm Inc. SCREEN Semiconductor Solutions Co., Ltd. ZOZO NEXT, Inc. Asilla, Inc. LTS, Inc. Core Concept Technologies Inc. DWANGO Co., Ltd. Recruit Co., Ltd. FLECT Co.,Ltd. dotData. Inc. **Dispensing Pharmacy**



#### ※ Breakdown of the total

The number of those who completed a course and obtained a degree : 72 The number of those who left the university after obtaining the credits required for completion of a course in the relevant academic year : 19

# [International Exchange]

### Number of International Students

#### (As of May 1, 2024)

	1	lst Yea		2	nd Yea			rd Yea st Year			th Yea d Yea			th Yea d Year			Total		Resea	arch St	uder
		Females	Int'l Students		Females	Int'l Students		Females	Int'l Students		Females	, Int'l Students		Females	Int'l Students		Females	Int'l Students		Females	Int'l Studer
Graduate Institute for Advanced Studies	13	4	4	2	1	1	14	4	5	6	3	0	0	0	0	35	12	10	6	4	Olduc
Anthropological Studies																0	0	0	2	2	
Japanese Studies										2	2					2	2	0			
Japanese History																0	0	0	1	1	
Japanese Literature							1		1							1	0	1			
Japanese Language Sciences							1			3	1					4	1	0	1		
Informatics	2						2	1	1	1						5	1	1			
Statistical Science																0	0	0			
Particle and Nuclear Physics	1	1					3		1							4	1	1			
Accelerator Science	2		2													2	0	2			
Astronomical Science							2	1	1							2	1	1	2	1	
Fusion Science							1		1							1	0	1			
Space and Astronautical Science							1									1	0	0			
Molecular Science	1						1									2	0	0			
Materials Structure Science																0	0	0			
Global Environmental Studies																0	0	0			
Polar Science				1	1											1	1	0			
Basic Biology	2	1	1	·····	·····		1	1								3	2	1			
Physiological Sciences	2	1	· · · ·				1									3	2	0			
Genetics	2	1	1	1		1	·····									3	ے 1	2			
	2	1														3 1	0	2			
Integrative Evolutionary Science				0	0	0	0		0	0	0	0		0	0				0		
ichool of Cultural and Social Studies *	0	0	0	0	0	0	0	0	0	0	0	0	11	8	0	11 5	8 3	0	0	0	
Regional Studies													5	3				0			
Comparative Studies													1	1		1	1	0			
Japanese Studies													5	4		5	4	0			
Japanese History																0	0	0			
Japanese Literature					-											0	0	0			
School of Physical Sciences *	0	0	0	0	0	0	1	0	0	5	0	3	9	2	1	15	2	4	0	0	
Structural Molecular Science													1	1		1	1	0			
Functional Molecular Science													4	1		4	1	0			
Astronomical Science										2		2	1			3	0	2			
Fusion Science							1			3		1	3		1	7	0	2			
Space and Astronautical Science																0	0	0			
chool of High Energy Accelerator Science %	0	0	0	3	0	2	5	2	4	3	1	1	4	1	3	15	4	10	0	0	
Accelerator Science			<u> </u>	1		1	2	1	2	1	1					4	2	3			
Materials Structure Science							1	1	1				1		1	2	1	2			
Particle and Nuclear Physics				2		1	2		1	2		1	3	1	2	9	1	5			
School of Multidisciplinary Sciences *	0	0	0	4	1	3	2	0	1	9	1	2	17	6	5	32	8	11	0	0	
Statistical Science													1	1		1	1	0			
Polar Science										]						0	0	0			
Informatics				4	1	3	2		1	9	1	2	16	5	5	31	7	11			
School of Life Science ※	0	0	0	3	2	1	8	3	6	6	4	4	10	3	5	27	12	16	0	0	
Genetics				2	1	1	6	3	5	6	4	4	6	1	2	20	9	12			
Basic Biology													3	1	2	3	1	2			
Physiological Sciences				1	1		2		1				1	1	1	4	2	2			
School of Advanced Sciences *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Evolutionary Studies of Biosystems																0	0	0			
Total	13	4	4	12	4	7	30	9	16	29	9	10	51	20	14	135	46	51	6	4	

\* The number of female students and international students is included in the total. \*\* The year of a 3-year doctoral program

### **Number of International Students**

(As of May 1, 2024)

	1	lst Yea	ar	2	nd Ye	ar		Brd Yea st Yea			Ith Yea nd Yea			5th Yea rd Yea			Total		Resea	arch St	udent
Country or Region		Females*	Int'l* Students		Females*	Int'l* Students		Females*	Int'l* Students		Females*	Int'l* Students		Females*	Int'l* Students		Females*	Int'l* Students		Females*	Int'l* Students
Asia	9	3	2	8	3	4	18	7	8	23	7	6	46	19	12	104	39	32	5	4	0
India	1						3	3	2	3	1	2	4	2	1	11	6	5			
Indonesia							2	1	1	1		1				3	1	2			
Sri Lanka				1		1				1						2	0	1			
Thailand				1		1	2		2	1		1	1		1	5	0	5			
Nepal							1		1							1	0	1			
Bangladesh										1	1	1				1	1	1			
Philippines													1		1	1	0	1			
Viet Nam	3	1	2	1		1	2	2	2	1		1	5	3	4	12	6	10			
Malaysia													2	2	2	2	2	2			
Mongolia													1			1	0	0			
Korea	1						2			1			3			7	0	0	1	1	
China	4	2		3	2	1	6	1		12	5		27	12	3	52	22	4	4	3	
Taiwan				2	1					2			2			6	1	0			
Africa	1	0	1	1	0	1	1	0	1	0	0	0	1	0	0	4	0	3	0	0	0
Algeria				1		1										1	0	1			
Egypt	1		1													1	0	1			
Ghana													1			1	0	0			
Nigeria							1		1							1	0	1			
Europe	1	1	0	2	1	1	8	2	5	4	1	2	2	1	1	17	6	9	1	0	1
Ireland																0	0	0	1		1
Kazakhstan				1		1	2	1	2	2	1	2	2	1	1	7	3	6			
Georgia							1									1	0	0			
Spain							1		1							1	0	1			
Denmark	1	1														1	1	0			
Germany				1	1		1		1							2	1	1			
France							3	1	1	2						5	1	1			
Middle East	1	0	1	0	0	0	0	0	0	1	1	1	0	0	0	2	1	2	0	0	0
Syrian										1	1	1				1	1	1			
Turkey	1		1													1	0	1			
North America / Central America	0	0	0	1	0	1	1	0	0	1	0	1	1	0	0	4	0	2	0	0	0
USA				1		1				1		1				2	0	2			
Canada							1									1	0	0			
Mexico													1			1	0	0			
South America	1	0	0	0	0	0	2	0	2	0	0	0	1	0	1	4	0	3	0	0	0
Brazil							2		2							2	0	2			
Peru	1												1		1	2	0	1			
Total	13	4	4	12	4	7	30	9	16	29	9	10	51	20	14	135	46	51	6	4	1

\* The number of female students and international students is included in the total. \*\* The year of a 3-year doctoral program





DATA

# [ Academic Exchange and Collaboration Agreements ]

SOKENDAI is promoting academic exchange and collaboration with other domestic and foreign universities through mutual agreements.

### Academic Agreement with Foreign Universities

Country of Region	University / Institute	Date of Agreement
China	Lanzhou University	November 12, 2019
Republic of Korea	The University of Science and Technology	May 25, 2005
France	École Centrale de Nantes	November 8, 2019
France	Université Paris-Saclay	February 8, 2020
France	Sorbonne Université	December 8, 2021
Russia	Novosibirsk State University	March 12, 2020
Norway	UiT The Arctic University of Norway	November 07, 2019
Italy	Università di Bologna	July 20, 2020
Italy	Università degli Studi di Salerno	June 8, 2023
Indonesia	Universitas Gadjah Mada Fakulta Ilmu Budaya	December 27, 2019
USA	University of Hawaii	February 28, 2018
China	Southwest Jiaotong University School of Physical Science and Technology	May 20, 2020
Thailand	Chulalongkorn University Faculty of Science	April 1, 2010
Thailand	Kasetsart University Faculty of Science	March 29, 2011
Thailand	Vidyasirimedhi Institute of Science and Technology	September 5, 2018
Malaysia	University of Malaya Faculty of Science	March 24, 2014
Germany	Friedrich Schiller University Jena Institute for Solid State Physics	July 17, 2020
Georgia	Georgian Technical University	February 13, 2019
Republic of Korea	Korea University College of Medicine	November 18, 2019
Republic of Korea	Pusan National University	November 10, 2022
Taiwan	National Taiwan University College	December 28, 2017
Taiwan	National Yang Ming Chiao Tung University	March 7, 2023
Vietnam	Vietnam National University of Science Faculty of Biology	February 8, 2017
Vietnam	Vietnam National University of Agriculture Faculty of Animal Science	February 15, 2017
Vietnam	Vietnam Academy of Social Sciences Institute of Archaeology	February 20, 2017
Bangladesh	Jahangirnagar University Faculty of Biological Sciences	October 9, 2018
India	Indian Institute of Science Education and Research Thiruvananthapuram	March 27, 2020
Slovenia	University of Ljubljana Biotechnical Faculty	August 28, 2018

# Academic Agreement with Domestic Universities

University / Institute	Date of Agreement
Tokyo Institute of Technology	April 1, 1995
Ochanomizu University	April 1, 1995
Nagoya University, Graduate School of Medicine	April 1, 1995
The University of Tokyo, Graduate School of Science	April 1, 1998
The University of Tokyo, Graduate School of Information Science and Technology	April 1, 1998
International Christian University, Graduate School of Arts and Sciences	April 1, 2000
Kyoto University, Graduate School of Asian and African Area Studies	April 1, 2005
Osaka University, Graduate School of Human Sciences	April 1, 2005
Kobe University, Graduate School of Intercultural Studies / Human Development and Environment	April 1, 2005
Chiba University, Graduate School of Humanities and Studies on Public Affairs	April 1, 2005
Japan Advanced Institute of Science and Technology, Graduate School of Advanced Science and Technology	April 1, 2009
Nagoya University, Graduate School of Engineering	April 1, 2010
Chiba University, Graduate School of Science and Engineering	April 1, 2010
Tsuda University, Graduate Program in Mathematics and Computer Science	April 1, 2015
Kyushu University, Graduate School of Pharmaceutical Sciences	April 1, 2017
Hosei University, Graduate School of Science and Engineering	April 1, 2018
Osaka University, Graduate School of Engineering	June 1, 2019
Nagoya University, Graduate School of Science / Engineering / Bioagiricultural Sciences / Parmaceutical Sciences	October 1, 2019
Kumamoto University, Graduate School of Medical Sciences	November 29, 2019
The University of Shiga Prefecture, Graduate School of Human Cultures	April 1, 2020
Kwansei Gakuin University, Graduate School of Science and Technology	April 1, 2022
Shizuoka University, Graduate School of Integrated Science and Technology / Medical Photonics / Science and Technology, Educational Division	October 1, 2023

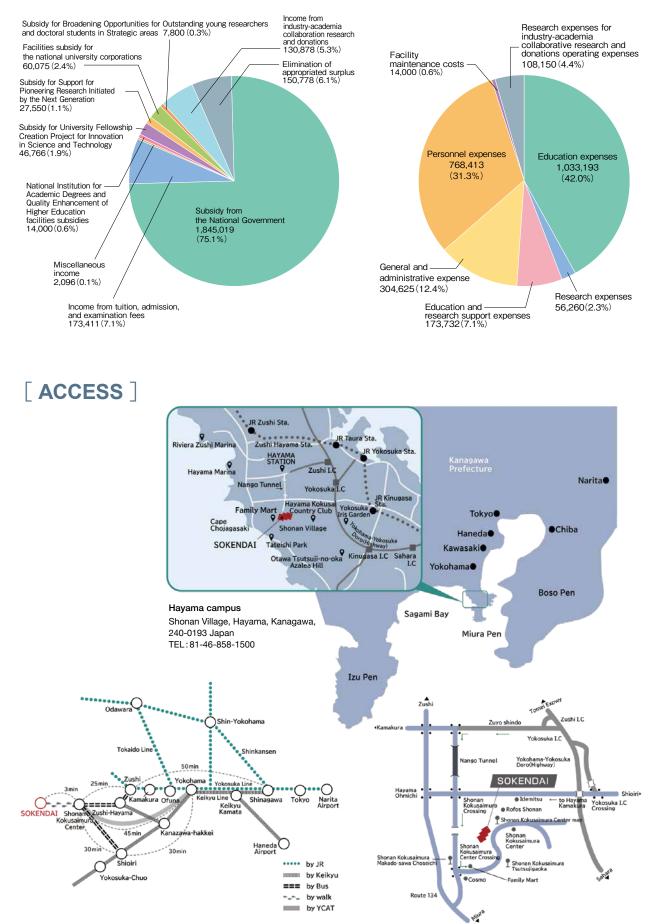
# Academic Agreement with Universities in Kanagawa

University	Graduate School	Date of Agreement
	Veterinary Science	
Azabu University	Environmental Health	
	Law	
	Economics	
	Business Administration	
Kanagawa University	Humanities	
Italiagawa Oliversity	Science	
	Engineering	
	History and Folklore Studies	
	Human Science	
Kanagawa Institute of Technology	Engineering	
	Humanities	
	Economics	
Kanto Gakuin University	Law	
	Engineering	
	Nursing	
	Science	
	Medical Sciences	
	Nursing	
Kitasato University	Pharmacy	
	Veterinary Medicine	
	Marine Biosciences	
	Infection Control Sciences	
Shonan Institute of Technology	Engineering	
	Economics	
	Law	January 10, 2001
Senshu University	Humanities	
	Business Administration	
	Commerce	
Tsurumi University	Leterature	
	Law	
Toin University of Yokohama	Engineering	
	Sport Sciences	
	Letters	
	Political Science	
	Economics	
	Law	
<b>T</b> 1 1 1 1 1 1 1	Arts	
Tokai University	Physical Education	
	Science	
	Engineering	
	Marine Science and Technology	
	Health Science	
	Human Environmental Studies	
Nihon University	Bioresource Sciences Veterinary Medicine	
-		
-	Engineering	
-	Engineering Medicine	
Tokyo Polytechnic University	Engineering Medicine Urban Social and Cultural Studies	
Tokyo Polytechnic University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience	
Tokyo Polytechnic University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science	
Tokyo Polytechnic University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering	
Tokyo Polytechnic University Yokohama City University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences	March 20, 2000
Tokyo Polytechnic University Yokohama City University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education	March 20, 2002
Tokyo Polytechnic University Yokohama City University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences	March 20, 2002
Tokyo Polytechnic University Yokohama City University Yokohama National University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation	
Tokyo Polytechnic University Yokohama City University Yokohama National University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology	March 20, 2002 April 1, 2002
Tokyo Polytechnic University Yokohama City University Yokohama National University Tokyo Institute of Technology	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities	
Tokyo Polytechnic University Yokohama City University Yokohama National University Tokyo Institute of Technology	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities Global and Inter-cultural Studies	
Tokyo Polytechnic University Yokohama City University Yokohama National University Tokyo Institute of Technology Ferris University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities Global and Inter-cultural Studies Music	April 1, 2002
Tokyo Polytechnic University Yokohama City University Yokohama National University Tokyo Institute of Technology Ferris University Meiji University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities Global and Inter-cultural Studies Music Agriculture	April 1, 2002 April 1, 2004
Tokyo Polytechnic University Yokohama City University Yokohama National University Tokyo Institute of Technology Ferris University Meiji University Institute of Information Security	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities Global and Inter-cultural Studies Music Agriculture Information Security	April 1, 2002 April 1, 2004 April 1, 2005
Tokyo Polytechnic University Yokohama City University Yokohama National University Tokyo Institute of Technology Ferris University Meiji University Institute of Information Security Tokyo City University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities Global and Inter-cultural Studies Music Agriculture Information Security Environmental and Information Studies	April 1, 2002 April 1, 2004 April 1, 2005 April 1, 2007
Tokyo Polytechnic University Yokohama City University Yokohama National University Tokyo Institute of Technology Ferris University Institute of Information Security Tokyo City University Shoin University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities Global and Inter-cultural Studies Music Agriculture Information Security Environmental and Information Studies Business Administration	April 1, 2002 April 1, 2004 April 1, 2005 April 1, 2007 April 1, 2009
Tokyo Polytechnic University Yokohama City University Yokohama National University Tokyo Institute of Technology Ferris University Meiji University Institute of Information Security Tokyo City University Shoin University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities Global and Inter-cultural Studies Music Agriculture Information Security Environmental and Information Studies Business Administration Nutritional Sciences	April 1, 2002 April 1, 2004 April 1, 2005 April 1, 2007 April 1, 2009 April 1, 2009
Tokyo Polytechnic University Yokohama City University Yokohama National University Tokyo Institute of Technology Ferris University Meiji University Institute of Information Security Tokyo City University Shoin University Sagami Women's University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities Global and Inter-cultural Studies Music Agriculture Information Security Environmental and Information Studies Business Administration Nutritional Sciences Social Entrepreneurship	April 1, 2002 April 1, 2004 April 1, 2005 April 1, 2007 April 1, 2009 April 1, 2009 April 1, 2021
Tokyo Polytechnic University Yokohama City University Yokohama National University Tokyo Institute of Technology Ferris University Institute of Information Security Tokyo City University Shoin University Sagami Women's University Aoyama Gakuin University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities Global and Inter-cultural Studies Music Agriculture Information Security Environmental and Information Studies Business Administration Nutritional Sciences Social Entrepreneurship Science and Engineering	April 1, 2002 April 1, 2004 April 1, 2005 April 1, 2007 April 1, 2009 April 1, 2009 April 1, 2021 April 1, 2010
Tokyo Polytechnic University Yokohama City University Yokohama National University Tokyo Institute of Technology Ferris University Meiji University Institute of Information Security Tokyo City University Shoin University Sagami Women's University Bunkyo University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities Global and Inter-cultural Studies Music Agriculture Information Security Environmental and Information Studies Business Administration Nutritional Sciences Social Entrepreneurship Science and Engineering Information and Communications	April 1, 2002 April 1, 2004 April 1, 2005 April 1, 2007 April 1, 2009 April 1, 2009 April 1, 2010 April 1, 2010 April 1, 2013
Tokyo Polytechnic University Yokohama City University Yokohama National University Tokyo Institute of Technology Ferris University Meiji University Institute of Information Security Tokyo City University Snoin University Sagami Women's University Aoyama Gakuin University Kanagawa Dental University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities Global and Inter-cultural Studies Music Agriculture Information Security Environmental and Information Studies Business Administration Nutritional Sciences Social Entrepreneurship Science and Engineering Information and Communications Dental Sociology	April 1, 2002 April 1, 2004 April 1, 2005 April 1, 2007 April 1, 2009 April 1, 2009 April 1, 2021 April 1, 2010
Tokyo Polytechnic University Yokohama City University Yokohama National University Tokyo Institute of Technology Ferris University Meiji University Institute of Information Security Tokyo City University Shoin University Sagami Women's University Bunkyo University Kanagawa Dental University Kamakura Women's University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities Global and Inter-cultural Studies Music Agriculture Information Security Environmental and Information Studies Business Administration Nutritional Sciences Social Entrepreneurship Science and Engineering Information and Communications Dental Sociology Child Studies	April 1, 2002 April 1, 2004 April 1, 2005 April 1, 2007 April 1, 2009 April 1, 2009 April 1, 2010 April 1, 2013 April 1, 2013
Tokyo Polytechnic University Yokohama City University Yokohama National University Tokyo Institute of Technology Ferris University Meiji University Institute of Information Security Tokyo City University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities Global and Inter-cultural Studies Music Agriculture Information Security Environmental and Information Studies Business Administration Nutritional Sciences Social Entrepreneurship Science and Engineering Information and Communications Dental Sociology	April 1, 2002 April 1, 2004 April 1, 2005 April 1, 2007 April 1, 2009 April 1, 2009 April 1, 2010 April 1, 2010 April 1, 2013
Tokyo Polytechnic University Yokohama City University Yokohama City University Yokohama National University Tokyo Institute of Technology Ferris University Meiji University Institute of Information Security Tokyo City University Shoin University Sagami Women's University Bunkyo University Kanagawa Dental University Kamagawa Dental University Kamagawa Dental University Kamagawa Diversity School of	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities Global and Inter-cultural Studies Music Agriculture Information Security Environmental and Information Studies Business Administration Nutritional Sciences Social Entrepreneurship Science and Engineering Information and Communications Dental Sociology Child Studies	April 1, 2002 April 1, 2004 April 1, 2005 April 1, 2007 April 1, 2009 April 1, 2009 April 1, 2010 April 1, 2011 April 1, 2013 April 1, 2014
Tokyo Polytechnic University Yokohama City University Yokohama City University Yokohama National University Tokyo Institute of Technology Ferris University Meiji University Institute of Information Security Tokyo City University Shoin University Sagami Women's University Bunkyo University Kanagawa Dental University St. Marianna University School of Medicine	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities Global and Inter-cultural Studies Music Agriculture Information Security Environmental and Information Studies Business Administration Nutritional Sciences Social Entrepreneurship Science and Engineering Information and Communications Dental Sociology Child Studies Medichine	April 1, 2002 April 1, 2004 April 1, 2005 April 1, 2007 April 1, 2009 April 1, 2009 April 1, 2001 April 1, 2013 April 1, 2013 April 1, 2014
Tokyo Polytechnic University Yokohama City University Yokohama National University Tokyo Institute of Technology Ferris University Meiji University Institute of Information Security Tokyo City University Shoin University Sagami Women's University Sagami Women's University Kanagawa Dental University Kanagawa Dental University Kanakura Women's University St. Marianna University School of Medicine Showa University	Engineering Medicine Urban Social and Cultural Studies Nanobioscience Medical Life Science Engineering Environment and Information Sciences Education International Social Sciences Urban Innovation Life Science and Technology Humanities Global and Inter-cultural Studies Music Agriculture Information Security Environmental and Information Studies Business Administration Nutritional Sciences Social Entrepreneurship Science and Engineering Information and Communications Dental Sociology Child Studies Medichine Health Sciences	April 1, 2002 April 1, 2004 April 1, 2005 April 1, 2007 April 1, 2009 April 1, 2009 April 1, 2010 April 1, 2011 April 1, 2013 April 1, 2014

# [FY2024 Income and Expenditures Budget ]

### ■Total Budget Income 2,458,373

### ■Total Expenditures Budget 2,458,373





### [logo]

SOKENDAI renewed our logo as we celebrate the 30th anniversary of the university's foundation in 2018. SOKENDAI represents a unique educational structure that provides intellectual knowledge at the highest standards. The ethos of the brand is mirrored through the visualization of a line 'Intelligence Connector' which symbolizes a platform for the multiple numbers of research centers across the world that form the diverse educational platform of SOKENDAI.



#### [Cover Image]

# Head of a male Wood White: scanning electron micrograph

Wood White butterfly, *Leptidea amurensis*, is a small species found in grasslands. Although the number is decreasing due to habitat loss, they are still abundant around Mount Fuji. The width of the head is approximately 2mm, with large compound eyes on each side. The rough appearance of the lower two-thirds of the eyes is due to variations in the size of the ommatidia, the individual units making up the compound eyes. Larger ommatidia are more sensitive to light than smaller ones, so mixing different sizes widens the brightness range to which they can respond. However, this roughness is specific to males; the female compound eyes consist of uniformly sized ommatidia. Presumably, males and females perceive the world differently.

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