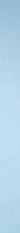


SENTAN-Q Annual Report 2019

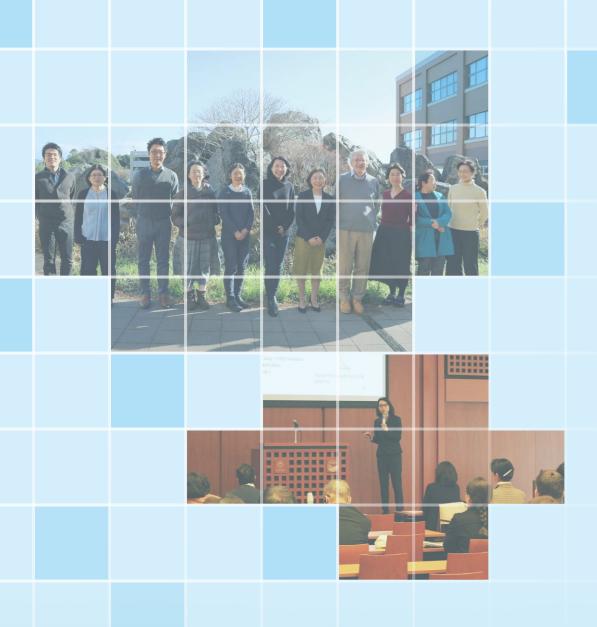






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This Annual Report introduces the efforts of Kyushu University in the first year of "Diversity and Super Global Training Program for Female and Young Faculty(SENTAN-Q)" which initiated in FY2019. SENTAN-Q's is a diverse program and the Annual Report includes general description, objectives and contents of SENTAN-Q, selection of trainees, screening, and introduction of first-year students.

SENTAN-Q incorporates advanced, diverse, and international elements. Kyushu University will produce many faculties who have world-class research and excellent leadership through SENTAN-Q. I very much appreciate to those involved and assisted in preparing the Annual Report.

March, 2020 Mariko Ogawa Office for the Promotion of Gender Equality, Kyushu University

# SENTAN-Q Annual Report 2019

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# **Greetings**



## SENTAN-Q Supervisor

President, Kyushu University

#### Chiharu Kubo

In Autumn 2019, Kyushu University established a new slogan, "Leap into the Next." In order to achieve research and human resource development that realizes this message, it is absolutely critical that the university work to further its abilities in research and education to ensure an elite level of quality that is internationally recognized. It is the acquisition and training of superior personnel that will serve as the key to this mission. With the adoption of the MEXT's 2019 Science and Technology Human Resource



Development Support Program, "Initiative for Realizing Diversity in the Research Environment", Kyushu University intends to utilize this model as an opportunity to help ensure its swift implementation for 100 years of future progress. In order to encourage active and vigorous participation from its female and young faculty, strengthen itself and help solidify its position as an eminent global university, Kyushu University initiated the "Diversity and Super Global Training Program for Female and Young Faculty (SENTAN-Q)" program.

Each year, ten individuals from among the university's female and young faculty who have maintained superior performance records are selected to undergo training led by overseas researchers with elite skills and abilities. Through this experience, the trainees pragmatically fortify their abilities in research education to be among the highest levels found around the globe. The aim of this program is to accelerate the appointment of female and young faculty to top-level and managerial positions and to help build a research education environment that will propel Kyushu University to global recognition as an eminent research university.

These operations will serve as a link in a wide-ranging administrative reform that places greater focus on female, young, and foreign researchers in Kyushu University's mid-term objectives, mid-term plans, national university administration reform promotion, and other activities, and will be implemented via university-wide cooperation. Trainee candidates were named at the beginning of this fiscal year, selected from a large pool of excellent individuals belonging to various departments. The selection committee was formed that include experts from outside the university was formed, and the trainee selection decisions were reached via a highly transparent review process. As a general rule, after completing two years of training, successful candidates advance to having more responsibilities within one year.

In these SENTAN-Q operations, it will select 6th term trainees over the six-year program period. There are high expectations to see the participation of as many ambitious female and young faculty as possible, gaining internationally recognized skills, and developing the ability to compete globally, thus contributing to Kyushu University's position as a center for excellence, one that maintains research standards of the highest level to be found in the world.

Our SENTAN-Q program has only just begun, but I would like to encourage your close observation of the growth and advancements moving forward—both of the selected trainees and of our university—as we work to thrive even more on the global stage.



# SENTAN-Q Implementer

Executive Vice President, Secretary-General, Kyushu University

### Toshiya Naito

This year marks the 5th year since the United Nations first formulated the Sustainable Development Goals, or SDGs. In Japan, many undertakings are advancing in various fields in a pursuit of a vibrant society supported by diverse human resources including the expansion of women's roles. As we at Kyushu University aspire to thrive



as a global hub of education and research, it is essential to implement an infrastructure in which diverse talents play active roles. Among these strategies, the active recruitment and appointment of female researchers is especially important to vitalize research activities, driven by a variety of standpoints and ideas.

To this end, Kyushu University has been strengthening efforts to promote gender equality, including creating international recruitment for women-only position openings (KASOKU), introduction of Dual Career Couples Policies, and implementation of support programs for balancing research and child-rearing. Now, we are pleased to announce the launch of the "Diversity and Super Global Training Program for Female and Young Faculty (SENTAN-Q)," following selected for funding under MEXT's 2019 Initiative for Realizing Diversity in the Research Environment, which is a Human Resource Development Support Program. The program aims to foster world-class female and young researchers who will lead research and education in the coming generations. Under the initiative, we have already been operating the SENTAN-Q Program, inviting top-level researchers from abroad since January

Kyushu University is committed to SENTAN-Q and producing world-class researchers, as the program bears great significance in promoting gender equality in education and research environment, as well as for our university in gaining momentum as the world's leading research university.

I would like to express my heartfelt appreciation to those involved for their efforts in coordinating with other universities from home and abroad and establishing systems in place on campus.

#### SENTAN-Q Coordinator

Vice President, Distinguished Professor, Kyushu University

#### Kaoru Tamada

The importance and difficulty of realizing a diversity-inclusive society has been discussed during various occasions in Japan. This is not only an issue of gender inclusivity but also includes the matter of how we accept differences in race, nationality, age, academic background, physical features, economic circumstances, and



so on, that is, how we establish a sustainable society in which we all can share and live together. Kyushu University has proposed a mindset comprised of the three Cs: Challenge, Change, and Creation (recently, Collaboration has also been included as the fourth C). However, I would like to ask you to consider resolutions of the following three Bs as well: Bias, Barriers, and Boundaries\*, for the establishment of a diversity-inclusive society. The SENTAN-Q program provides an opportunity for students and faculty, for both women and men, to learn together with regard to our and our university's futures, regardless of age, sex, position, or department. It is not difficult to imagine that a university driven by these faculties would be highly attractive. I will continue running the program by dreaming of a future when our trainees will lead the university. I deeply appreciate your understanding of and cooperation with the SENTAN-Q program.

<sup>\*</sup>The idea of the three Bs was conceived in collaboration with Dr. Hisako Otsubo, Research Institute of Pharmacy, Nihon University.

# General Description of SENTAN-Q



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Kyushu University was selected for funding under MEXT's 2019 Initiative for Realizing Diversity in the Research Environment, which forms part of the ministry's agenda to support careers in Science and Technology Human Resource Development Support Program. Kyushu University has been designated to play a pioneer role in this initiative. Pioneers lead the way in creating a more diverse and inclusive research environment, one that empowers women academics to rise to the top of their professions. The work pioneers do include, for example, helping women find placements overseas and providing them with further career support upon their return.

As part of this pioneer role, Kyushu University has launched the **SENTAN-Q** program. Through SENTAN-Q, we will unleash the full potential of our female faculty, as well as that of our younger male faculty, and thereby become a truly world-class university. We will provide these individuals with top-class training in research and teaching skills to fast-track their promotions to senior and management positions. In this way, we will achieve a research environment the international community recognizes as truly global.

SENTAN-Q consists of six steps:

**STEP1** Selection of trainees

STEP2 University governance, diversity and inclusive education (on campus)

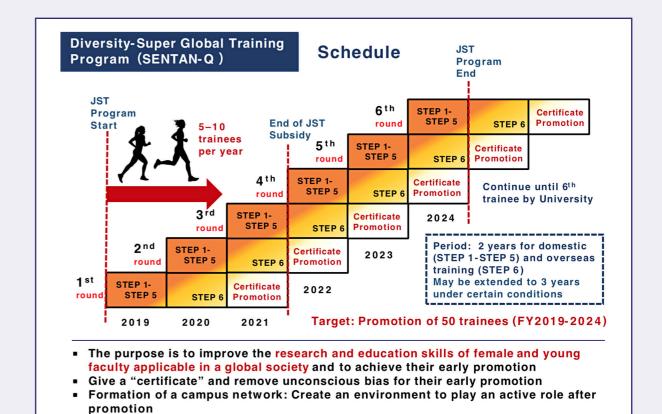
STEP3 Teaching methodologies for active learning (on campus)

STEP4 Directed study and guidance of foreign students (on campus)

STEP5 Up-to-date field-specific recurrent training (on campus)

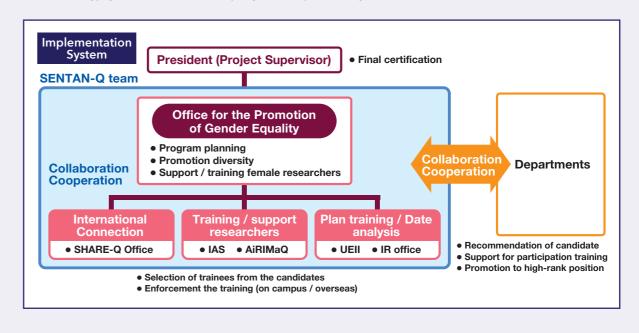
STEP6 Final Examination: Class teaching and directed study (overseas)





Trainees who attain the targeted learning level will earn a certificate and receive a tenured position or a one-rank promotion. The program lasts two years (including the time at an overseas university). However, we can adjust the duration to accommodate maternity, child-rearing, or long-term care needs. SENTAN-Q will aim to train 50 individuals in six years. Information about the program's progress as well as trainees' accomplishments will be published in Polymorfia (ISSN 2424-1113), the journal of the Office for the Promotion of Gender Equality, Kyushu University. We will also work with the All Nippon Diversity Network to share our findings and insights across Japan.

SENTAN-Q is a university-wide undertaking that forms part of our efforts to make the university more inclusive for young researchers, female, and non-Japanese nationals, as outlined in our medium-term strategy/goals and in MEXT's program for promoting reform in national universities.



# Objectives and Contents of SENTAN-Q



### **Objective of SENTAN-Q**

This program is designed for outstanding female and young faculty members at Kyushu University to establish themselves as world top-class, competitive researchers through cutting edge diversity & global training.

Trainees in this program are selected through a highly transparent screening process from candidates recommended by each department. In principle, the trainees will take a 2-year diversity and global training course. When the trainees complete the course, a certificate and tenure or a one-level promotion is given within 1 year.

In the course, the trainees will acquire research and education skills that meet global standards, and the wide knowledge required of a senior or managerial researcher. Furthermore, the program envisions the formation of an on-campus network that goes beyond gender boundaries and crosses different research fields (the elimination of unconscious bias)

#### Contents of SENTAN-Q

This program consists of 6 steps;

**STEP 1** *Selection of trainees* 

**STEP 2** University governance, diversity and inclusive education (on campus)

**STEP 3** Teaching methodologies for active learning (on campus)

**STEP 4** Directed study and guidance of foreign students (on campus)

**STEP 5** Up-to-date field-specific recurrent training (on campus)

**STEP 6** Final Examination: Teaching and directed study (overseas)

**Period** 

2 years for each trainee (can be extended under certain conditions, e.g. maternal leave or nursing care).

The program will run from 2019 to 2024 (6 application rounds for 5-10 trainees each). The program is expected to promote about 50 trainees. Trainees who complete the course receive a certificate from the president and are granted a tenured position or a one-level promotion.

#### **STEP1** Selection of trainees

Qualified applicants Female faculty, or male faculty aged 37 and under at the end of each FY (associate professor, lecturer and assistant professor).

(1) Tenured faculty (2) Untenured faculty but scheduled for a tenure review

Selection criteria:

(1) Sufficient research achievements (2) A positive attitude to learning about new issues related to universities and society (3) Motivated to improve global research and education skills including overseas training

#### University governance, diversity and inclusive education (on campus)

Objective:

Learn about the importance of university governance, diversity and inclusion. Lecturers are invited from the world's top universities (mandatory course).

University governance: Long-term perspective of what a university should be and university Management. University vice president or former vice president, lecturers invited from overseas top universities.

Diversity and inclusive: The importance of diversity and inclusion in university and society, and various innovative cases born from these concepts. The lecturers are an expert invited from overseas.

#### Teaching methodologies for active learning (on campus)

Objective: Learn about the latest teaching methodologies for active learning from lecturers affiliated with world-class universities (mandatory course). The lecturer is an expert invited from an overseas world-class university

#### **STEP4** Directed study and guidance of foreign students (on campus)

Objective: Learn how to carry out research guidance in English for international students while receiving guidance from a world-class senior researcher as a mentor

Content: Setting a research theme, carrying out research guidance in English, paper writing, etc. with international students (maximum 2), supervised by a overseas mentor.

> The overseas mentor should be a university researcher who meets the requirements of a top-level university (Progress 100). The trainee selects the international students and the overseas mentor. In principle, the writing of one international co-authored paper is required. Web conferencing technology will be made available for overseas communication.

#### STEP5 Up-to-date field-specific recurrent training (on campus)

Objective: Select your extra-professional field from Kyushu University's priority issues, such as data science (Al or IoT) or SDGs and receive permanent training to broaden your scientific view. This will be helpful to remain highly active after promotion through the establishment of interdisciplinary fields, research centers, and budget requests.

Content: Two or more courses to be taken from the course list. STEP 5 can be completed after STEP 6 overseas research.

#### Final Examination: Teaching and directed study (overseas)

Objective: Overseas training constitutes the final examination of SENTAN-Q. It determines whether the trainees developed research and educational skills that are internationally valid.

**Period** 

Overseas staying period should be more than 8 weeks.

Place

An overseas university (In principle, this should be a university with which an exchange agreement is in place, but it can also be another top university). Only trainees who have completed STEP 2 through STEP 4 can participate in STEP 6.

The trainee selects the overseas university and mentor. In principle, as in STEP 4, the writing of one international co-authored paper is required.

#### Evaluation of the trainee's achievements

For STEP 2, STEP 3 and STEP 5, lecturers conduct a quantitative evaluation of the trainee's achievement based on rubric tables.

For STEP 4 and STEP 6, the overseas mentor form a world-class university determines whether the trainee has acquired internationally valid research and education skills, taking into consideration the achievement of internationally co-authored papers.

Final certification of the training (in principle after 2 years) is decided by the President after deliberation by the committee.



#### Timeline leading up to STEP 1

I	July	MEXT informs the university that it has been selected for funding.
August	, September	The university designs the System of SENTAN-Q.
	September	The university decides on a payroll subsidy (a points-based system for subsidizing the promotion of trainees to senior positions).
I	September	The university establishes project protocols and nomination criteria.
Septem	ber, October	The university organizes a team to selection committee.
	per, October, er, December	The university investigates practices inside and outside Japan for training program and lecturers, and makes arrangements with the institutions concerned.
Octobe	r, November	The university starts the application of the candidates
Octobe	r, November	The university produces an unbiasing checklist to remove unconscious/hidden bias from the candidate selection process.

## SENTAN-Q's management team

Name	Affiliation	Remark
Chiharu Kubo	President	SENTAN-Q Supervisor
Toshiya Naito	Ececutive Vice President, Secretary-General	SENTAN-Q Implementer
Kaoru Tamada	Vice President, Distinguished Professor	SENTAN-Q Coordinater
Eriko Jotaki	Office for the Promotion of Gender Equality	Coordinater
Satoko Fukahori	University Education Innovation Initiative	Coordinater
Makoto Aratomo	Ececutive Vice President	Advisor
Tatsuro Ishibashi	Ececutive Vice President	Advisor
Hiroyuki Sasaki	Senior Vice President, Distinguished Professor	Advisor
Kazuo Ogata	Senior Vice President, Professor	Advisor
Kazunari Sasaki	Senior Vice President, Distinguished Professor	Advisor
Mamiko Takeuchi	Office for the Promotion of Gender Equality	
Mariko Ogawa	Office for the Promotion of Gender Equality	
Tae Fujita	Office for the Promotion of Gender Equality	
Naomi Suzuki	Office for the Promotion of Gender Equality	
Shoshiro Takeyoshi	Director of Human Resources Department	
Tetsuya Ojiro	Director of Planning Department	
Seiga Gotou	Director of Research and Industrial Collaboration Promotion Department	
Hiroaki Motomura	Director of International Affairs Department	
Noriyasu Sato	Director of Finance Department	
Kazunari Yamashita	Employee Relations Division, Human Resources Department	
Kebtarou Okawa	Employee Relations Division, Human Resources Department	
Fumiko Ishii	Employee Relations Division, Human Resources Department	

## STEP1

## Selection of trainees

The first year of SENTAN-Q began midway through the university's fiscal year 2019. Accordingly, the nomination process took place between October 1 and November 29, and candidates were nominated by department. Candidates were screened by a 10-member team consisting of executive VPs, VPs, Professors at the university's Institute for Advanced Study, VPs from other universities, and individuals who have previously worked in university administration at a VP level. The screening process consisted of two stages. First, the team convened on beginning of December to review the candidates' application documents. Then, on December 26, the team interviewed the candidates. Prior to this screening process, each team member completed an unbiasing checklist. During the interviews, the candidates delivered presentations in English and fielded questions in English and Japanese. Following the transparent screening process, the team ultimately selected 10 candidates on December 27.

# **Kick-off Meeting**

Held on: January 15, 2020

Held at: Inamori Hall, Ito Campus



#### **Kick-off Meeting Contents**

#### **Opening Address**

■ Chiharu Kubo President, KU

#### Welcome Address

- Andrew T.S.Wee Former Vice President of NUS
- Miwako Waga Director, International Outreach Affairs, UCSD
- Toyoki Kunitake
  University Professor, KU Institute for Advanced Study

#### Speech from the Trainees

- Yukiko Yamauchi Associate Professor, KU
- Mai Bando Associate Professor, KU

#### SENTAN-Q Program Overview

- Toshiya Naito
  Executive Vice President, KU/Program
  Implementer
- Kaoru Tamada
  Vice President, KU/Program Coordinator
- Eriko Jotaki
   Office for the Promotion of Gender Equality



Having selected the trainees, we held a Kick-off Meeting to raise awareness about the purpose of SENTAN-Q and what the training involves. The meeting was attended by the trainees themselves and 70 other people, including people from outside the university. This turnout suggested a broad interest in SENTAN-Q.

President Chiharu Kubo opened the proceedings with a welcome speech, in which he expressed his expectations for trainees' future success. Greetings were then extended to the trainees by Professor Andrew Wee, one of the program Lecturers, and then by Dr. Miwako Waga from UCSD. The attendees then watched a video of Sandra Brown, Vice Chancellor at UC San Diego, delivering her message. Following the video, Dr. Toyoki Kunitake, University Professor at the Institute for Advanced Study, described the selection process and wished the candidates success.

Next up to the podium were two of the first-term trainees (both associate professors at the university), who delivered an English-language presentation introducing their research and outlining what they hope to achieve through the program. The final part of the event consisted of briefings about the program delivered by program implementer Toshiya Naito (executive VP and secretary-general), program coordinator Kaoru Tamada (VP), and Eriko Jotaki (Office for the Promotion of Gender Equality).

SENTAN-Q will run for six years, with six terms of trainees. The program will equip these trainees with international competitiveness and global fluency. In turn, the trainees will contribute the university become a center of world-class research and teaching.



The front row consists of the president and the trainees.

The back row consists of the guests and SENTAN-Q's management team. (Jan. 15, 2020)



Prof. Andrew Wee STEP 2 Lecturer



**Dr. M. Waga**Overseas cooperation



Prof. T. Kunitake Selection committee



Dr. M. Bando Trainee



Dr. Y. Yamauchi Trainee

STEP2

# University governance, diversity and inclusive education (on campus)

Class 1

Lecturer: Andrew T.S. Wee Professor of NUS (Former Vice President)

Held on: January 15 and 16, 2020 Held at: Inamori Hall, Ito Campus

Lecture 1

Introduction to NUS, University Governance, International Competitiveness

Lecture 2

Importance of Diversity for Society and University (Research and Education)





This two-day class was conducted entirely in English. It used an active learning format, in which the trainees actively exchanged ideas. At the end of the course, the trainees were required to compile a report.

Class 2

Lecturer : Jean-Luc Bredas

Professor of the University of Arizona (Former Dean)

Held on: February 12 and 13, 2020 Held at: Open Space of ISI Building and

Leading Program Room of Open Learning Plaza, Ito Campus

Lecture 1

# Leading University Department or Institute







Lecture 2

### Strategic Vision for a Research-Oriented Large Public University: The Case of the University of Arizona





This two-day class was conducted entirely in English. The trainees were grouped closer together than they were in the first class, to encourage more active discussions.



# Teaching methodologies for active learning (on campus)

(Cancelled on 2019 FY)

Lecturer:	Robert Wagenaar	Professor of University of Groningen, Director of the International Tuning Academy, External expert for the European Commission
	Maria Yarosh	Researcher of University of Groningen, Researcher and

Planning cooperation: Tim Birtwsitle Emeritus Professor of University of Leeds

Held on: March 17-19, 2020

Held at: Multipurpose hall of Ito Guest House and 4F of Center Zone 1, Ito Campus

This three-day class was conducted entirely in English. From a few weeks before, the trainees were required the reports every week. Face to face sessions were scheduled longer than 4 hours everyday.

Unfortunately this STEP 3 program was cancelled under the influence of new coronavirus on this 2019 FY.



Prof. Wagenaar



Faculty Developer of the International Tuning Academy

Dr. Yarosh



Prof. Birtwsitle

STEP4

# Directed study and guidance of foreign students (on campus)

Among ten of the first term trainees, the trainees who had already selected the international student and senior mentor of overseas promptly started STEP 4 training from January. The overseas mentors carry out their instruction using practical English.

Other trainees are searching for mentors and students in order to start STEP 4 training at beginning of April. The selection of international students and overseas mentor should be done by a trainee in principle. The length training period of STEP 4 is one year.

## Open seminar

Some lecturers gave the open seminar for Kyushu University researchers and students after their SENTAN-Q training lectures.











Career Development Seminars by Top Scientist

A Personal Perspective on 40 Years in Academia: Global Networking and Seizing One's Luck!

Professor Jean-Luc Brédas

In recounting my journey in the academic world, from the time of my Ph.D. Thesis in Belgium and post-doctoral stay in the US to my present position at the University of Arizona, I will describe events that eventually shape a scientist's career and can

Date: **2020. 2. 13** (THU) 16:00 – 17:30 Venue: Kyushu Univ. ITO campus. Open learning Plaza 1F Room 110 Language : English



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The list is arranged in alphabetical order of family name

No.1

Bando Mai Associate Professor

Department of Aeronautics and Astronautics, Faculty of Engineering

Research Field

Orbital Mechanics and Control of Spacecraft



No.2

Eguchi Nawo Assistant Professor

Center for Oceanic and Atmospheric Research, Research Institute for Applied Mechanics (RIAM)

Research Field

Atmospheric Science: Satellite Remote Sensing,



No.3

Masuo Chisako T. Associate Professor

Department of Social Studies, Faculty of Social and Cultural Studies

**Research Field** 

Chinese Studies (Foreign Policy and Politics), International Relations in East Asia



No.4

Nagatsu Yuichiro Assistant Professor

Department of Communication Design Science, Faculty of Design

Arts Management, Arts and Social Inclusion



No.5

Nakamura Mako Associate Professor

Center for Promotion of International Education and Research, Faculty of Agriculture

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Muscle Biology, Developmental Biology, Cell Biology



Nomura Hisako Lecturer

Center for Promotion of International Education and Research, Faculty of Agriculture

Research Field

No.6

Agricultural Economics, Agricultural Resource Economics, Environmental Economics



The list is arranged in alphabetical order of family name

No.7

Sassa Fumihiro Assistant Professor

Department of Electronics, Faculty of Information Science and **Electrical Engineering** 

Research Field

MEMS, Microfluidic Device, Sensor Robot, Bio sensor, Chemical sensor



No.8

Tomiyasu Ryoko Associate Professor

Division for Intelligent Societal Implementation of Mathmatical Computation, Institute of Mathematics for Industry (IMI)

Applied Algebra, Number Theory, Mathematical Crystallography



No.9

Wakabayashi Rie Assistant Professor

Department of Applied Chemistry, Faculty of Engineering

Research Field Supramolecular Chemistry



No.10

Yamauchi Yukiko Associate Professor

Department of Informatics, Faculty of Information Science and **Electrical Engineering** 

Research Field

Distributed Algorithm, Mathematical Informatics



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## Plans for the FY2020 term (April 1, 2020, to March 31, 2021)

By the end of March 2020, the first-term trainees will have completed STEP 2. STEP 3 was immediately cancelled before training. The first-term trainees will therefore take the STEP 3 with the second-term trainees in 2020 FY. During the 2020 Fiscal year, beginning April 1, 2020, we will focus on STEP 4 (Directed study and guidance of foreign students) and STEP 5 (Up-to-date fieldspecific recurrent training). Some of the trainees who complete these steps will start STEP 6 (Final Examination: Class teaching and directed study) within FY2020.

We will begin the nomination process for the second-term trainee in March. The selection process should finish by the end of June, and the training should commence in July, as shown below.

#### First-term Trainee

#### STEP4

From January 2020:

Supervising international students

#### STEP5

From April 2020:

Recurrent educations

#### STEP6

January 2021 onward:

Class teaching and directed study (overseas)

#### Second-term Trainee (to be selected)

#### March 2 - May 8, 2020:

Period for accepting nominations

May:	STEP1	First screening (review of application documents)
lunai	CTED1	Second screening

(interviews)

Late June: Trainee selection

#### July, August, September:

STEP2 and STEP3

**STEP2** (Londa Schiebinger, Stanford Univ.)

STEP2 (Sandra A. Brown, UCSD)

## **SENTAN-Q** expected effects

The full six-year term of SENTAN-Q should yield the following outcomes:

- The hiring-training-deployment-promotion cycle will raise both the quality and quantity of female faculty and young faculty.
- It will make the university a more diverse and inclusive organization, reducing unconscious/hidden biases that could hold back women and juniors recruited to senior positions.
- Advanced research, for example digital integration (AI, IoT) will open up new potential for academic-industry partnerships and startups (raising the investment value of academic research).
- The project will serve as a best practice model (follow-ups on trainees' accomplishments will be conducted among the former trainees and the quantitative outcomes published).
- The university will attract more international students and non-Japanese faculty, boosting its international reputation.
- Female students will be inspired by the prominent, visible roles played by the former trainees.

# KYUSHU UNIVERSITY

# **Diversity and Super Global Training Program** for Female and Young Faculty (SENTAN-Q)

**Guidelines for 1st Term Trainees** (Sept. 16, 2019)



**Japan Science and Technology Agency** 

# **Objective of this program**

- This program is designed for outstanding female and young faculty members at Kyushu University to establish themselves as world top-class, competitive researchers through cutting edge diversity & global training.
- Trainees in this program are selected through a highly transparent screening process from candidates recommended by each department. In principle, the trainees will take a 2-year diversity & global training course. When the trainees complete the course, a certificate and tenure or a one-level promotion is given within 1 year.
- In the course, the trainees will acquire research and education skills that meet global standards, and the wide knowledge required of a senior or managerial researcher.
- Furthermore, the program envisions the formation of an on-campus network that goes beyond gender boundaries and crosses different research fields (the elimination of unconscious bias)

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# **Contents of this program**

- This program consists of 6 steps
  - STEP 1 Selection of trainees
  - STEP 2 University governance, diversity and inclusive education (on campus)
  - STEP 3 Teaching methodologies for active learning (on campus)
  - STEP 4 Directed study and guidance of foreign students (on campus)
  - STEP 5 Up-to-date field-specific recurrent training (on campus)
  - STEP 6 Final Examination: Teaching and directed study (overseas)
- Period: 2 years for each trainee (can be extended under certain conditions, e.g. maternal leave or nursing care)
- Trainees who complete the course receive a certificate from the president and are granted a tenured position or a one-level promotion
- The program will run from 2019 to 2024 (6 application rounds for 5-10 trainees each). The program is expected to promote about 50 trainees.

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# **Details of this program (1/6)**

#### STEP 1 Selection of trainees (on campus)

Trainees in this program are selected through a highly transparent screening process from candidates recommended by each department.

- Qualified applicants: Female faculty, or male faculty aged 37 and under at the end of each FY (associate professor, lecturer and assistant professor)
  - (1) Tenured faculty (2) Untenured faculty but scheduled for a tenure review
- Application period: October 1 to November 29
- Campus Review Date: December, Location: Kyushu University, Ito Campus
- Selection criteria
  - (1) Research achievements (2) A positive attitude to learning about new issues related to universities and society (3) Motivated to improve global research and education skills including overseas training
- Selection Committee: President and board members of Kyushu University, professors emeriti in the Institute for Advanced Study and external experts (ca. 10 members, an unconscious bias check sheet will be provided to the committee before review)
- Language: English and Japanese
- Number of applicants (planned): 5-10 people / year In principle, male : female = 1:1, humanities : science = 1:1
- Result announcement: December 2019
- Start of training: January 2020

# **Details of this program (2/6)**

# STEP 2 University governance, diversity and inclusive education (on campus)

**Objective** Learn about the importance of university governance, diversity and inclusion. Lecturers are invited from the world's top universities (mandatory course)

#### **University governance**

- Period: 1-2 days of intensive lectures from early January to late March
- Place: Ito Campus
- Content: Long-term perspective of what a university should be and university management
- Lecturers: University vice president or former vice president, lecturers invited from overseas top universities.

#### Diversity and inclusive

- Period: 1-2 days of intensive lectures from early January to late March
- Place: Ito Campus
- Content: The importance of diversity and inclusion in university and society, and various innovative cases born from these concepts
- Lecturer: An overseas expert

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# **Details of this program (3/6)**

### **STEP 3** Teaching methodologies for active learning (on campus)

**Objective** Learn about the latest teaching methodologies for active learning from lecturers affiliated with world-class universities (mandatory course)

- Period: 2-3 days of intensive lectures from early January to late March
- Place: Ito Campus
- Participatory, interactive lessons
- Classes are conducted in English
- The lecturer is an expert invited from an overseas world-class university.

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# Details of this program (4/6)

# STEP 4 Directed study and guidance of foreign students (on campus)

**Objective** Learn how to carry out research guidance in English for international students while receiving guidance from a world-class senior researcher as a mentor

- Period: 1 year starting from January 2020
- Place: Trainee's laboratory
- Content: Setting a research theme, carrying out research guidance in English, paper writing, etc. with international students (maximum 2), supervised by a overseas mentor
- The overseas mentor should be a university researcher who meets the requirements of a top-level university (Progress 100).
- the trainee selects the international students and the overseas mentor
- In principle, the writing of one international co-authored paper is required.
- Web conferencing technology will be made available for overseas communication

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# **Details of this program (5/6)**

### STEP 5 Up-to-date field-specific recurrent training (on campus)

**Objective** Select your extra-professional field from Kyushu University's priority issues, such as data science (AI or IoT) or SDGs and receive permanent training to broaden your scientific view. This will be helpful to remain highly active after promotion through the establishment of interdisciplinary fields, research centers, and budget requests

- Content and period: Two or more courses to be taken from the course list between January 2020 and December 2020
- Place: Various campuses at Kyushu University
- Faculty from the humanities should take science-related classes, and vice versa
- Classes for industry-academia collaboration and entrepreneurship are also available.
- STEP 5 can be completed after STEP 6 overseas research
- Lectures are conducted in English or Japanese using active learning methods

# **Details of this program (6/6)**

# STEP 6 Final Examination: Teaching and directed study (overseas)

**Objective** Overseas training constitutes the final examination of SENTAN-Q. It determines whether the trainees developed research and educational skills that are internationally valid

- Period: 1 year starting from January 2021 (overseas staying period should be more than 8 weeks)
- Place: An overseas university (In principle, this should be a university with which an exchange agreement is in place, but it can also be another top university)
- Only trainees who have completed STEP 1 through STEP 4 can participate in STEP 6
- Conduct lectures at an overseas university in English. If it is difficult to conduct a regular class, it can be replaced with tutorial lectures at multiple universities.
- Student research guidance in English at an overseas university with an overseas mentor.
- The trainee selects the overseas university and mentor
- In principle, as in STEP 4, the writing of one international co-authored paper is required.

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## **Evaluation of the trainee's achievements**

## STEP 2, STEP 3, STEP 5

- Lecturers conduct a quantitative evaluation of the trainee's achievement based on rubric tables
- The trainee conducts a self-evaluation at the same time to provide feedback on the efficiency of the program for the following year

### STEP 4, STEP 6

■ The overseas mentor form a world-class university determines whether the trainee has acquired internationally valid research and education skills, taking into consideration the achievement of internationally co-authored papers

Final certification of the training (in principle after 2 years) is decided by the President after deliberation by the committee

# Unconscious bias checklist

Initiative for Realizing Diversity in the Research Environment



**Appendix** 

■ This program is designed to empower women and young faculty members through the direct guidance of top-level overseas researchers. The goal is not simply to increase the number of women and young faculty, rather to make them competitive and attractive in a global research market.

■ The ultimate goal is to produce diverse and outstanding female and young researchers at Kyushu University, who can lead top-level research.

■ The trainees should understand the purpose of this program and make the best use of this training opportunity for their own learning and development.

**Unconscious bias checklist** 

Everyone has unconscious, or hidden, biases, which are picked up inadvertently from the environment and become etched into your thinking, influencing your decisions in various situation. Due to their subtle nature, unconscious biases are hard to completely eradicate. Biases may cause you to treat someone in a certain way because of their gender, ethnicity, or age. In organizations, unconscious biases can make individuals from marginalized groups more likely to be disadvantaged for personnel evaluation such as during recruitment or promotion.

MEXT Science and Technology Human Resource Development Support Program

Diversity and Super Global Training Program for Female and Young Faculty

To minimize the effects of unconscious bias, institutions increasingly require examiners to undergo unconscious bias training before they judge candidates' performances. SENTAN-Q is no exception. Thus, SENTAN-Q distributes this unconscious bias checklist to each member of the selection committee so that they may become aware of their unconscious biases before a screening. Please read the following instructions before starting the checklist.

1. Unconscious bias is a phenomenon related to neurology, not personality. You can only avoid being affected by unconscious biases if you are aware that everyone is affected by them, including yourself.

2. Unconscious biases stem from preconceptions and similar attributes. You may be more vulnerable to the effects of bias when you feel rushed for time, tired, or stressed.

3. Before the start of the screening process, take time to clarify the selection criteria and check that each member understands them. A greater awareness of the criteria will help ensure a fair, unbiased process.

4. Conditions of departments and universities may change with the times. When deciding whether a candidate is right for the organization in question, consider how they may contribute to the organization's future, not just its present.

5. Be aware that past academic evaluations may have been affected by bias.

SENTAN-Q secures the diversity of the selection committee in order to assess diverse candidates. Please be prepared to listen to and respect the ideas and opinions of members of the committee from different backgrounds and be equally mindful of unconscious biases.

By signing below, I acknowledge that I have read and understood and agree to the above policy and instructions.

lame (please print)	Date	Signature or seal

Please ensure that each member of the selection committee signs the checklist.

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