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# 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 graduate university in Japan, SOKENDAI has awarded roughly 2,400 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.

Inagata

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

# **Profile**

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 is an independent graduate university (the first of its kind in Japan) founded in 1988 with the aim of contributing to the creation and development of culture through education and research in academic theory and application. As a world-leading international graduate university, SOKENDAI operates in close partnership and collaboration with affiliated inter-university research institutes.

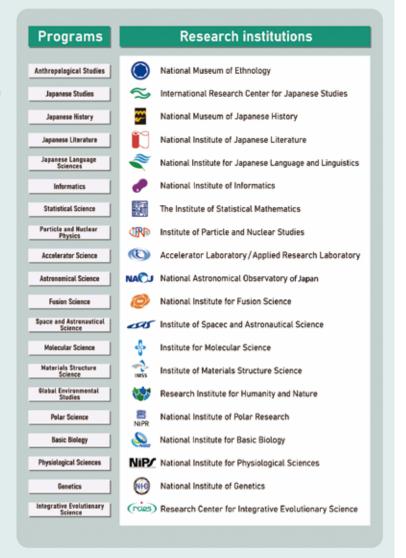
The role of the inter-university research institutes and the world-class research environment they offer as

# Inter-University Research Institutes

The inter-university research institutes (parent institutes) provide researchers from universities across Japan with resources (e.g., large-scale facilities and equipment, large amount of data, and valuable materials, etc.) that are not available in ordinary universities, and play a leading role in advancing scientific research in Japan through joint research with researchers nationwide and abroad. SOKENDAI employs a large group of researchers from various research fields as faculty members to provide advanced specialized education within the excellent research environment provided by such parent institutes.

# Graduate Institute for Advanced Studies

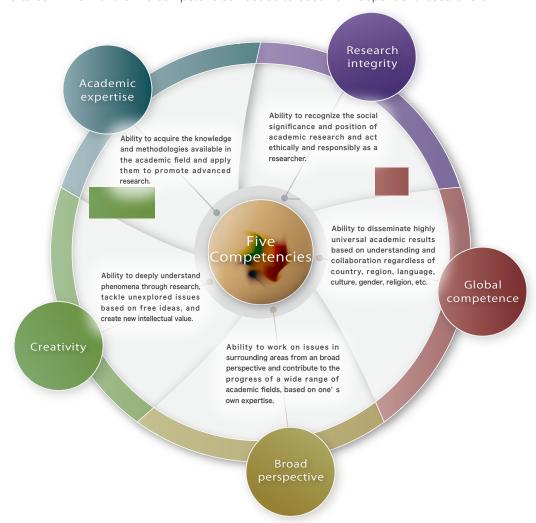
SOKENDAI has fostered highly-specialized PhDs using the world's most advanced research centers as educational sites. To nurture PhDs who can tackle complex and interdependent issues arising in the context of ever-changing academic trends and the ever more pressing demands of modern society, it is necessary to develop a system that allows the flexible use of highly specialized resources across a wide range of disciplines. To achieve this goal, SOKENDAI has reorganized its educational structure and established the Graduate Institute for Advanced Studies on April 1, 2023. At the same time, the National Institute for Japanese Language and Linguistics and the Research Institute for Humanity and Nature were incorporated into SOKENDAL as parent institutes to further enhance the educational environment. The Graduate Institute for Advanced Studies offers 20 programs with the support of parent institutes. As such, SOKENDAI provides an educational environment that transcends the conventional disciplinary boundaries and allows for the more flexible use of the diverse educational resources of the parent institutes for all teaching staff and the student body.



# Features of SOKENDAI

# Five Competencies

SOKENDAI nurtures Ph.Ds with the five competencies needed to become 'independent researchers'



# Doctoral program

SOKENDAI offers both five-year and three-year doctoral programs.



# **Student support**

# Financial support

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

# Research Dispatch Support

SOKENDAI supports 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 >

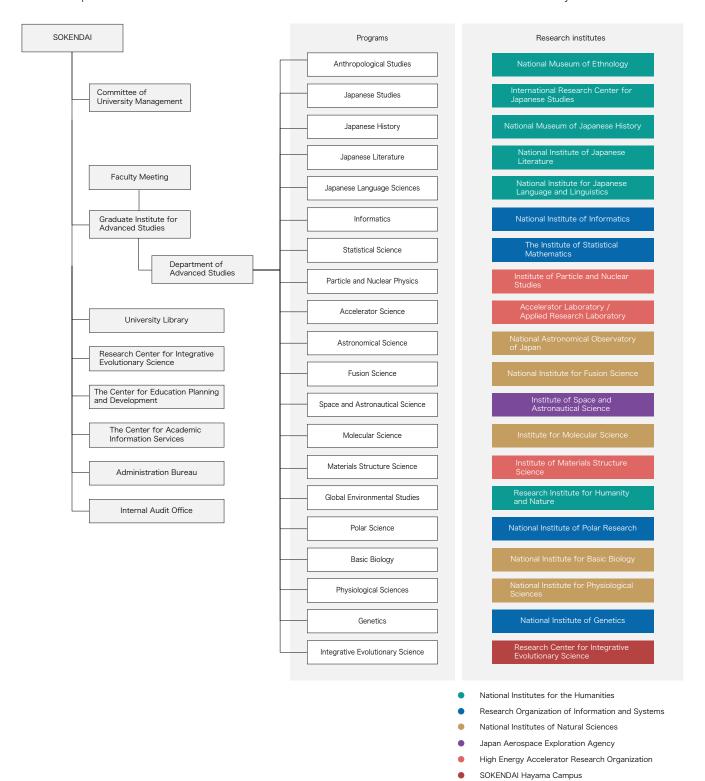




# Research and Education System

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



# **Administrative Board**

As of April 1, 2023

President NAGATA Takashi
Executive Director YAMAMOTO Satoshi
Executive Director ARIKAWA Kentarou
Auditor OKAMURA Sadanori
Auditor INAGAKI Masato
(The above are corporate members)

Vice President YAMAMOTO Satoshi
Executive Officer MICHIZONO Shinichiro
President's Assistant KURUSHIMA Noriko

# ■ Graduate Institute for Advanced Studies

Dean, Graduate Institute for Advanced Studies SAKAKIBARA Satoru Chair, Anthropological Studies MINAMI Makito Chair, Japanese Studies ISODA Michifumi Chair, Japanese History MATSUGI Takehiko Chair, Japanese Literature SAITO Maori Chair, Japanese Language Sciences MATSUMOTO Yo Chair, Informatics YAMADA Seiji Chair, Statistical Science FUJISAWA Hironori NISHIMURA Jun Chair, Particle and Nuclear Physics KAMITANI Takuya Chair, Accelerator Science Chair, Astronomical Science SEKII Takashi Chair, Fusion Science SAKAKIBARA Satoru Chair, Space and Astronautical Science DOTANI Tadayasu Chair, Molecular Science YOKOYAMA Toshihiko 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

# University Library

Director ARIKAWA Kentaro
Deputy Director YAGYU Shuji

# ■ Research Center for Integrative Evolutionary Science

Director INNAN Hideki

# ■ The Center for Education Planning & Development

Director YAMAMOTO Satoshi

# ■ The Center for Academic Information Services

Director ARIKAWA Kentaro

# Administration Bureau

Secretary-General KAMAZUKA Satoshi
Manager, General Planning Division OKADA Maki
Manager, General Affairs Division HORIUCHI Shinya
Manager, Financial Affairs Division IIZUKA Yasushi
Manager, Academic and Students Affairs Division UMENO Kenichi

KUTSUKAKE Nobuyuki

Chair, Integrative Evolutionary Science

# Education and Research Council ———

As of April 1, 2023

- As of April 1, 2023

<del></del>			
President	NAGATA Takashi	Chair, Accelerator Science	KAMITANI Takuya
Executive Director (Vice President)	YAMAMOTO Satoshi	Chair, Astronomical Science	SEKII Takashi
Executive Director	ARIKAWA Kentaro	Chair, Space and Astronautical Science	DOTANI Tadayasu
Dean, Graduate Institute for Advanced Studies	SAKAKIBARA Satoru	Chair, Molecular Science	YOKOYAMA Toshihiko
Chair, Fusion Science		Chair, Materials Structure Science	SETO Hideki
Chair, Anthropological Studies	MINAMI Makito	Chair, Global Environmental Studies	TAYASU Ichiro
Chair, Japanese Studies	ISODA Michifumi	Chair. Polar Science	HIRAWAKE Toru
Chair, Japanese History	MATSUGI Takehiko	Chair, Basic Biology	NIIMI Teruyuki
Chair, Japanese Literature	SAITO Maori	, 5,	,
, ,		Chair, Physiological Sciences	FURUSE Mikio
Chair, Japanese Language Sciences	MATSUMOTO Yo	Chair, Genetics	IWASATO Takuji
Chair, Informatics	YAMADA Seiji	Chair, Integrative Evolutionary Science	KUTSUKAKE Nobuyuki
Chair, Statistical Science	FUJISAWA Hironori	onan, mogrative Evolutionary delence	NO FOOTO THE MODULY UNIT

# - Administrative Council

NISHIMURA Jun

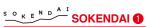
Chair, Particle and Nuclear Physics

NAGATA Takashi	Pres
YAMAMOTO Satoshi	Infor
ARIKAWA Kentaro	Direct Resea
WATANABE Yasuaki	Chai Akita
WATANABE Yoshihito	Pres
	Presi
KOSUGI Nobuhiro	Scier
	Repi Sumi
HANAOKA Fumio	Sum
ARINOBU Mutsuhiro	
ISODA Fumio	
INOSE Kumie	
KIMURA Keiji	
KUNINAKA Hitoshi	
KAWAI Maki	
AMANO Reiko	
	YAMAMOTO Satoshi ARIKAWA Kentaro WATANABE Yasuaki WATANABE Yoshihito KOSUGI Nobuhiro HANAOKA Fumio ARINOBU Mutsuhiro ISODA Fumio INOSE Kumie KIMURA Keiji KUNINAKA Hitoshi KAWAI Maki

President, National Institutes for the Humanities KIBE Nobuko

President, Research Organization of Information and Systems	KITSUREGAWA Masaru
Director General, High Energy Accelerator Research Organization	YAMAUCHI Masanori
Chair of the Board, President, Akita International University	MONTE Cassim
President, Akita Prefectural University	FUKUDA Hiroo
President, Japan Agency for Marine-Earth Science and Technology	YAMATO Hiroyuki
Representative Director & President, Sumika Technical Information Service, Inc.	SEKINE Chizu

# Inter-University Research Institutes participating in **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

TEL: +81-6-6878-8236

URL: https://www.minpaku.ac.jp/



# **National Institutes for the Humanities** International Research Center for Japanese Studies 3

# Japanese Studies

3-2 Oeyama-cho, Goryo, Nishikyo-ku, Kyoto, 610-1192

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

TEL: +81-43-486-0123

URL: https://www.rekihaku.ac.jp/



### **National Institutes for the Humanities National Institute** of Japanese Literature 6

# 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 6

# 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/



# **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 ®

# Molecular Science

URL: https://www.ims.ac.ip/en/

38 Nishigonaka, Myodaiji, Okazaki, 444-8585 Japan

TEL: +81-564-55-7000



### **National Institutes of Natural Sciences National Institute**

# Basic Biology

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

38 Nishigonaka, Myodaiji, Okazaki, 444-8585 Japan

TEL: +81-564-55-7000

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

### Physiological Sciences

URL: https://www.nips.ac.jp/eng/

38 Nishigonaka, Myodaiji, Okazaki, 444-8585

TEL: +81-564-55-7000



# **National Institutes of Natural Sciences** National Astronomical Observatory

of Japan 1

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

TEL: +81-422-34-3600

URL: https://www.nao.ac.ip/

# NAOJ Mizusawa campus (2)

2-12 Hoshigaoka, Mizusawa, Oshu, Iwate, 023-0861 Japan

TEL: +81-197-22-7111

### Nobeyama Radio Observatory (8)

462-2 Nobevama, Minamimakimura, Minamisaku, Nagano, 384-1305 Japan

TEL: +81-267-98-4300

# Subaru Telescope 4

650 North A'ohoku Place, Hilo, Hawaii 96720

TEL: +1-808-934-7788

# NAOJ Chile Observatory (5)

Los Abedules 3085, Oficina 701, Vitacura, Santiago, CHILE

TEL: +56-2-2656-9253



# Fusion Science

322-6, Oroshi-cho, Toki, Gifu, 509-5292 Japan

TEL: +81-572-58-2222 or 2042 URL: https://www.nifs.ac.jp/en/

# Japan Aerospace Exploration Agency Institute of Space

and Astronautical Science 17

# 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 (8)



# Laboratory Accelerator Laboratory · Applied Research

### Accelerator Science

https://www2.kek.jp/accl/eng/

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

🐧 Institute of Materials Structure Science

# Materials Structure Science

https://www2.kek.ip/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 Oaza-Shirakata, Tokai-Mura, Nakagun, Ibaraki, 319-1106 Japan



# Statistical Mathematics @

Statistical Science 10-3 Midori-cho, Tachikawa, Tokyo, 190-8562

TEL: +81-50-5533-8500

URL: https://www.ism.ac.ip/index\_e.html



# of Polar Research @

Polar Science 10-3 Midori-cho, Tachikawa, Tokyo, 190-8518

Japan

TEL: +81-42-512-0608 URL: https://www.nipr.ac.jp/

# Syowa Station (Antarctica) 🐵



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

### Informatics

2-1-2 Hitotsubashi, Chiyoda-ku, Tokyo, 101-8430

Japan

TEL: +81-3-4212-2110 URL: https://www.nii.ac.jp/en/

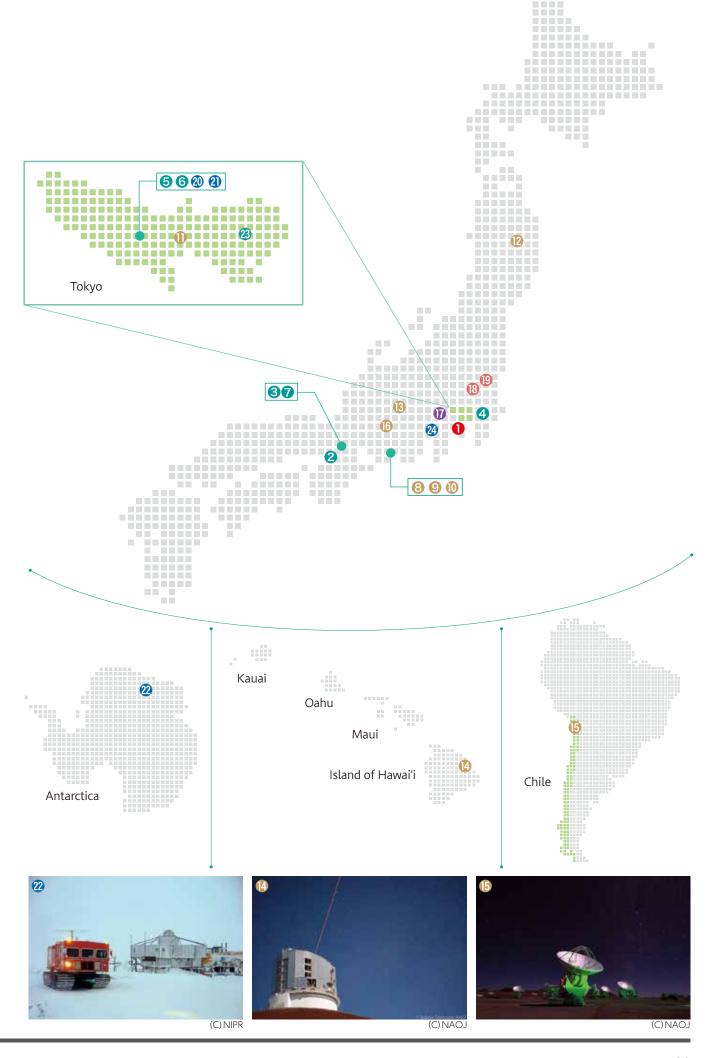


# Research Organization of Information and Systems **National Institute of Genetics 29**

# Genetics

1111 Yata, Mishima, Shizuoka, 411-8540 Japan

TEL: +81-55-981-6720 URL: https://www.nig.ac.jp/



# History

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.

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.

An Office and Committee for Preparation of the Establishment of a Postgraduate School for Advanced Studies are established at Okazaki National Research Institute.

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.

An Office and Committee for Preparation of the Establishment of the Graduate University for Advanced Studies are established at Okazaki National Research Institute.

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.

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.

The Graduate University for Advanced Studies is inaugurated. The central administration office is established at the Tokyo Institute of Technology (Nagatsuda Campus).

### School of Mathematical and Physical Science School of Life Science

- Department of Statistical Science
   Department of Accelerator Science

- Department of Genetics
   Department of Molecular Biomechanics
- Department of Synchrotron Radiation Science
   Department of Physiological Science
   Department of Structural Molecular Science
- Department of Functional Molecular Science

(The university commences matriculation from April 1989.)

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.

Dr. Eizi Hirota is appointed as the first Vice President of the University.

The Coordination Center for Research and Education is established.

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.

The Department of Polar Science (School of Mathematical and Physical Science) is established; matriculation begins.

Land in Hayama, Kanagawa (27,000 m²), 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.

Construction of the central administration office (4,205m²) begins at the Hayama Campus.

The Information Center for Research and Education is established.

Administrative functions are transferred from Nagatsuda Campus to 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.

The School of Advanced Sciences, with the Department of Biosystems Science, is established at the Hayama Campus (matriculation begins in April 1999).

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

Construction of the School of Advanced Sciences building for research (3,060m²) begins at the Hayama Campus.

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 commences matriculation.

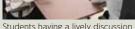
Construction completed on the research building for the School of Advanced Sciences.

	His	story	of SOKEND	Al Preside	nts		April 20	01	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
	The	1.4						y	and Social Studies) is established; matriculation begins  Construction begins on the Hayama Campus Library (1,427m²).
		e 1st sident		agakura(DSc o Mar.1995 			February 2002 April		Library construction completed. The Department of Informatics established in the School of Mathematical and Physical Science; matriculation begins.
	The 2r		Eizi, Hirota( Apr.1995 to I				April 2003 October	Stu of M "The	e Department of Japanese Literature (School of Cultural and Social dies), and the Department of Space and Astronautical Science (School fathematical and Physical Science) are established; matriculation begins.  e National University Corporation Law (Law No. 112 of 2003)" is nulgated and enforced.
	e 3rd siden		<b>Keiichi, Kodai</b> Apr.2001 to Ma				r	for Adv of the I eforme	nation into the National University Corporation, Graduate University ranced Studies Dr. Sc. Keiichi Kodaira is reappointed as the President University. The School of Mathematical and Physical Science is d into three schools: the School of Physical Science (including the ents of Structural Molecular Science, Functional Molecular Science,
The President			n <b>oyuki, Takaha</b> r.2008 to Mar				As the Acc and Stati	stronome Schoo celerato the Sc stical Sc	nical Science, Fusion Science and Space and Astronautical Science), I of High Energy Accelerator Science (including the departments of Science, Materials Structure Science, Particle and Nuclear Physics), hool of Multidisciplinary Science (including the departments of cience, Polar Science and Informatics). The School of Life Science has pree-year doctoral program into a five-year doctoral program.
The 5th Preside			i <mark>nobu, Okada(</mark> 2014 to Mar.20			April 200	The na Science		he Department of Molecular Biomechanics at the School of Life anged to the Department of Basic Biology.
						April 2006	the School	o <b>l</b> of Mu	nysical Sciences, the School of High Energy Accelerator Science, and ultidisciplinary Sciences have implemented the five-year doctoral The Schools have begun to accept students.
The 6th President			, <b>Hasegawa(D</b> 17 to Mar.2023			April 2007	Evo <b>l</b> utionary its two existir	/ Studie ng depa	vanced Sciences is reorganized to establish the Department of s of Biosystems (providing a five year doctoral program), in stead of rtments, the Department of Biosystems Science and the Department viding three-year doctoral programs), matriculation begins.
The 7th	Tak	ashi	Nagata(DSc)			2008	Dr. Naoyuki Ta	akahata	has been appointed as the fourth President.
President			to present			2009	The Departmen	nt of Cy	ber Society and Culture has stopped accepting new students.
						pril T	Hayama Campus.	ma Cent	er for the Promotion of Integrated Sciences(1,033m²) begins at the er for Advanced Studies has changed to the Center for the iences.
						11 Coi	nstruction of the	Center	for the Promotion of Integrated Sciences is completed.
						3 Info	rmation Services	and Te	chnology Center is established.
						Dr. Ya	asunobu Okada h	as beer	appointed as the fifth President.
									rmation Services is established by unification of the University vices and Technology Center.
				March	2017 April	(Dept. op	peration period fr	om 200	d Culture abolished. 11.4.1 to 2017.3.31) pointed as the sixth President.
			a) s	March 20	)18 oril	The Center fo	or the Promotion o	of Integr	oment is established. ated Sciences is abolished. d (Minato-ku, Tokyo)
3 1 2 2 2				March 2022 April		okyo branch a		Evo <b>l</b> utio	onary Science is established.
				April 2023	Grad The C Deve <b>l</b> Schoo	luate Institute Center for Edu opment. I of Cultural a	for Advanced Stu ucational Develo nd Social Studies,	udies is pment , School	the seventh President. established, matriculation begins. is reorganized to establish The Center for Educational Planning of Physical Sciences, School of High Energy Accelerator Sciences, Life Sciences, School of Advanced Sciences abolished.



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







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

# MINAMI Makito

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.

# **Anthropological Studies**

# **National Museum of Ethnology**

National Institutes for the Humanities

This program is offered by the National Museum of Ethnology. Students will conduct research on the diverse cultures of mankind in various parts of the world from prehistoric times to the present. From the perspective of cultural anthropology, ethnology, and related fields, students will be instructed in ethnographic research that describes and analyzes a specific culture, and cross-cultural research that compares cultures from a specific perspective. Students will 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.

# >> Program Outline: Three-year doctoral program Doctor of philosophy

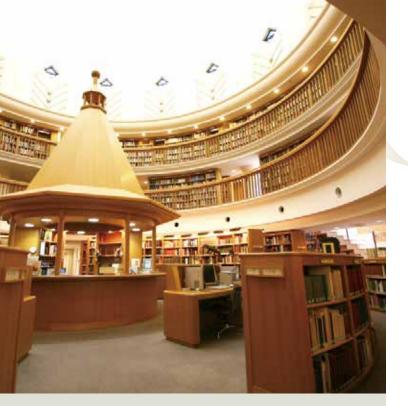
# >> Career Options for Graduates in this Program:

- 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



Library of the International Research Center for Japanese Studies



International symposium offering graduate students an opportunity to present their research



Graduate student project presentation meeting organized by the students themselves



Japanese ceremonies: wedding and funeral



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



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

# ISODA Michifumi

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.

# Japanese Studies

# **International Research Center** for Japanese Studies

National Institutes for the Humanities

The Japanese Studies program facilitates the pursuit of an international and interdisciplinary Japanese studies encompassing the humanities, social sciences, and the natural sciences. Key to this is the involvement of all our faculty in teaching and research guidance.

The program requires candidates to take courses on "Theory and Methodology in Japanese Studies", "Interdisciplinary Research", and "Dissertation Work in Advanced Studites", which provide the theoretical and methodological basis for conducting Japanese studies from a global perspective. Through these courses and guided research, we will foster researchers with creative and highly specialized perspectives, equipped to undertake Japanese studies in the twenty-first

# >> Program Outline: Three-year doctoral program Doctor of philosophy

# >> 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 cuttingedge 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.
- Places where our graduates have been employed: Akita University, Tokyo Institute of Technology, Kyoto University, Nara Women's University, Hiroshima University, Kochi Women's University, Miyazaki Municipal University, Institute of Technologists, Otsuma Women's University, Chubu University, Kyoto Women's University, Kyoto Seika University, Kyoto Bunkyo University, Shuchiin University, Doshisha Women's University College of Liberal Arts, Northeast Normal University, Hakuho Women's College, International Research Center for Japanese Studies, National Museum of Japanese History, Japan Society for the Promotion of Science, JSPS Postdoctoral Fellowships for Research in Japan, Chulalongkorn University, Padjadjaran University, IRIS Inc., East China Normal University, Teikyo University, Kyushu University, Osaka University, Osaka Metropolitan University, Jiangsu University of Technology, National Pingtung University, Beijing Language and Culture University, Aichi Shukutoku University, Jiangxi University of Science and Technology, Qingdao University, Qufu Normal University, Shanghai University, Shanghai Normal University, Nagasaki Prefectual Board of Education, etc.



# International Research Center for Japanese Studies

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



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



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

# MATSUGI Takehiko

In this program, students will be able to conduct practical research that only a museum can provide, utilizing the vast collection of materials and state-of-the-art equipment held by the National Museum of Japanese History (Rekihaku). At the same time, you will have the opportunity to collaborate with the other 19 programs covering almost all academic fields in the humanities and sciences. Let's aim for the world's top historical research, originating in Japan!

# **Japanese History**

# National Museum of Japanese History

National Institutes for the Humanities

This program on Japanese History aims to nurture researchers with a broad perspective and international standing, in the field of Japanese history. We aim to produce graduates who can conduct advanced research in Japanese history, based on the methods required for specific fields of specialization, and nurture human resources who can contribute to society with their advanced research skills. We aim to foster researchers with advanced comprehensive abilities through guidance from specialists in the fields of document-based historical research, archaeology, folklore studies, and analytical sciences, and by making use of the vast amounts of tangible material resources and diverse information resources held at the National Museum of Japanese History, which also offers this program.

# >> Program Outline: Three-year doctoral program Doctor of philosophy

# >> 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.



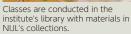
# National Museum of Japanese History

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



Closed stacks at the National Institute of Japanese Literature







Graduate School Library

# SAITO Maori

The Japanese Literature Program, which is based on the National Institute of Japanese Literature fosters professionals to lead new developments in Japanese literature. The program focuses on primary materials such as documents among cultural resources and aims to acquire specialized research skills and comprehensive analytical skills and knowledge. Thus, this program fosters researchers having broad, unique and interdisciplinary perspectives who can tackle issues in peripheral fields with abilities to think logically and express oneself in writing.

# Japanese Literature

# **National Institute of Japanese Literature**

National Institutes for the Humanities

This program on Japanese Literature aims to nurture and produce doctoral students who will take over, and develop the study of Japanese literature with the academic community of Japanese literature (domestic literature)as the main stakeholder. To this end, this program fosters individuals who can contribute to research in this field, and make unique contributions to society by tackling the issues that include using original ideas from peripheral fields and interdisciplinary perspectives, based on a comprehensive expertise in the core discipline of Japanese literature.

# >> Program Outline: Three-year doctoral program Doctor of philosophy

# >> 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.



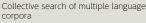
### National Institute of Japanese Literature

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



The World Atlas of Transitivity Pairs (WATP)







"Kenshukuryōko-shū" published in 1695 about kana orthography of

# **MATSUMOTO Yo**

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.

# Japanese Language Sciences

# National Institute for Japanese Language and Linguistics

National Institutes for the Humanities

We aim to foster a future generation of researchers who can objectively and quantitatively analyze the Japanese language based on data. To this end, we utilize the linguistic resources and research networks of the National Institute for Japanese Language and Linguistics (NINJAL) to cultivate the skills and abilities necessary to conduct linguistic analyses using new methods including theory-based investigation, experiments, fieldwork, social surveys, and computer simulations, in addition to conventional methods of analysis.

# >> Program Outline: Three-year doctoral program Doctor of philosophy

# >> Career Options for Graduates in this Program:

• Possible career paths for graduates:

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

Data scientists and natural language processing engineers who are active in the information processing industry using their linguistic expertise

Curators, archivists, and local government officials with linguistic expertise

Researchers and educators who teach the Japanese language in Japan and abroad

Developers of digital teaching materials related to Japanese language for native speakers and Japanese as a foreign language



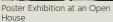
# National Institute for Japanese Language and Linguistics

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



Socializing in the 16th floor lounge







High-performance cloud for in-house research

# YAMADA Seiji

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.

# **Informatics**

# **National Institute of Informatics**

Research Organization of Information and Systems

Informatics is a comprehensive academic field that covers computer sciences, information engineering, artificial intelligence, and mathematics—which are necessary for data scientists. In addition, it covers humane and social informatics, which focus on mankind and 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 can hold leadership roles at the international level.

# >> Program Outline:

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

# >> Career Options for Graduates in this Program:

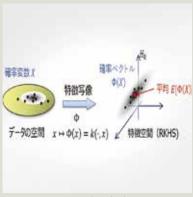
- Researchers and engineers engaged in the field of informatics (basic theory and application of information technology (IT), basic and applied Al and data sciences, etc.) at domestic and overseas universities, public research institutions, and private
- Faculty in the department of informatics at universities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



# National Institute of Informatics

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

Library of the Institute of Statistical Mathematics



Kernel method

# **FUJISAWA Hironori**

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.

# Statistical Science

# The Institute of Statistical Mathematics

Research Organization of Information and Systems

The program of Statistical Science aims to cultivate individuals who possess creative research skills to contribute to solving various important intricately-intertwined problems. To this end, the program conducts education and research related to the basics, mathematics and applications of data collection designs, modeling, inference and prediction, and equip students with the ability to extract information and knowledge from the real world based on the effective use of data.

# >> Program Outline:

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

# >> Career Options for Graduates in this Program:

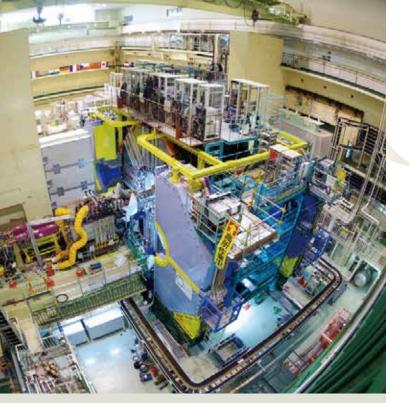
• Local and foreign universities, national and corporate research institutes, private companies (e.g., IT, manufacturing, financial, and pharmaceutical companies), etc.



# The Institute of Statistical Mathematics

- 10-3 Midori-cho, Tachikawa,
- Tokyo, 190-8562 Japan

  https://www.ism.ac.jp/index\_e.html



The SuperKEKB accelerator and Belle II. measuring instrument, which started operations to enhance luminosity by 40



T2K near detector ©KFK



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

# **NISHIMURA** Jun

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.

# Particle and Nuclear **Physics**

# Institute of Particle and Nuclear Studies

High Energy Accelerator Research Organization

### Exploring the Mysteries of Matter and the Universe

In this program at the Institute for Particle and Nuclear Studies of the High Energy Accelerator Research Organization (KEK), students belong to theoretical or experimental groups. They receive a rounded graduate education, which include lectures and research guidance from staff members, who are also SOKENDAI faculty members. This research and education program aims to develop researchers who can contribute to the further development of fields related to particle physics, nuclear physics and cosmology. By taking advantage of the rich environment at KEK, which is an international research center in this field, this program fosters researchers with a broad perspective, high levels of expertise, and international capabilities who can head the direction of research in related fields, at the global level.

# >> Program Outline:

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

# >> 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 project-based 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.



### Institute of Particle and Nuclear Studies

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

# Graduate Institute for Advanced Studies



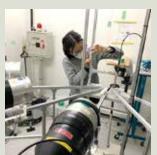
Superconducting magnets in the



Assembling work of fast beam kicker



Beam study at Photon Factory (PF) electron storage ring



Installation of detectors for photoneutron measurement

# >> Chair

# KAMITANI Takuya

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.

# **Accelerator Science**

# Accelerator Laboratory / **Applied Research Laboratory**

High Energy Accelerator Research Organization

# The Science of Accelerators—the Ultimate Material **Exploration Device**

High energy accelerators are powerful tools for exploring the various components of each level of the natural world—from the simplest elementary particles and nuclei to atoms, molecules, and complex and exquisite life forms. The main goal of this program is to promote natural sciences by improving the performance of accelerators and to provide education on the specialized technology required for from both theoretical and experimental aspects, including research on the principles of accelerators and the development of advanced accelerator technologies. At the same time, through education and research in closely related fields such as radiation science, computer science, superconducting technology, and mechanical engineering, this program will comprehensively produce graduates who can play a central role in the future of accelerator science.

# >> Program Outline:

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

# >> 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/



ALMA ©X-CAM/ALMA (ESO/NAOJ/NRAO)



ATERUI II, a supercomputer for astronomy

# SEKII Takashi

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 researchers from many 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**

# National Astronomical Observatory of Japan

National Institutes of Natural Sciences

This program focuses on observational and theoretical research, along with instrumentation research for astronomy and related fields. The program infrastructure provides a research environment with the world's most advanced observational instruments and supercomputers. We aim to foster 1) researchers who can play an active role at the forefront of the international research; 2) specialists who will play leading roles in the development of advanced technology; and 3) personnel who will work to promote science against the back drop of advanced technical knowledge. We seek students who have a strong desire to tackle the problems they face, possess advanced academic skills, and are logical and creative.

# >> Program Outline:

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

# >> 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 Astronomical Observatory

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

  https://www.nao.ac.jp/en/



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



Simulation of turbulence from LHD first-principles

# SAKAKIBARA Satoru

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.

# **Fusion Science**

# **National Institute for Fusion Science**

National Institutes of Natural Sciences

### Be Born the Cosmic Energy on Earth

We aim to further studies on fusion energy, by fostering high quality researchers who can provide international leadership in the field. Graduates from our program will be able to use their advanced expertise in experimental physics and theoretical research on the confinement and stability of high temperature plasmas to contribute to society, conduct research in simulation science to elucidate these physical phenomena, and conduct elemental research on fusion reactor technology, including heating, measurement, superconductivity, and materials technology.

# >> Program Outline:

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

# >> 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 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/



An artist's impression of Hayabusa-2 attempting touchdown onto an artificial crater on the asteroid Ryugu.



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





An laboratory experiment

Participation in the sounding rocket experiment as the Field works course.

# **DOTANI** Tadayasu

The Space and Astronautical Science Program utilizes the rare environment of the world-leading institute for space science and engineering, and provides students an opportunity for high-level education and advanced research. The program covers a wide range of fields such as launch vehicles, spacecrafts, and scientific balloons. Students can learn practical research by touching on the most advanced and complex space projects. We are looking forward to the application of students who have a strong interest and motivation in space science and engineering.

# Space and **Astronautical Science**

# **Institute of Space and Astronautical Science**

Japan Aerospace Exploration Agency

This program provides comprehensive and cross-disciplinary education and research guidance in the fields of space science and engineering, namely solar system science and astrophysics and development of space technology. This program will foster researchers with high level expertise, broad perspectives, and international competitiveness. They are expected to lead future space science, development of space technologies, and utilization of space missions.

# >> Program Outline:

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

# >> 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.



### Institute of Space and Astronautical Science

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

# Graduate Institute for Advanced Studies



Measurement of the electronic state by UVSOR Synchrotron Facility photoelectron spectroscopy





Purification of proteins by highperformance liquid chromatography

# >> Chair

# YOKOYAMA Toshihiko

"Molecular science" was born as an interdisciplinary field linking chemistry and physics. In recent years, the research field has expanded greatly to include not only chemistry and physics but also biology. In this course, students will learn the cutting edge of molecular science through lectures and experiments by faculty members who are conducting research from the perspectives of (1) observation of unique structures and functions of molecules and molecular assemblies and development of new observation methods, (2) elucidation of the origins of such unique structures and functions through experimental and theoretical researches, and (3) design and synthesis of molecules and molecular assemblies having new structures and functions. We hope that through the experience of being at the cutting edge of academia, you will acquire scientific basis for a great future.

# Molecular Science

# Institute for Molecular Science

National Institutes of Natural Sciences

This program, offered by the Institute for Molecular Science (Okazaki City), fosters a future generation of researchers who will establish a systematic understanding of molecules—which are the basic constituent units of matter-and elucidate the diverse phenomena that matter presents. We aim to produce graduates who can conduct advanced research (experiments, measurements, theories, etc.), rationally understand the results of their research, challenge unexplored problems with creative ideas, create new intellectual values and universal truths, and contribute to the development of humanity based on molecular

# >> Program Outline:

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

# >> Career Options for Graduates in this Program:

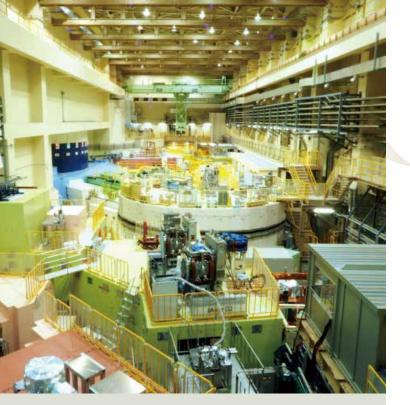
Career Opportunities for Graduates:

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/



Biological macromolecular X-ray crsytallography experiment using synchrotron radiation



Synchrotron Radiation Facility, Photon

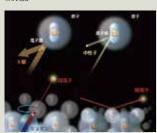


rimental hall of PF ©IMSS



Experimental Hall of Materials and Life Science Experimental Facility (MLF)





Four kinds of quantum beams

# SETO Hideki

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.

# **Materials Structure** Science

# Institute of Materials Structure Science

High Energy Accelerator Research Organization

# The World of Nanotechnology opened by Synchrotron Radiation, Neutrons, Muons, and Slow positrons

In this program, students can attend lectures and receive research guidance on cutting-edge materials science and life science, which employ the four quantum beams obtained from accelerators: synchrotron radiation, neutrons, muons, and slow positrons. In addition to research on a wide range of fields such as physics, chemistry, life sciences, applications in medical science, environmental sciences, and geophysics, students can also contribute to the development of new frontiers in materials science through the advancement of technologies for generating and using quantum beams. In a rich environment with access to multiple quantum beams, we will train researchers to develop broader perspective and expertise, and can play an active role on the international stage.

# >> Program Outline:

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

# >> 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/



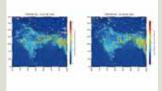
Project laboratory which reflects a research environment that allows for debates and mutually inspiring interactions without being bound by traditional laboratory setting



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



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



Changes in the concentration of nitrogen dioxide captured by satellite data (TROPOMI). (Left) directly before lockdown, (Right) immediately after lockdow (Aakash Project, implementation period: 2020–2024)



"Mizu-no-wa Classroom" in Yaese Town, Okinawa. Springwater survey with local children (LINKAGE project, implementation period: 2022-2026)



Towards sustainable use of nitrogen (Sustai-N-able Project、2022-2027)

# TAYASU Ichiro

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.

# Global Environmental **Studies**

# Research Institute for Humanity and Nature

National Institutes for the Humanities

The program of Global Environmental Studies 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 problemsolving approach in collaboration with society. The program is designed for students to gain knowledge and methodologies accumulated by the academic fields that constitute Global Environmental Studies and to become independent researchers who will engage in solving global environmental issues with their expertise. In addition, the program will provide research training that avails the research environment for cutting-edge research and the advantages of small-group education.

# >> Program Outline: Three-year doctoral program Doctor of philosophy

# >> Career Options for Graduates in this Program:

- Career Opportunities for Graduates
- Faculties engaged in education and research on environmental studies at universities and other institutions of higher education

Engineers, researchers, and support staff in environmentrelated fields at companies, government offices, national and public research institutes, local governments, international organizations, and NGOs

Researchers and curators at museums and other institutions



### Research Institute for Humanity and Nature

• 457-4 Motoyama, Kita-Ku, Kyoto, 603-8047

https://www.chikyu.ac.jp/rihn\_e/



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.

# HIRAWAKE Toru

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.

# **Polar Science**

# National Institute of Polar Research

Research Organization of Information and Systems

This program aims to nurture outstanding researchers with advanced research capabilities in space and planetary science, solar-terrestrial physics, atmospheric, oceanic, snow and ice sciences, solid earth science, and life science. It will enable graduates to explore universal principles and laws governing various natural and physical phenomena in the polar regions and high mountains. It also aims to elucidate the role of polar regions in the global planetary system, and variations in the global environment, as well as the geological and natural histories of polar regions.

# >> Program Outline:

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

# >> 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.



# National Institute of Polar Research

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



A variety of model organisms and novel model organisms under study



At the Laboratory





Graduation ceremony at the National Institute for Basic Biology



National Institute for Basic Biology, Myodaiji area



National Institute for Basic Biology.

# NIIMI Teruyuki

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 problemsolving 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.

# **Basic Biology**

# **National Institute for Basic Biology**

National Institutes of Natural Sciences

In the Basic Biology program, students will investigate the commonality and diversity that characterize living organisms, the universal mechanisms and the structure that maintain them, and the mechanisms of change that produce diversity. This program aims to train researchers who can discover more fundamental and important problems in biological sciences, and challenge themselves to solve these by cultivating the advanced research skills and rich academic knowledge necessary to conduct independent research activities as a researcher in this

# >> Program Outline:

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

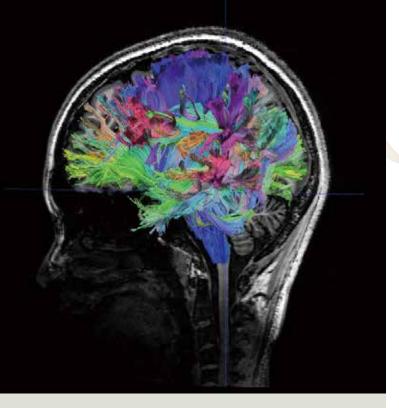
# >> Career Options for Graduates in this Program:

• 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

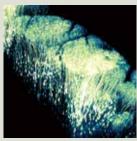
• 38 Nishigonaka, Myodaiji, Okazaki, 444-8585 Japan https://www.nibb.ac.jp/en/



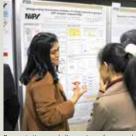
Research environment with access to advanced equipment



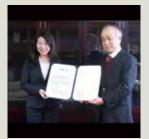
Careful research guidance in small



Three-dimensional imaging of living neurons in the brain



Presentation and discussion of research findings at an international meeting



A scene from the degree conferment ceremony



Magnetic resonance imaging of human brain

# **FURUSE Mikio**

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 Sciences**

# **National Institute for Physiological Sciences**

National Institutes of Natural Sciences

The Physiological Sciences program provides education and research guidance to comprehensively clarify the mechanisms of body functions, from the molecular-cellular level, which is the basic structure of living organisms, to the whole-body level, which is composed of systems. We train researchers to be active participants in the fields of medicine and life sciences, with a focus on physiology and neuroscience.

# >> Program Outline:

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

# >> Career Options for Graduates in this Program:

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



# National Institute for Physiological

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









Access to research facilities with



Develop ability to think and debate logically through practical discussion



Students may choose how deeply to immerse themselves in research



At poster presentations students can discuss their research progress with numerous faculty and researchers from



Frequent seminars by researchers from around the world in a wide variety of related fields

# **IWASATOTakuji**

Graduate students in the Genetics Program can enjoy science in the enriched environment of National Institute of Genetics (NIG). NIG has more numbers of faculties than students, thus, each student can choose some faculties from other NIG labs as his/her Progress Committee members and can obtain advice on his/her research from them at any time. The Progress Committee system is useful for students to widen the scope of their research by obtaining guidance from faculties having varying expertise. Alumni who received their basic training in NIG to become scientists play important roles in broad fields, both academic and non-academic.

# **Genetics**

# **National Institute of Genetics**

Research Organization of Information and Systems

This program fosters the ability of students to contribute as independent researchers in developing the field of life sciences, with genetics at its core. In addition to gaining the expertise to produce results from new and advanced research through thorough research guidance by multiple faculty members, this program fosters graduates with a deep insight and knowledge of the life science field, the ability to conceptualize the future of the field, to understand, discuss, and express science in English, and maintain high ethical standards as a researcher.

# >> Program Outline:

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

# >> 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



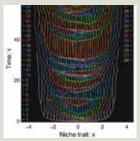
# National Institute of Genetics

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

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



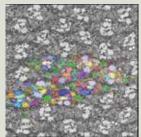
Wild Bornean Orangutans in



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



Octopaminergic neurons in the cricket brain



An electron micrograph of the visual center of the swallowtail butterfly



The skull of a Japanese wolf whose genome has been sequenced (photo: courtesy of Dr. Naotaka Ishiguro)

# KUTSUKAKE Nobuyuki

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**

# **Research Center for Integrative Evolutionary** Science

### A New Outlook on Life and the Future

Our aimis to foster individuals who can independently conduct outstanding research and contribute to society with a high level of expertise in either the field of biological evolution or the field of science and society. We offer programs where students acquire the skill to present and discuss their research and conduct internationally organized research projects with their expertise. At the same time, we offer programs that aim to cultivate individuals who have a broad perspective on scientific research, understand the relationship between science and society, and have a high awareness of research ethics.

# >> Program Outline:

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

# >> Career Options for Graduates in this Program:

• 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



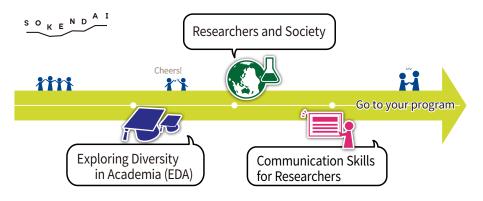
# Research Center for Integrative Evolutionary Science

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

# Educational Programs

# SOKENDAL Freshman Course

The Freshman Course is an intensive course for newly-enrolled 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 2022 (Japanese Course)

Date: April 5 - 8, 2022

Number of Participated Student: 68

■ Second Semester 2022 (English Course)

Date: October 4 - 7, 2022

Number of Participated Student: 24

■ First Semester 2023 (Japanese Course)

Date: April 4 - 7, 2023

■ Second Semester 2023 (English Course) (tentative)

Date: October 10 - 13, 2023

# **SOKENDAI Special Researcher Program**

# **SOKENDAI Cultural Forum / School of Cultural and Social Studies**

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.

# O Field-Specific Type

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

# O Pioneering Research Type

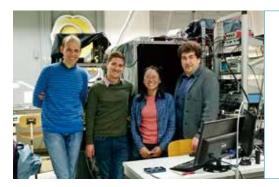
To support students who independently conduct original and challenging research that is not bound by the framework of existing research fields, departments, schools or other organizations.

# The number of SOKENDAI Special Researchers (AY2022)

Field-Specific Type	24 (Information and Artificial Intelligence: 12, Large-Scale and Advanced Research: 12)
Pioneering Research Type	15

# **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.



# 2022

Category 1 (Short-term Abroad Program)

Number of students supported: 11

Category 2 (Long-term Abroad Program)

Number of students supported: 6

**Category 3 (Long-term Domestic Program)** 

Number of students supported: 5

# **SOKENDAl** publication grant for research papers

The publishing cost support of the printing expenses is carried out for the academic paper which was a result of the research activities. This support is applicable only to the students who belong to SOKENDAI. Total 24 publications were supported in 2022.

# 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



Paris student residence





degree examination

research society in France

# **Joint School Seminars**

# **SOKENDAI Cultural Forum**

# October 1, 2022 face to face · Online (hybrid)

The forum is an event for academic exchanges organized by SOKENDAI's only liberal arts department, School of Cultural and Social Studies. Centering "culture" as a common focus, it offers a forum for interdisciplinary exchanges among faculties and students of various departments from inside and outside of the university.

As it provides a place to publish their research, the event functions as an educational opportunity for the students to present their research works and achievements and to learn presentation skills at the same time. Through these activities, the project also serves as a gateway for academic interactions between art and science students.

Furthermore, by involving students in the planning and organization of the event, students can exercise their planning skills and receive advice and support from faculties on project management through the collaboration, which in turn would facilitate students' ability as independent researchers.



# Life Science Retreat

# December 20-21, 2022 Online and Onsite

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.



In 2022, it was held over 2 days in a hybrid mode of online and onsite to prevent the spread of covid-19. A total of 97 (online) and 70 (onisite) 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**

- Collaboration with KOSEN via fabrication of compact accelerators OTANI Masashi (Assistant Professor, Accelerator Science)
- "Tan-Q" Science education and outreach program using compact cosmic-ray detector MIHARA Satoshi (Professor, Accelerator Science)
- Challenges in the Exploration of the Unknown: Cutting-edge Studies Young Researchers Discuss 2022 OISHI Masatoshi (Professor, Astronomical Science)
- Experiencing the Frontiers of Research: Radio Astronomy Observation Training for High School Students UMEMOTO Tomofumi (Assistant professor, Astronomical Science)
- Astronomers decoding mysteries of the universe ---from the ground and the space IKUTA, Chisato (Associate professor, Space and Astronautical Science)
- Training program for next-generation young researchers based on the community at Aomori, Rokkasho area ASHIKAWA Naoko (Associate professor, Fusion Science)

#### November 27, 2022

#### Shonan Kokusai-mura Academia Lecture Cafe Integral

#### Genomic Origins of Diversity in the Two-Horned Wolf and Canis lupus

TERAI Yohey(Assistant professor, Research Center for Integrative Evolutionary Science)

#### "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 nstitutes and foster future generations.

The program 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.

In FY2022, 173 fellows participated in this program.

USA 17, Canada 14, UK 26,

France 39, Germany 51, Sweden 26



Orientation program in 2019

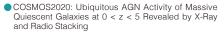


At the host institute in 2022

### **Press Release**

Research in 2022 published on the following papers are press released and subsequently appeared in newspapers and various media:

 Geography-dependent horizontal gene transfer from Stable isotopic investigation of the feeding vertebrate predators to their prev ecology of wild Bornean orangutans Connectome of the lamina reveals the circuit for early Plasticity for the kin and conspecific preferences in colour processing in the visual pathway of a butterfly the frog tadpoles (Rana ornativentris) Formulation of chromatin mobility as a function of Rice GLUCAN SYNTHASE-LIKE5 promotes anther nuclear size during C. elegans embryogenesis using polymer physics theories. callose deposition to maintain meiosis initiation and progression. Antigenic escape accelerated by the presence of Astronomers reveal first image of the black hole at the heart of our galaxy immunocompromised host Silencing the odorant receptor co-receptor impairs Evolutionary double suicide in symbiotic systems olfactory reception in a sensillum-specific manner in the cockroach





Single-nucleosome imaging reveals steady-state motion of interphase chromatin in living human cells



Mesospheric ionization during substorm growth



Evolutionary biological perspectives on current social

issues of breastfeeding and weaning



 A simplified model to estimate nonlinear turbulent transport by linear dynamics in plasma turbulence



## **SOKENDAI** Fund

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

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





## **SOKENDAI** Newsletter

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

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

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





# Research Center for Integrative Evolutionary Science

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.

#### Research Activities

- · Development of the body of knowledge on the basis of organismal evolution
- · Application of ideas gained from organismal evolution studies to other research fields
- · Development of our understanding of science, including its nature and place in society
- · Application of interdisciplinary expertise to seek solutions to various challenges in society

#### Other Activities

- · Graduate education and researcher training
- Domestic and international collaborative research
- Outreach

https://rcies.soken.ac.jp/index.html

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 academic 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.



Director, Research Center for IntegrativeEvolutionary Science Innan Hideki

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
- · 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
  - · Planning and implementation of CEPD online meetups

### **Institutional Research and Planning Section**

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

### **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 FAX: 81-46-858-1633 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

Book: (Japanese) approx. 22,800 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. 5,520 titles Institutional Repository: 5,300 titles approx.

As of April 1, 2023

### **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".

For inquiries or information: University Library

TEL: 81-46-858-1528 FAX: 81-46-858-1607 E-mail: lib@ml.soken.ac.jp

#### **Electronic Journals**

Q.

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

# DATA BOOK

### Nobel Prize Laureates from SOKENDAL

### Professor Emeritus, School of High Energy Accelerator Science



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

## The 2008 **Nobel Prize in Physics**

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

1999.4-2004.3 Professor, School of Mathematical and Physical Science 2004.4-2006.3 Professor, School of High Energy Accelerator Science 2003.4-2004.4 Chair, Department of Particle and Nuclear Physics Order of Culture 2008

### Professor Emeritus, School of Life Science



OHSUMI Yoshinori Professor Emeritus. SOKENDAI / National Institute for Basic Biology

## The 2016 Nobel Prize in Physiology or Medicine

for his discoveries of mechanisms for autophagy

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)

Name	Department	Prize
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 (after 2015)

Name	Department	Research Theme
ISHIGE Naomichi (Emeritus Professors)	Dept. of National Museum of Ethnology	Cultural anthropology (2021)
KAWAI Maki (Director General)	Dept. of 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 (after 2015)

Name	Department		Subject
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 Non- destructive 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 (after 2015)

Name	Department	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	2019	Theoretical Development of Quantum Dissipative Dynamics and Its Application to Primary Processes of Photosynthesis

#### ■ JSPS Ikushi Prize (after 2015)

Name	Department	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 9th SOKENDAI Award (September 28, 2022)

Name	Department	Doctoral thesis
CHEW(TORII) Yuki	Dept. of Functional Molecular Science	Ultrafast quantum dynamics of ultracold Rydberg atoms in arrays of optical tweezers
ATIS YOSPRAKOB	Dept. of Particle and Nuclear Physics	Complex Langevin, thimbles and tensor networks as solutions to the sign problem
Li Haoyu	Dept. of Informatics	Improving Neural-Network-Based Speech Enhancement for Noise Reduction and Intelligibility Boosting

### ■ The recipients of the 10th SOKENDAI Award (March 24, 2023)

Name	Department	Doctoral thesis
MORI Takato	Dept. of Particle and Nuclear Physics	Entanglement structure in quantum many-body systems, field theories, and holography
SAKAMOTO Takahiro	Dept. of Evolutionary Studies of Biosystems	Population genetics theory of natural selection

## **Academic Staff**

(As of May 1, 2023)

Category	Member ofthe Board	Professor Associate	Professor	Lecturer	Assistant Professor	Others	Secretaria	Total
President	1							1
Executive Director	2							2
Auditor	2							2
Vice Presiden	(1)							(1)
Graduate Institute for Advanced Studies								
Anthropological Studies		26	21					47
Japanese Studies		18	2					20
Japanese History		19	10					29
Japanese Literature		12	9					21
Japanese Language Sciences		11	7					18
Informatics		31	16		10			57
Statistical Science		21	20		6			47
Particle and Nuclear		31	37	20	15			103
Accelerator Science		49	46	17	55			167
Astronomical Science		30	36	4	45			115
Fusion Science		15	24		23			62
Space and Astronautical Science		22	40		14			76
Molecular Science		15	10		21			46
Materials Structure Science		19	22	6	19			65
Global Environmental Studies		9	7		1			17
Polar Science		12	17		16			45
Basic Biology		16	14		36			<b>6</b> 6
Physiological Sciences		17	14		21			<b>5</b> 2
Genetics		20	11		21			52
Integrative Evolutionary Science		(6)	(7)	(3)	(2)			(18)
Research Center for Integrative Evolutionary Science		6 (1)	7	3	2			18 (1)
The Center for Education Planning and Development	(1)		3	1				4 (1)
The Center for Academic Information Services	(1)						(1)	(2)
Secretariat etc.							41	41
Total	5 (3)	399 (7)	373 (7)	51 (3)	305 (2)	0	41 (1)	1174 (23)

<sup>\*</sup> 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.

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





		1st yea	r	2	2nd Yea	ar		3rd Year			4th Yea nd 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	45	17	2	0	0	0	34	12	6	0	0	0	0	0	0	79	29	8
Anthropological Studies							4	2								4	2	0
Japanese Studies							3	3	2							3	3	2
Japanese History							1	1								1	1	0
Japanese Literature							2	1								2	1	0
Japanese Language Sciences							4	2	3							4	2	3
Informatics	8	·/	·	·	<b></b>	<u></u>	5		1							13	0	1
Statistical Science	1						6	1								7	1	0
Particle and Nuclear Physics	8	4														8	4	0
Accelerator Science	1	1					1									2	1	0
Astronomical Science	4	1					1									5	1	0
Fusion Science	2															2	0	0
Space and Astronautical Science	3	1		ļ	ļ		1									4	1	0
Molecular Science	3	·					2	1								5	1	0
Materials Structure Science	ļ						<del>-</del>									0	0	0
Global Environmental Studies																0	0	0
Polar Science	2	2	1	<b>/</b>	<b>/</b>	<b>/</b>	1									3	2	1
Basic Biology	3	1	·				2	1								5	2	0
Physiological Sciences	2	1						·								2	1	0
Genetics	4	3	1													4	3	1
Integrative Evolutionary Science	4	3	·····				1									5	3	0
School of Cultural and Social Studies*1							0	0	0	7	5	4	42	21	10	49	26	14
Regional Studies							0	0	0	1	1	1	11	6	4	12	7	5
Comparative Studies		/	/			<u> </u>				1	<u>'</u>	'	8	4	2	9	5	2
Japanese Studies		/								3	2	3	9	4	4	12	6	7
	_	/								1	1		10	4	4	11	5	0
Japanese History		/	/	/	<u> </u>	/							4	3		5	3	0
Japanese Literature	0	0	0	17	3	1	16	1	5	1	3	5			8			
School of Physical Sciences*1  Structural Molecular Science	0	0	0	ļ	1		16		5	23		1	30	6		86	13	19
				2			1			5	2		3	1	2	11	4	
Functional Molecular Science				3						2		1	6	1	3	11	1	4
Astronomical Science				5	1		6	1	2	6			9	2	1	26	4	3
Fusion Science				3		1	7		3	6		3	4		2	20	0	9
Space and Astronautical Science				4	1	_	2			4	1		8	2		18	4	0
School of High Energy Accelerator Science*1	3	0	3	13	3	5	16	2	4	11	3	4	16	2	5	59	10	21
Accelerator Science	1		1	3	2	2	2	1	1	3	1		3		1	12	4	5
Materials Structure Science				3	1	1				2		1	3	1	2	8	2	4
Particle and Nuclear Physics	2		2	7		2	14	1	3	6	2	3	10	1	2	39	4	12
School of Multidisciplinary Sciences*1	6	1	4	15	1	4	25	1	9	24	6	11	51	11	13	121	20	41
Statistical Science				1	ļ		8			4			17	3	1	30	3	1
Polar Science				3			1			1			7	2		12	2	0
Informatics	6	1	4	11	1	4	16	1	9	19	6	11	27	6	12	79	15	40
School of Life Science*1	4	3	3	16	6	8	13	6	6	21	6	9	36	13	10	90	34	36
Genetics	2	1	2	10	4	6	9	5	6	9	2	5	10	3	5	40	15	24
Basic Biology	1	1		1			1			10	3	3	13	6	2	26	10	5
Physiological Sciences	1	1	1	5	2	2	3	1		2	1	1	13	4	3	24	9	7
School of Advanced Sciences*1	0	0	0	4	2	0	3	2	0	3	1	0	9	6	1	19	11	1
Evolutionary Studies of Biosystems				4	2		3	2		3	1		9	6	1	19	11	1
Total	58	21	12	65	15	18	107	24	30	89	24	33	184	59	47	503	143	140

<sup>\*1</sup> 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

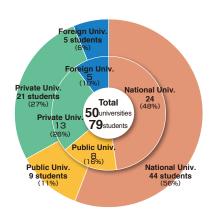
## **Applicants and Enrollments**

(As of April 1, 2023)

	0	ota										Backgr	round						
December		nber of ts to be	Appli	cant	Pas	ser	Adm Stud			Gender			Interna	ational	Jobholder				
Department	acce	pted)							Ma	Male		nale	Students		Jobholder				
	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	90	69	52	35	45	34	28	22	17	12	2	6	3	15			
Anthropological Studies	(-)	(4)		6		4		4		2		2				2			
Japanese Studies	(-)	(3)		9		3		3				3		2		3			
Japanese History	(-)	(3)		4		1		1				1				1			
Japanese Literature	(-)	(2)		4		2		2		1		1				1			
Japanese Language Sciences	(-)	(3)		10		4		4		2		2		3					
Informatics	(8)	(12)	14	5	9	5	8	5	8	5				1	3	2			
Statistical Science	(2)	(6)	2	12	1	6	1	6	1	5		1				4			
Particle and Nuclear Physics	(6)	(1)	19	3	9		8		4		4								
Accelerator Science	(2)	(1)	2	1	2	1	1	1		1	1								
Astronomical Science	(5)	(1)	16	3	5	1	4	1	3	1	1								
Fusion Science	(3)	(2)	3		2		2		2										
Space and Astronautical Science	(4)	(3)	3	1	3	1	3	1	2	1	1					1			
Molecular Science	(7)	(5)	4	2	4	2	3	2	3	1		1				1			
Materials Structure Science	(2)	(1)																	
Global Environmental Studies	(-)	(2)		2															
Polar Science	(2)	(1)	5	1	3	1	3	1	ř	1	3		1		<u></u>				
Basic Biology	(5)	(3)	7	2	5	2	3	2	2	1	1	1							
Physiological Sciences	(3)	(6)	2	1	2		2		1		1								
Genetics	(6)	(2)	5	1	4	1	4		1		3		1						
Integrative Evolutionary Science	(3)	(1)	8	2	3	1	3	1	1	1	2								

<sup>():</sup> Number of Students to be accepted

## Admission of the 2023



Japanese National Universities	
Hokkaido University	2
Hirosaki University	1
Tohoku University	4
Yamagata University	1
University of Tsukuba	3
Tsukuba University of Technology	1
Chiba University	1
The University of Tokyo	4
Tokyo Institute of Technology	1
Ochanomizu University	2
The University of Electro-Communications	1
Niigata University	1
Nagaoka University of Technology	1
University of Fukui	1
Toyohashi University of Technology	2
Kyoto University	8
Osaka University	1
Kobe University	1
Nara Institute of Science and Technology	1
Okayama University	1
Hiroshima University	2
Yamaguchi University	1
Ehime University	2
Kyushu University	1

Japanese Public Universities	
Yokohama City University	1
Ishikawa Prefectural University	1
Fukui Prefectural University	1
Kyoto Prefectural University	1
Osaka Prefecture University	2
University of Hyogo	1
Hiroshima City University	1
Okinawa Prefectural University of Arts	1

#### Japanese Private Universities

Aoyama Gakuin University	1
J. F. Oberlin University	1
Gakushuin University	1
Kogakuin University	1
Chuo University	1
Tokyo Denki University	1
Tokyo University of Science	5
Toho University	1
Nanzan University	1
Nihon University	3
The Open University of Japan	1
Ritsumeikan University	2
Waseda University	2

### Foreign Universities

Donghua University	1
Korea Advanced Institute of Science and Technology	1
University of London	1
King's College London	1
Arizona State University	1

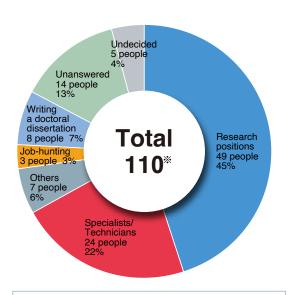
## **Degrees Awarded**

	For the period of 1991~2017	2018	2019	2020	2021	2022	Total		
Doctor of Philosophy	2022 [143] (254)	75 [8] (5)	72 [8] (3)	87 [9] (7)	82 [4] (3)	97 [12] (5)	2435 [184] (277)		

<sup>( ):</sup> The number of those who were granted the Ph.D. by way of Dissertation (not included in the total).

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

## Career Tracking / Data of the 2022



#### Breakdown of the total

The number of those who completed a course and obtained a degree: 85

The number of those who left the university after obtaining the credits required for completion of a course in the relevant academic year: 25

#### Universities/Research institutes,etc ······

The University of Tokyo

Kyoto University

Tohoku University

Nigata University

Hiroshima University

Japan Women's University

North Carolina State University

Université Angers

Duy Tan University

Hanoi University

Dartmouth College

The Scripps Research Institute

Geospatial Information Authority of Japan

Exploratory Research Center on Life and Living Systems

Institute for Molecular Science

National Astronomical Observatory of Japan

High Energy Accelerator Research Organization (KEK)

Institute of Materials Structure Science

Institute of Statistical Mathematics

National Institute of Informatics National Institute of Genetics

National Institute for Basic Biology

National Institute for Physiological Sciences

National Institute of Information and Communications Technology

National Institute of Technology, Oita College

Samejima Hospital

Saga Prefecture

Nagasaki Prefecture

#### Private companies/Public service corporation ······

Ushio Inc. Nikkei Inc.

Resonac Holdings Corporation

BrainPad Inc.

Altech Corporation

Hitachi, Ltd.

TOYOTA MOTOR CORPORATION

Mizuho-DL Financial Technology Co., Ltd.

Asahi Kasei Corporation

SMBC Nikko Securities Inc.

Yamamoto Chemicals.Inc.

Mitsubishi Electric Corporation

Aichi Steel Corporation

Fujitsu Ltd.

NIPPON TELEGRAPH AND TELEPHONE CORPORATION

INTAGE Inc.

Nikkei Business Publications, Inc.

Gigaphoton Inc

Rakuten Group, Inc.

Google Japan G.K.

Cornea Technologies Ltd.

Tokai Technology Center

YAZAKI Corporation

Astroscale Japan Woven Planet Holdings, Inc

Indeed, Inc.

Institute for Creative Integration

## **International Exchange**

### **Number of International Students**

(As of May 1, 2023)

							3	rd Yea	ar	4	th Yea	ar	5	th Yea	ır		(As of May 1, 2023)					
	1	1st Year			2nd Year			(1st Year**)			(2nd Year**)			(3rd Year**)			Total			Research Studen		
		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	2	1	1	0	0	0	6	3	0	0	0	0	0	0	0	8	4	1	4	3	:	
Advanced Studies																0	0	0	1	1		
SOKENDAI							2	2								2	2	0				
Japanese History																0	0	0				
Japanese Literature																0	0	0				
Japanese Language Sciences							3	1								3	1	0				
Informatics							1									1	0	0	1	1		
Statistical Science																0	0	0				
Particle and Nuclear Physics																0	0	0	1			
Accelerator Science																0	0	0				
Astronomical Science																0	0	0	1	1		
Fusion Science																0	0	0				
Space and Astronautical Science																0	0	0				
Molecular Science																0	0	0				
Materials Structure Science																0	0	0				
Global Environmental Studies																0	0	0				
Polar Science	1	1														1	1	0				
Basic Biology																0	0	0				
Physiological Sciences		l														0	0	0				
Genetics	1		1													1	0	1				
Integrative Evolutionary Science			<u>'</u>													0	0	0				
chool of Cultural and Social Studies *	0	0	0	0	0	0	0	0	0	4	3	0	10	6	0	14	9	0	4	2	_	
Regional Studies	0	0	0	0	0	0	0	0	0	1	1	0	4	2	0	5	3	0	-		_	
Comparative Studies											'		2	1		2	1	0				
		ļ								3	2		4	3		7	5	0	3	2		
Japanese Studies										3	2		4						3			
Japanese History																0	0	0				
Japanese Literature							-			-			0			0	0	0	1			
chool of Physical Sciences *	0	0	0	1	0	0	5	0	3	5	1	1	8	1	1	19	2	5	1	1		
Structural Molecular Science										1	1		2		1	3	1	1				
Functional Molecular Science										1			3	1		4	1	0				
Astronomical Science							2		2				1			3	0	2	1	1		
Fusion Science				1			3		1	3		1	2			9	0	2				
Space and Astronautical Science																0	0	0				
chool of High Energy Accelerator Science 💥	3	0	2	5	2	4	4	1	1	4	1	3	5	1	3	21	5	13	0	0		
Accelerator Science	1		1	2	1	2	1	1					1		1	5	2	4				
Materials Structure Science				1	1	1				1		1	2	1	2	4	2	4				
Particle and Nuclear Physics	2		1	2		1	3		1	3	1	2	2			12	1	5				
chool of Multidisciplinary Sciences 💥	4	1	3	4	1	2	9	1	2	11	4	5	13	5	4	41	12	16	0	0		
Statistical Science													1	1	1	1	1	1				
Polar Science		ļ														0	0	0				
Informatics	4	1	3	4	1	2	9	1	2	11	4	5	12	4	3	40	11	15			_	
chool of Life Science ※	3	2	1	8	3	6	6	4	4	9	3	5	10	5	5	36	17	21	0	0		
Genetics	2	1	1	6	3	5	6	4	4	5	1	2	5	1	2	24	10	14				
Basic Biology										3	1	2	2	1	1	5	2	3				
Physiological Sciences	1	1		2		1				1	1	1	3	3	2	7	5	4				
School of Advanced Sciences **	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0		
Evolutionary Studies of Biosystems													1	1	1	1	1	1				
Total	12	4	7	18	6	12	30	9	10	33	12	14	47	19	14	140	50	57	9	6		

 $<sup>^\</sup>star$  The number of female students and international students is included in the total.  $^{\star\star}$  The year of a 3-year doctoral program

### **Number of International Students**

(As of May 1, 2023)

Country or Region	1st Year		2nd Year			3rd Year (1st Year**)			4th Year (2nd Year**)			5th Year (3rd Year**)				Total		Research Student			
Country of neglon		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	8	3	4	11	4	7	25	7	6	29	11	12	39	19	12	112	44	41	5	5	1
India				2	2	2	3	1	2	3	2	1	3		1	11	5	6	1	1	1
Indonesia				1		1	1		1				1	1	1	3	1	3			
Sri Lanka	1		1				1									2	0	1			
Thailand	1		1	1		1	1		1	1		1	1			5	0	4			
Nepal				1		1										1	0	1			
Bangladesh							1	1	1				2	1	2	3	2	3			
philippines										1		1	2	2	2	3	2	3			
Viet Nam	1		1	2	2	2	1		1	5	3	4	3	1	2	12	6	10			
Malaysia										2	2	2				2	2	2			
Mongolia													1			1	0	0			
Korea				2			1			1			2			6	0	0			$\overline{}$
China	3	2	1	2			14	5		15	4	3	23	14	4	57	25	8	4	4	
Taiwan	2	1					2			1			1			6	1	0			$\overline{}$
Africa	1	0	1	2	1	1	0	0	0	0	0	0	2	0	0	5	1	2	0	0	0
Algeria	1		1													1	0	1			
Egypt				1	1											1	1	0			$\vdash$
Ghana													1			1	0	0			
Nigeria				1		1										1	0	1			$\vdash$
South Africa													1			1	0	0			_
Europe	2	1	1	3	1	3	3	1	2	2	1	1	4	0	2	14	4	9	3	1	3
Ireland				1		1										1	0	1			
Kazakhstan	1		1	2	1	2	2	1	2	2	1	1	1		1	8	3	7			
Spain																0	0	0	1		1
Germany	1	1											2		1	3	1	1	1		1
France							1									1	0	0	1	1	1
Belarus													1			1	0	0			
Near and Middle East	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1	1	0		0
Syrian							1	1	1							1	1	1			
North America / Central America	1	0	1	1	0	0	1	0	1	1	0	0	2	0	0	6	0	2	1	0	0
USA	1		1				1		1							2	0	2			
Canada				1												1	0	0	1		$\vdash$
Mexico										1			2			3	0	0			$\vdash$
South America	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	2	0	2	0	0	0
Brazil				1		1									-	1	0	1			
Peru				<u> </u>		-				1		1				1	0	1			$\vdash$
Total	12	4	7	18	6	12	30	9	10	33	12	14	47	19	14	140	50	57	9	6	4

 $<sup>^{\</sup>star}$  The number of female students and international students is included in the total.  $^{\star\star}$  The year of a 3-year doctoral program







## **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 Univeristies**

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
Russia	Novosibirsk State University	March 12, 2020
Norway	UiT The Arctic University of Norway	November 07, 2019
Italy	Università di Bologna	July 20, 2020
Indonesia	Universitas Gadjah Mada Fakulta Ilmu Budaya	December 27, 2019
USA	University of Hawaii at Manoa	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
Russia	Peter the Great St. Petersburg Polytechnic University	January 23, 2019
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
Okinawa Institute of Science and Technology	October 1, 2021
Kwansei Gakuin University, Graduate School of Science and Technology	April 1, 2022

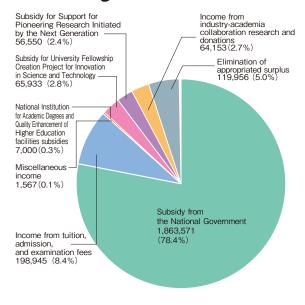
### **Academic Agreement with** Universities in Kanagawa

Unive	ersities/Institutes	Date of Agreement
Azabu University	Graduate School of Veterinary Science	
- Laba Officially	Graduate School of Environmental Health	
	Gradate School of Law Gradate School of Economics	
	Gradate School of Business Administration	
	Gradate School of Foreign Languages	
Kanagawa University	Gradate School of Science	
	Gradate School of Engineering	
	Gradate School of History and Folklore Studies	
	Gradate School of Human Science	
Kanagawa Institute of Technology	Graduate School of Engineering	
	Graduate School of Humanities	
	Graduate School of Economics Graduate School of Law	
Kanto Gakuin University	Graduate School of Law Graduate School of Engineering	
	Graduate School of Burgineering  Graduate School of Nursing	
	Graduate School of Science	
	Graduate School of Medical Sciences	
	Graduate School of Nursing	
Kitasato University	Graduate School of Pharmacy	
	Graduate School of Veterinary Medicine	
	Graduate School of Marine Biosciences	
	Graduate School of Infection Control Sciences	
Shonan Institute of Technology	Graduate School of Engineering	
	Graduate School of Economics	l 40 000
Panahu I Inivaraity	Graduate School of Law Graduate School of Humanities	January 10, 200
Senshu University	Graduate School of Business Administration	
	Graduate School of Commerce	
Tsurumi University	Graduate School of Leterature	
outum omrorony	Graduate School of Law	
Toin University of Yokohama	Graduate School of Engineering	
	Graduate School of Sport Sciences	
	Graduate School of Letters	
	Graduate School of Political Science	
	Graduate School of Economics	
	Graduate School of Law	
	Graduate School of Arts	
Tokai University	Graduate School of Physical Education	
	Graduate School of Science Graduate School of Engineering	
	Graduate School of Marine Science and Technology	
	Graduate School of Health Science	
	Graduate School of Human Environmental Studies	
Tokyo Polytechnic University	Graduate School of Engineering	
	Graduate School of Bioresource Sciences	
Nihon University	Graduate School of Veterinary Medicine	
	Graduate School of Medicine	
Yokohama City University	Graduate School of Urban Social and Cultural Studies	
ionormal only officially	Graduate School of Nanobioscience	
	Graduate School of Medical Life Science	
	Graduate School of Engineering	
Yokohama National University	Graduate School of Environment and Information Sciences Graduate School of Education	M 00 0000
TOKOTIATTIA NATIOTIAI OTTIVEISITY	Graduate School of International Social Sciences	March 20, 2002
	Graduate School of Urban Innovation	
Tokyo Institute of Technology	Graduate School of Life Science and Technology	April 1, 2002
Meiji University	Graduate School of Agriculture	
, ,	Devision of Humanities	4 "14 0004
Ferris University	Devision of Global and Inter-cultural Studies	April 1, 2004
	Devision of Music	
NSTITUTE of INFORMATION SECURITY	Graduate School of Information Security	April 1, 2005
Tokyo City University	Graduate School of Environmental and Information Studies	April 1, 2007
Sagami Women's University	Graduate School of Nutritional Sciences	April 1, 2009
	Graduate School of Social Entrepreneurship	April 1, 2021
Shoin University	Graduate School of Business Administration	April 1, 2009
Aoyama Gakuin University	Graduate School of Science and Engineering Graduate School of Information and	April 1, 2010
Bunkyo University	Communications	April 1, 2013
Kanagawa Dental University	Graduate School of Dental Sociology	April 1, 2014
Kamakura Women'S University	Graduate School of Child Studies	April 1, 2015
St. Marianna University School Of Medicine	Graduate School of Medichine	April 1, 2010
Showa University	Graduate School of Health Sciences	April 1, 2016
	Graduate School of Art and Design	, 2010
Joshibi University Of Art And Design Den-En Chofu University	Graduate School of Human Science	April 1, 2018

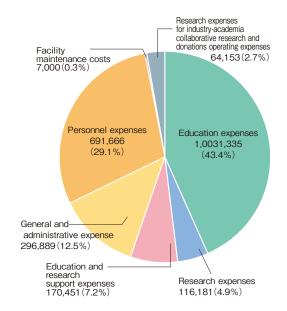
## FY2023 Income and Expenditures Budget

(Yen, Thousand)

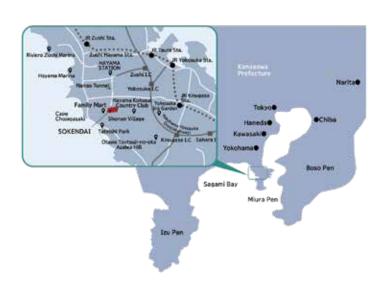
#### ■Total Budget Income 2,377,675



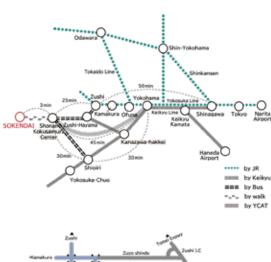
### ■Total Expenditures Budget 2,377,675



## **ACCESS**



[Hayama campus] Shonan Village, Hayama, Kanagawa, 240-0193 Japan TEL: 81-46-858-1500







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.

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