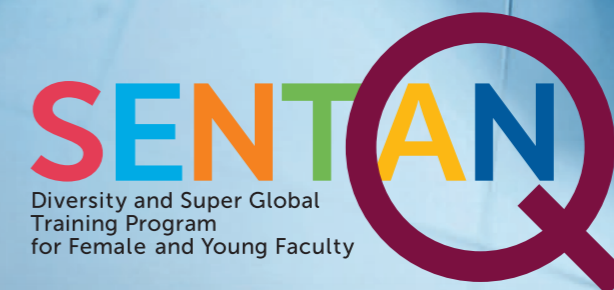


Published
March 2022

MEXT Support Program for the Development of Human Resources in Science and Technology
Initiative for Realizing Diversity in the Research Environment

Diversity and Super Global Training Program for Female and Young Faculty

SENTAN-Q Annual Report 2021



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FY 2021 marked the 3rd anniversary of the implementation of “Diversity and Super Global Training Program for Female and Young Faculty (SENTAN-Q)”. This Annual Report provides the general description of the program and its objective as well as the program completion reports by the 1st trainees, who successfully completed their two years’ program in December, 2021.

We would like to express our gratitude to those concerned who cooperated in publishing this Annual Report.

March, 2022
 Shoko Sagara

Office for the Promotion of Gender Equality, Kyushu University

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■ SENTAN-Q Supervisor

President, Kyushu University

Tatsuro Ishibashi



In November 2021, Kyushu University was selected as a Designated National University Corporation by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). We have designed the “Kyushu University Vision 2030” initiative upon this MEXT designation as we aspire to be a “university that drives social change with integrative knowledge” and contribute to solving social issues and transforming socio-economic systems.

Kyushu University aims to ensure the various and curiosity-driven research which helps the promotion of cutting-edge research, and to nurture talented students who can lead the future of society. For achieving this goal, it is vital to ensure the environment where all university members including young, female and international individuals can demonstrate their ability for self-realization. One of the most important thing to be considered is to promote the appointment of female researchers, accelerate their promotion to senior positions and strengthen their leaderships by developing their research skills. To this end, Kyushu University launched “Diversity and Super Global Training Program for Female and Young Faculty (SENTAN-Q)”, following selection for funding under MEXT’s support program "Initiative for Realizing Diversity in the Research Environment" in 2019.

The aim of SENTAN-Q is to provide outstanding female and young faculty with opportunities for strengthening their research and educational skills to meet the highest global standards through training courses offered by world’s top-class researchers. The program also intends to accelerate the promotions of successful trainees to high-ranking and management positions and contribute to the university through building a research and educational environment that will be recognized as truly global.

Each fiscal year, about ten trainees are selected from outstanding female and young faculty through a highly transparent screening process by the selection committee which members include experts from outside the university. Successful trainees who reach the targeted learning level will receive certificates and tenured position or a one level promotion will be given within one year of the completion of the program.

FY 2021 marks the 3rd year of SENTAN-Q program. In July, the 3rd trainees including 4 female researchers and 7 male researchers were selected. Due to the COVID-19 related travel restrictions, all trainees including the 1st trainees and the 2nd trainees are devoting themselves to the program making the active use of online conferencing tools. In December 2021, the 1st trainees successfully completed STEP6 except 3 trainees who have been permitted the extension of training periods due to life events etc. On February 10th 2022, the graduation ceremony was held online to give certificates to the successful trainees.

SENTAN-Q will run for six years with six generation of trainees. We hope to utilize the program and further develop the university to raise its global competitiveness. We appreciate your cooperation and understanding.

■ SENTAN-Q Implementer

Executive Vice President, Secretary General, Kyushu University

Toshiya Naito



In Japan, many undertakings are being advanced in various fields in a pursuit of a vibrant society supported by diverse human resources— including the expansion of women’s roles. In November 2021, Kyushu University was selected as a Designated National University Corporation by MEXT and aspires to thrive as a global hub of education and research. We believe it is essential to create an infrastructure in which diverse talents can play active roles. Among these strategies, the active recruitment and appointment of female researchers is especially important for vitalizing research activities through the introduction of a variety of perspectives and ideas.

To this end, Kyushu University has been strengthening its efforts to promote gender equality, including the establishment of international recruitment for women-only position openings (KASOKU), the introduction of Dual Career Couples and the implementation of support programs for balancing research and child-rearing. In July 2019, Kyushu University was selected for funding under "Initiative for Realizing Diversity in the Research Environment", MEXT Support Program for the Development of Human Resources in Science and Technology. From January 2020, we have launched “Diversity and Super Global Training Program for Female and Young Faculty (SENTAN-Q)” with an aim to identify and nurture outstanding female and young faculty, who will lead the academic research as the world’s top-class and competitive researchers.

Kyushu University is implementing SENTAN-Q to produce world’s top-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.

In 2020, SENTAN-Q welcomed the 1st trainees in January and the 2nd trainees in August. The 3rd trainees were selected in July 2021. While the outbreak of COVID-19 has necessitated some adjustments in the initially planned curriculum including lectures by world’s top-class researchers, we have pursued the program actively, encouraged by the thought that the “new normal” environment offers us an opportunity to put into practice digitally connected, globally competitive education and research. Owing to these activities, SENTAN-Q was given an overall rating of “S” in the mid-term assessment carried out in December 2021.

We are pleased to note that seven of the 1st trainees completed the program in December 2021 and received certificates based on their outstanding achievements. The graduation ceremony was held online on February 10, 2022.

I would like to express my heartfelt appreciation to those involved in coordinating with other universities including overseas universities and establishing systems on campus.

■ SENTAN-Q Coordinator

Senior Vice President, Distinguished Professor, Kyushu University

Kaoru Tamada



The third year of SENTAN-Q program is about to end in the continued COVID-19 pandemic. I feel sorry about the situation that the trainees have to give up the opportunity of overseas training and switch to online international research collaboration. At the same time, I was deeply impressed by the trainees, total 31 members from the 1st and 3rd generations, who have continued their efforts despite such adversity. Thanks to your efforts, we could receive the score "S" in the mid-term assessment this year. This must be due to the commitment of the overseas lecturers/mentors and Kyudai office as well as strong motivation of the trainees.

In January, the first-term trainees excluding those who have been extended the program by their life events have successfully completed all the course and will be promoted to higher academic position. Congratulations! However, regardless of the profession, promotion to a higher position is not a goal in itself but the goal is to realize one's dream by gaining responsibility and freedom. I hope that the trainees will use what they have learned in the SENTAN-Q program and expand their fields of activity to the world.

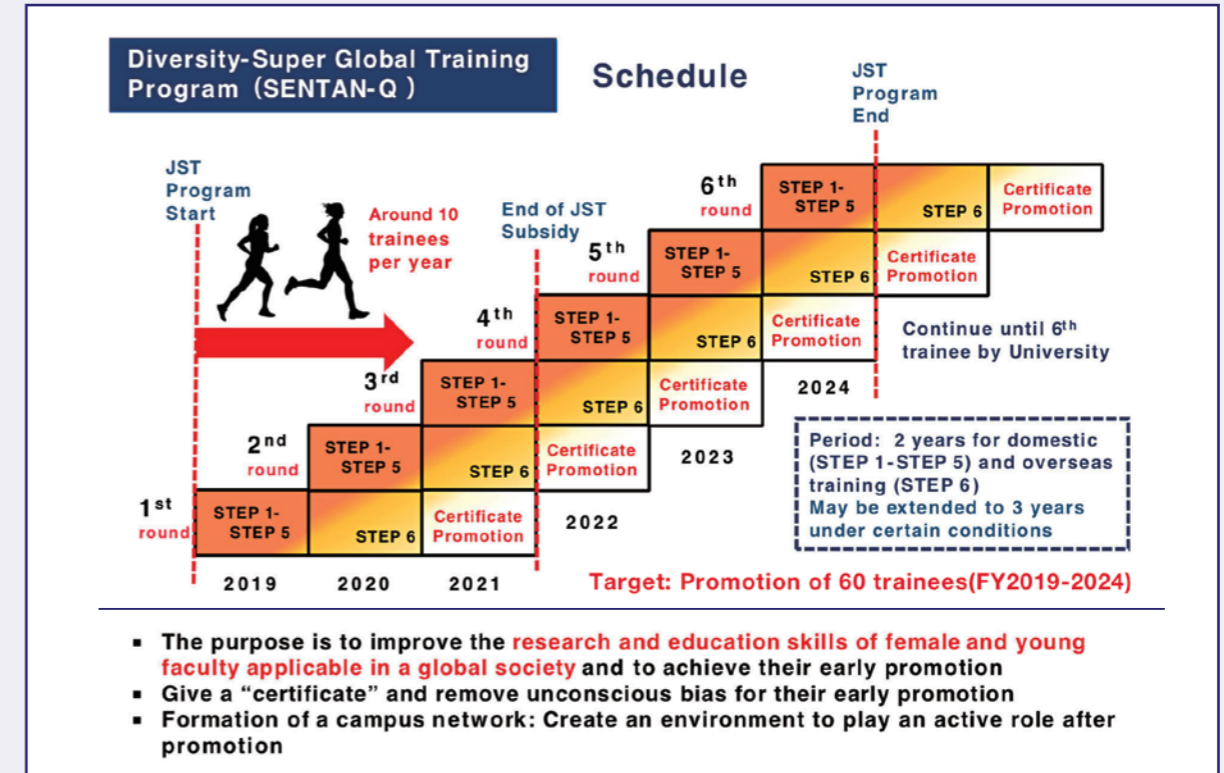
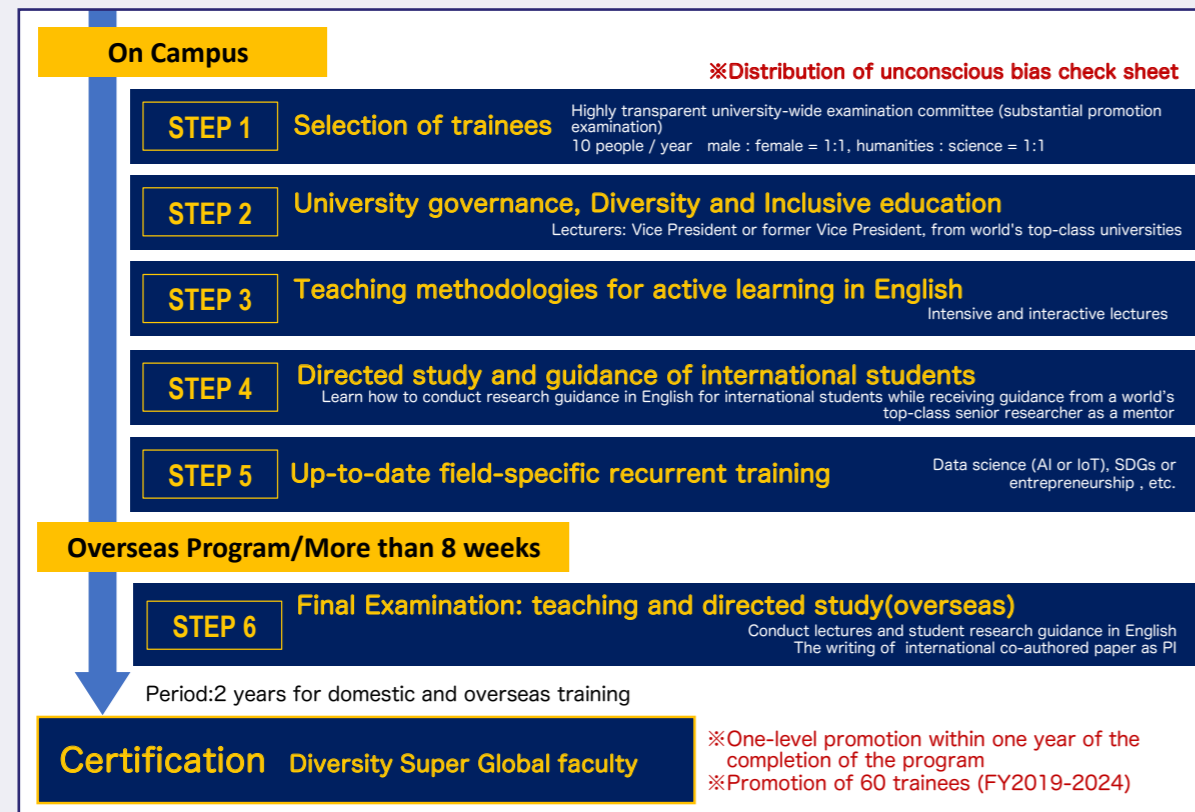
I turned 60 this year, but nowadays our life is long and our learning period will continue. I feel that I can keep my feelings always fresh by taking the SENTAN-Q training course together with young members. As a program coordinator, I would like to continue to take on the challenge of running the program. We appreciate your cooperation and understanding.

Kyushu University was selected for funding under "Initiative for Realizing Diversity in the Research Environment", MEXT Support Program for the Development of Human Resources in Science and Technology in 2019. The aim of this program is to improve diversity in the research environment by providing female researchers with opportunities for conducting overseas research and encouraging their active participation upon their return to Japan. It also funds the program which accelerate the promotions of female researchers to high-ranking and management positions.

To this end, Kyushu University has launched "Diversity and Super Global Training Program for Female and Young Faculty (SENTAN-Q)" in 2019. The aim of SENTAN-Q is to provide outstanding female and young faculty members with opportunities to challenge the world's top-class research and education and accelerate their promotions to high-ranking and management positions at the university. Our goal is to create the research and educational environment that will be recognized as truly global and lead the world academic research.

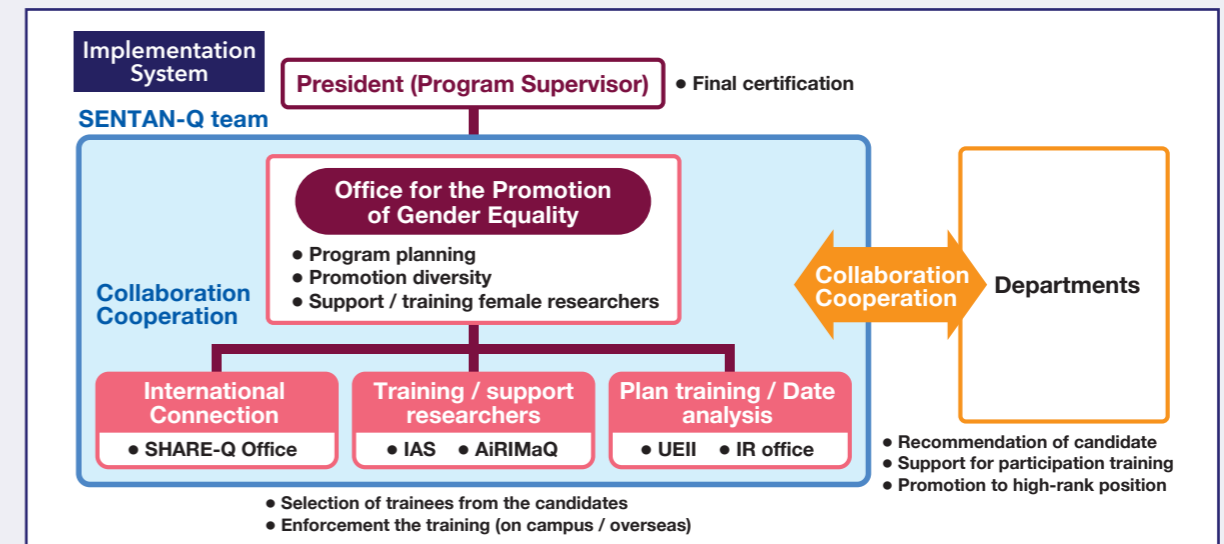
SENTAN-Q consists of STEP1 to STEP6. Trainees are selected through the highly transparent screening process from outstanding female and young faculty members, who are recommended by departments and expected to attain promotions within a few years (STEP1). After being selected by university-wide committee, trainees start their two-years program. They will take on campus training from STEP2 to STEP5 then proceed to the final examination as STEP6, which consists of overseas training for more than 8 weeks (please see the appendix for further details).

SENTAN-Q 6 STEPS



Trainees who reach the targeted learning level will receive certificates. A tenured position or a one-level promotion will also be given. The program lasts two years including the overseas training. However, we can adjust the duration to accommodate maternity, child-rearing, or nursing care needs. SENTAN-Q will aim to produce 60 trainees through 6 application rounds. Information about the program's progress as well as trainees' accomplishments are published in Polymorpha (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 being implemented with the cooperation of the entire university, as part of administrative reforms centered around "young, women and foreign researchers" as set forth in Kyushu University's Mid-term Objectives and Mid-term Plan and the National University Administration Reform Facilitation Project etc.



Due to the COVID-19 related travel restrictions, the program has been conducted online using Zoom application tool in the same way as FY2020. This year, the University of Illinois at Urbana-Champaign, one of our program model schools gave us the extensive support on online lectures. STEP2 lectures were given by two Vice-Chancellors of the University of Illinois at Urbana-Champaign from August to September. STEP3 lectures were given by Teaching and Learning Specialist of the University of Illinois at Urbana-Champaign from October to December.

STEP1 Selection of Trainees

The nomination process for the 3rd trainees took place between March 1 (Mon) and May 10 (Mon). After the screening by CV and interview, 11 trainees were selected. The Kick-Off Meeting was held on July 26 (Mon). The 3rd trainees started their 2 years training from August.

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

The 3rd trainees

Lecture 1

Date: August 24 (Tues) from 8:30 to 10:00 (JST)

Lecturer: Prof. Reitumetse Obakeng Mabokela
 Vice Provost for International Affairs and Global Strategies
 The University of Illinois at Urbana-Champaign

Theme: Higher Education Governance in the United States



Lecture 2

Date: September 17 (Fri) from 8:30 to 10:00 (JST)

Lecturer: Prof. Sean Garrick
 Vice Chancellor for Diversity, Equity, and Inclusion
 The University of Illinois at Urbana-Champaign

Theme: A vision for equity, diversity and inclusion



STEP3 Teaching methodologies for active learning in English (on campus)

Lecturers: Mr. David Favre

Teaching and Learning Specialist
 Center for Innovation in Teaching & Learning
 The University of Illinois at Urbana-Champaign



The 3rd trainees

Lecture 1

Date: October 12 (Tues) from 8:30 to 10:00 (JST)

Theme: Active Learning in Lectures

Lecture 2

Date: November 9 (Tues) from 8:30 to 10:00 (JST)

Theme: 10 minutes Teaching Practice and Feedback

Lecture 3

Date: December 7 (Tues) from 8:30 to 10:00 (JST)

Theme: 10 minutes Teaching Practice and Feedback

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

Trainees select the overseas mentor for STEP4 themselves. After consulting with overseas mentor, trainees conducted research guidance to international students at Kyushu University for thesis writing. The 2nd trainees made up of 5 females and 5 males, started STEP4 from August 2020 and completed in July 2021 after the submission of international co-authored papers. The 3rd trainees started STEP4 from 2021 for one year.

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

After completing STEP3, trainees start STEP5 and select two or more courses from their extra-professional fields. Some trainees have submitted reports indicating that STEP5 can help them incorporate new knowledge from different research fields and enhance their research activities. Some of them have also initiated the joint collaborative research with STEP5 lecturer from different research fields. STEP5 can be completed after STEP6 during the two-years program.

STEP6 Teaching and directed study (overseas)

Overseas training as the final examination of SENTAN-Q. It determines whether the trainees have acquired research and educational skills that meets the highest global standards. The 1st trainees started STEP6 from January 2021. Due to the COVID-19 related travel restrictions, some part of STEP6 training had to be replaced with online lectures and online research guidance at overseas universities. In December 2021, the 1st trainees successfully completed STEP6 except 3 trainees who have been permitted the extension of training periods due to life events etc. The 2nd trainees started STEP6 and will complete in July 2022.

The Diversity, Equity and Inclusion Strategic Plan of the University of Illinois at Urbana-Champaign

University of Illinois at Urbana-Champaign (UIUC) and Kyushu University (KU) have been promoting intimate collaborative research and education based on international strategic partnerships, that was started by the academic exchange agreement on May 26, 2014 and updated via the signing ceremony held at Illinois campus on August 26, 2019.

UIUC is located in the twin cities of Champaign and Urbana in the state of Illinois, which is well known for its racially and ethnically diverse population in the US. In 2021, the population of Black or African American is 14.6 % and the population of Hispanic or Latino is 17.5 % according to US Census Bureau. Because of this local environment, UIUC has been conscious with social injustice including racial and ethnic discrimination, and actively engaged in the promotion of diversity, equity & inclusion (DEI) via the Office of the Vice Chancellor for DEI.

In order to learn the importance of diversity while being in highly homogeneous Japanese society composed of Japanese males, it is effective to learn about the pioneering examples of world's top-class universities with rich diversity such as UIUC.

This year, we invited two STEP2 lecturers from UIUC : Prof. Reitumetse Obakeng Mabokela, Vice Provost for International Affairs and Global Strategies and Prof. Sean C. Garrick, Vice Chancellor for Diversity, Equity and Inclusion. For STEP3, we asked Mr. David Favre, a teaching and learning specialist at the school's Center for Teaching and Learning Innovation to be the STEP3 instructor.

The following is the brief introduction of DEI strategic plan of UIUC according to the document written by Vice Chancellor Sean C. Garrick.

Prof. Sean C. Garrick, Vice Chancellor for Diversity, Equity and Inclusion, UIUC



The University of Illinois Urbana-Champaign is one of nation's leading research institutions and has been since 1867. Diversity, equity, and inclusion (DEI) are central to our mission. At Illinois we are dedicated to providing access to educational opportunity for all qualified students, regardless of their race or ethnicity, gender identity, sexual orientation, socioeconomic status, language, culture, national origin, religious or faith traditions, age, or disability status. The diversity of our faculty, staff, and students affects our productivity, creativity and our ability to lead in creating a better tomorrow.

The University System's Guiding Principles recognize that DEI are fundamental to our institution: "The University of Illinois System has the privilege and responsibility to cultivate the immense talents of diverse students, faculty, staff, and leaders. Healthy relationships—defined by mutual respect, trust, and an expectation of transparency and fair treatment—are the collective responsibility of all our members; no one can afford to be a bystander when it comes to ensuring full participation of everyone in every sphere of our campus communities. . . Diversity of backgrounds, perspectives, and experiences enriches campus conversations in and out of the classroom, inspires our creative endeavors, and drives innovative solutions to the world's problems."

As we embed equity and inclusion as foundational values throughout an Illinois educational and workplace experience, we know that the contributions of our faculty – regardless of their area of scholarship – are critical to the development of future leaders who can collaborate in the diverse and contemporary society.

In Fall 2020 we launched the Chancellor's Call to Action to Address Racism and Social Injustice Research Program. This initiative seeks to transform how the University of Illinois Urbana-Champaign supports and prioritizes research and engagement that tackles the real and pervasive issues that persist as barriers to justice, tolerance, and equality in the United States. With an annual budget of \$2M, we created a sustained, concentrated effort with measurable outcomes, underscored by our responsibility as an educational institution, a partner in our communities, and a global leader in research and engagement.

During this first year of the initiative, proposals from 10 campus units and 17 departments were funded (see Fig. 1). Given that research shows that female faculty and faculty of color are disproportionately called upon by both colleagues and students to do diversity, equity and inclusion work, and that such work is often not recognized or rewarded, the demographics of those receiving funding suggests that the program will have an effect in reversing that trend. Eighty-two percent (82%) of all awards were made to female faculty and staff and 45% were faculty and staff of color (see Fig. 2). These scholarly activities and awarded proposals each have the potential to make immediate change in our community and represent the heart of our academic mission and the very best of who we are as a university.

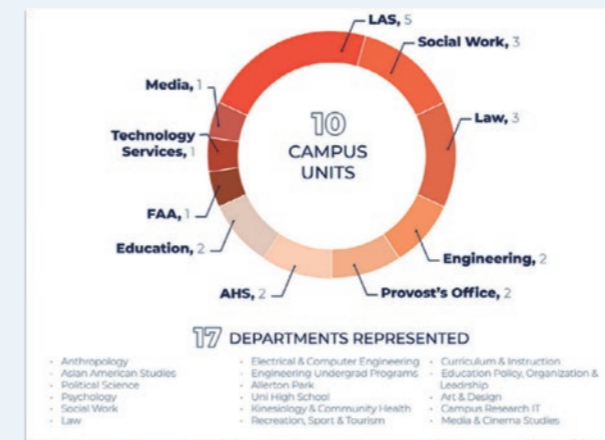


Fig.1 Campus units and academic departments supported by the 2021 Chancellor's Call to Action Research Program

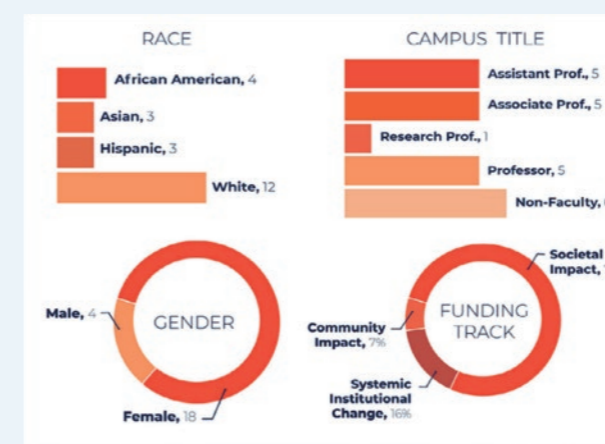


Fig.2 Demographics of award for the 2021 Chancellor's Call to Action Research Program

The Graduation Ceremony of the 1st trainees was held online on February 10 (Thurs), 2022. The 1st trainees were selected as a group of 8 females and 2 males in FY 2019 and started their two-years program from January 2020. In December, the 1st trainees successfully completed SENTAN-Q program except 3 trainees who have been permitted the extension of training periods due to life events etc. The brief description of Graduation Ceremony and Program Completion Report Meeting are given below.

At the beginning of Graduation Ceremony, President Tatsuro Ishibashi read out the names and affiliations of trainees in alphabetical order as the slides of their faces and certificates were shown on the screen. He greeted the attending guests and congratulated the trainees on their achievements. He also expressed his expectation that the trainees will contribute to the advance of Japan's academic research by the high-level research and educational skills as well as leadership acquired through SENTAN-Q.

The congratulatory messages were then extended to the trainees by the attending guests, Mr. Yoshihide Miwa, Chief of Office of Human Resources Development for Science and Technology, Human Resources Policy Division, MEXT, and Ms. Yasuko Yamamura, Program Officer, Department for Science and Technology Program Promotion, Japan Science and Technology Agency.

After that, STEP2 lecturers from SENTAN-Q's overseas model schools sent congratulatory video messages. First, Prof. Sandra A. Brown, former Vice Chancellor of the University of California San Diego (hereinafter referred to as "UC San Diego"), commended the trainees for achieving excellent results while facing difficulties under the global pandemic of COVID-19. She also said that UC San Diego is greatly honored to have the opportunity to collaborate on SENTAN-Q program. Second, Prof. Andrew T.S. Wee, former Vice President of the National University of Singapore, said that teaching an international students is what all researchers experience in this increasingly global

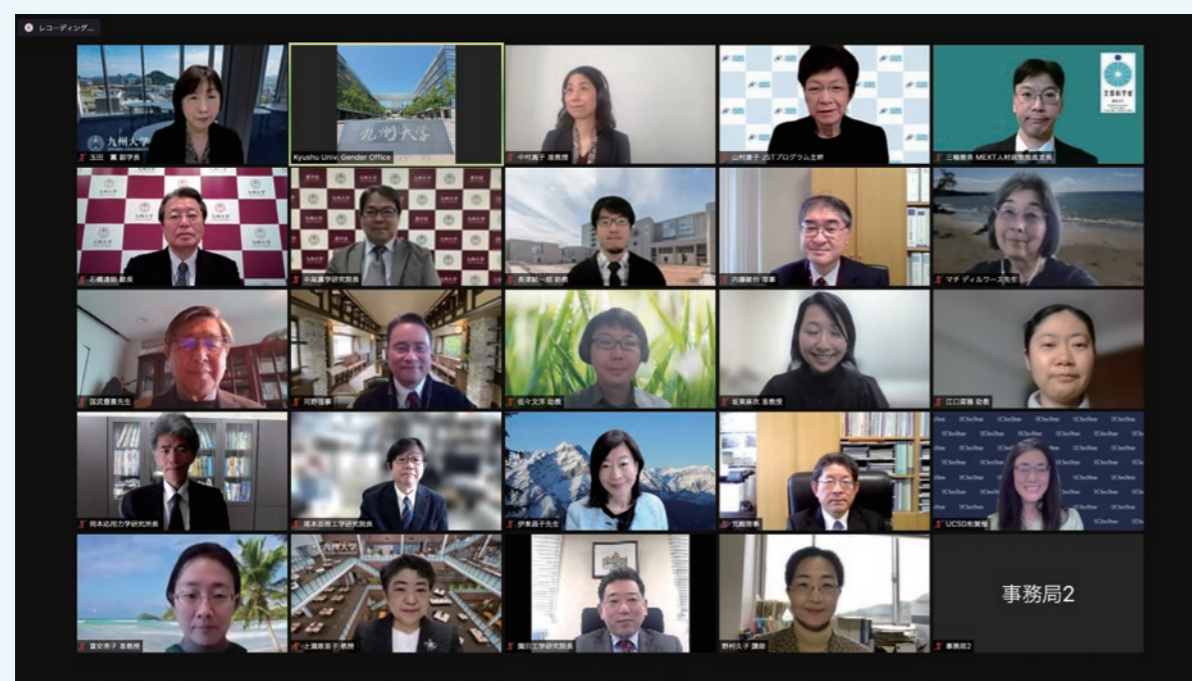
society. He also said that the knowledge and skills acquired through SENTAN-Q will prove directly relevant when the trainees go on to attain academic leadership positions in the future. Lastly, Prof. Jean-Luc Bredas of the University of Arizona congratulated the trainees for having completed the program in this difficult situation and expressed his expectations of their outstanding achievements in the future careers.

After the guests' congratulatory messages, Assoc. Prof. Mako Nakamura of the Faculty of Agriculture spoke words of thanks and appreciation on behalf of the trainees. Looking back on the two years of SENTAN-Q program, she said they would not have successfully completed the program without the support of people both inside and outside the university. She also said that she will seek to pass on knowledge acquired through the program to students, the university, and the general public and expressed her eagerness to work actively in the international arena. At the end of Graduation Ceremony, the group photo was taken for those involved including the trainees and the attending guests.

After the break, Program Completion Report Meeting was held online. The trainees made the brief presentation of what they learned from their two-years program, especially focusing on STEP4, 5 and 6. They also talked about the knowledge and experience they had gained through the program and their future career plans as researchers. Some trainees said that they were able to build an international network for joint research and develop the patience needed to pursue the research. Also, there was a comment that SENTAN-Q allowed them to rethink their dreams and consider how to realize them when the future is uncertain.

As the closing remark, Senior Vice President Kaoru Tamada gave a message as the SENTAN-Q coordinator. She said that ideas born out of a difficult situation may contain insights that can lead us into the future. She then conveyed her appreciation to all those concerned, both inside and outside the university.

(Shoko Sagara, Office for the Promotion of Gender Equality)



Congratulatory message from the STEP2 lecturers



Prof. Andrew Wee
The National University of Singapore



STEP 2
Governance &
Diversity-Inclusion

Congratulations for successfully completing the SENTAN-Q program!
SENTAN-Q 研修修了おめでとうございます!

This program provides excellent preparation for global young faculty at Kyushu University for their lifelong academic career, especially in Japan. Your course has a healthy mix of female and male young faculty from diverse disciplines, so you were also exposed to different subjects from the sciences to the humanities through your interactions, not unlike what a regular faculty experiences.

この研修は、九州大学のグローバルな若手教員が、特に日本で、生涯にわたってアカデミックキャリアを築いていくための優れた機会を提供しています。研修はダイバーシティ原則に基づいた健全な男女比となるよう設計されており、また通常の教員の研修とは異なり、研修生間の交流を通じて、科学から人文社会まで、様々な分野に携われるようになっていきます。

Furthermore, international research experiences is nowadays a very necessary prerequisite in any academic career. As academics, you will also contribute significantly to Japanese society. Some of the content will also prove directly relevant when you go on to assume future academic leadership positions. I wish you long and successful academic careers in the next chapter of your lives!

さらに、国際的な研究経験は、今日、あらゆるアカデミックキャリアにおいて欠かせない前提条件となっています。大学教員として、あなたたちはこれから日本の社会に大きく貢献していくこととして、そして将来指導的地位に就いた際には、本研修で学んだ知識が、直接に役立つものであったことを強くご期待します。皆さんの輝かしい前途をお祝いするとともに、益々のご活躍をお祈りいたします。

Professor Andrew Wee
National University of Singapore

国立シンガポール大学 教授
Andrew Wee

First term Trainees

No.1

BANDO Mai *Associate Professor*



Affiliation Department of Aeronautics and Astronautics,
Faculty of Engineering

Research Field Orbital Mechanics and Control of Spacecraft

During the overseas training for the SENTAN-Q final exam, I conducted theoretical research on orbital control of spacecraft using the new framework of Koopman operators with doctoral students under the mentorship of Prof. Scheeres at the University of Colorado, Boulder. The students in Prof. Scheeres' laboratory have a wide range of research topics, and I was impressed by the fact that each of them has a distinct area of expertise. With the common theme of astrodynamics as a foundation, each student can deepen their areas of specialization according to their individual interests, thereby broadening the research field of the entire laboratory from various perspectives, which not only increases the specialization of individual students but also further improves the level of the laboratory as a whole. In addition, I felt that collaborative research through the guidance of students was a completely different experience from collaborative research conducted by myself. It was a regrettable that this overseas training was conducted only online, but we plan to continue sending and receiving students in the future.

No.2

EGUCHI Nawo *Assistant Professor*



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

Research Field Atmospheric Sciences: Satellite Remote Sensing,
Climate Change

Through joint research with domestic and foreign researchers under the COVID-19 situation, I was able to reaffirm the importance of communication and at the same time learn a lot of knowledge and research methods that are applicable to the world, especially my research region, that is, I gained a grounded confidence.

The interaction with trainees in other fields was through mainly online (slack), but it was truly diversity inclusion. Although each individual is independent, it was good to recognize others (e.g., research manners) and feel that they were moving toward the same goal.

Diversity and active learning learned in STEP 2 and 3 were put into practice in lectures and international student guidance during the training period (STEP 4 and 6). I would like to continue to incorporate these ideas and methods for the education and joint research. In addition, since we have launched a satellite mission, I would like to shape this mission while being aware of the leadership learned through this training and the knowledge gained in STEP 5 (artificial satellite engineering, science and technology society, etc.).

Finally, I would like to thank the SENTAN-Q Secretariat, the teachers who taught at each STEP, and the teachers/staffs of the Research Institute for Applied Mechanics for giving me a valuable opportunity.

No.3

"Assoc. Prof. Masuo has been permitted the extension of training period due to life events etc. "

MASUO Chisako T. *Associate Professor*



Affiliation Faculty of Social and Cultural Studies

Research Field Chinese (Foreign Policy), International Relations

When I was a student, I spent three years in the United States and China in total. I had also worked as a research assistant for an American professor for two and a half years. However, as all of my degrees were earned in Japan, I was accustomed to publish my research achievements only in Japanese. In humanities and social sciences in Japanese academia, that is usually enough to move up to a professor. However, I was wondering if I should remain to be an "ordinary scholar". So, for five years or so before joining the SENTAN-Q program, I had attended only the conferences held in English or Chinese, and gradually increased the outputs in those languages.

SENTAN-Q is almost "mission impossible" for a researcher in social science as it is basically designed for scientists and engineers. However, my participation in it upon the request of my department has brought some positive results for me: I have gained confidence in systematic English lectures while carrying the STEP6. Similarly, by co-authoring a paper with a graduate student who belonged to a foreign university, I added toughness to compile a paper in unfamiliar field to me while taking the student's and his university's situations in mind. Since the program demands a lot of cooperation from outside scholars, I have also gained experiences in countless negotiations in English and Japanese. If all faculty members were to receive this kind of training, I am sure that the level of Kyushu University would improve dramatically.

No.4

NAGATSU Yuichiro *Assistant Professor*



Affiliation Department of Communication Design Science,
Faculty of Design

Research Field Arts Management, Arts and Social Inclusion

The past two years have been a time for me to get rid of my weakness in English and to develop a willingness to take on new communication challenges. Every opportunity to take classes at overseas universities and to conduct collaborative research with overseas researchers was a new challenge for me. Instead of being unable to travel due to the new coronavirus, I was able to make many connections not only in the UK, where I had originally planned to go but also in other parts of the world, especially in Southeast Asia. I would like to use these connections as a foothold to continue to take on the challenge of expanding my research and educational activities internationally. In these uncertain times, how can I still promote what I think is important? I think I have learned about that mindset and methodology. I am also grateful to all the professors and administrative staff who have been involved in the management of SENTAN-Q, to the professors inside and outside of the university who have taken on the role of mentors, and to my "peers" in various research fields who I have met since becoming a university faculty member. I would like to use this as an opportunity to work on inter-departmental collaboration.

First term Trainees

No.5

NAKAMURA Mako *Associate Professor*

Affiliation

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

Research Field

Muscle Biology, Developmental Biology, Cell Biology



The two years have passed quickly, and I am very relieved and proud to complete the SENTAN-Q program. The lectures of the Steps 2, 3 and 5 were wonderful and informative. The steps 4 and 6 looked overwhelming at the beginning. I would not have completed the program without my mentors, Dr. Judy Anderson, University of Manitoba and Dr. Charles Sagerstrom, University of Colorado. They guided me how to progress and I deeply appreciate their mentorship and cooperation. I would also like to express my gratitude to the faculties, administrative staff and the students who involved in the program. I am more than happy to have been granted so much support by so many people around me. After reaching this milestone, I become ready to give back to the students, to Kyushu University, and to our research communities.

No.6

NOMURA Hisako *Lecturer*

Affiliation

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

Research Field

Agricultural Economics, Agricultural Resource Economics, Environmental Economics



You can do it if you try - "one person can make a difference". It was January 2020 when I was selected as the first SENTAN-Q trainee. I had planned for my mentor in the UK to join me in April for the doctoral students' field research. I had also planned to take a sabbatical during the SENTAN-Q training period and travel to the UK in June. However, a state of emergency was declared in April and working from home began, so I had to cancel both the field research and the overseas training in the UK. Nevertheless, in April, the doctoral students went through a two-week quarantine period to conduct field research in Myanmar. Also, I started preparing three meals for my two children taking online classes while providing lectures and writing online quizzes in between. Despite some changes in the training plan due to COVID-19, I would like to express my gratitude to the SENTAN-Q Steering Committee for their quick response in organizing the lectures of Steps 2 and 3, held face-to-face and online. In particular, Professor Breda's introduction of university governance, diversity, and inclusive education at the STEP2 training on February 12 and 13 was very concrete and stimulating. It was a valuable opportunity to hear about Professor Breda's experience in devising the "one person can make a difference" approach in his organization. I also gained a deeper understanding of the University of Arizona's governance, diversity, and inclusive education initiatives. In addition, I realized that it is possible to coauthor with overseas researchers if we are ingenious, although it was a challenge to coauthor with doctoral students of my mentor without overseas training. Nevertheless, this training program was an excellent opportunity for me to experience what I can do if I try, while revising my plan each time in the face of an uncertain future. I would like to make the most of this experience in my future research life.

No.7

SASSA Fumihiro *Assistant Professor*

Affiliation

Department of Electronics, Faculty of Information Science and Electrical Engineering

Research Field

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



Throughout the two years of SENTAN-Q training, I learn and achieve a lot in terms of education and international collaboration research. Particularly, in the training through collaboration research with high level overseas researchers, we jointly supervised doctoral students of Kyushu University, UCSD and UPPA, respectively, with the mentor. There were various difficulties in this process, especially the limitations of the research environment and remote communication to the oversea universities in the Covid-19 situation. However, with the enthusiasm of the supervising students and the help of the mentors, I was able to learn the skills to produce results even under such circumstances. I had the opportunity to mentor graduate students from different positions and perspectives, which gave me the skills, achievements, and confidence as an university teacher in a short period of two years. The knowledge of organizational governance, inclusiveness, and active learning that I learned in the classroom in the early stages of the program has been a great help in teaching students in my subsequent overseas collaborative research and is still very helpful in teaching students in my own laboratory. Consequently, I received the Young Scientists' Award in the 2021 Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology. In the future, I will use the skills I gained from this SENTAN-Q training program to conduct international research and educational activities.

No.8

OISHI-TOMIYASU Ryoko

Associate Professor

Affiliation

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

Research Field

Applied Algebra, Number Theory, Mathematical crystallography



During my stay in Hong Kong and quarantine hotels, I felt great to be able to work all day! I'd like to thank my coworkers at Kyushu U and HKU, collaborators and my family for letting me focus on the project abroad for more than two months. I developed various codes that can be used for computational number theory and my future research. The research theme with the mentor and his student will be continued as my youth dream to combine the theory of modular forms, discrete structures and diffraction. The first-year project was also adopted by JST Sohatsu program.

First term Trainees

No.9

"Assist. Prof. Wakabayashi has been permitted the extension of training period due to life events etc. "

WAKABAYASHI Rie *Assistant Professor*

Affiliation

Department of Applied Chemistry,
Faculty of Engineering

Research Field

Supramolecular Chemistry



First of all, I would like to express my sincere congratulations to the 1st trainees who have completed the program. I wish you all the best in your future careers.

I am still in the middle of the training, but I feel I have learnt many things that I would have never experienced in my normal research life. Particularly, STEP 4 gave me important experiences not only how to advance my research project, but also how to encourage students or elicit their opinions, which should be important aspect as a researcher/educator. I am grateful to the professor who willingly served as a mentor and SENTAN-Q program for providing me with this opportunity. In addition, I have started to learn data science, which is new to me and I am planning to apply it to my research. There are still many steps left to go, but I will do my best to complete them all.

No.10

"Assoc. Prof. Yamauchi has been permitted the extension of training period due to life events etc. "

YAMAUCHI Yukiko *Associate Professor*

Affiliation

Department of Informatics, Faculty of Information
Science and Electrical Engineering

Research Field

Distributed Algorithm, Mathematical Informatics



My training period has been extended for seven months due to my maternity leave. The schedule of my final step of the SENTAN-Q program has been changed but fortunately I found new classes and students in Sorbonne University, France. I started student research guidance from November 2021, and had a class on "Distributed Coordination of Autonomous Mobile Robots" from 2021 December to 2022 January. All research meetings and classes were online and we found new types of difficulties. However, I worked on new things, for example, incorporating active learning to my class so that we have good interaction. In addition, it was easier to work on the final step online after the maternity leave. Regarding directed study and guidance of an international student, the result has been presented at AROB-ISBC-SWARM 2022 this January, which is an international conference of a new area for me. I am very grateful for such a wonderful opportunity.

Second term Trainees

No.1

ALBRECHT Ken *Associate Professor*

Affiliation

Division of Integrated Materials,
Institute for Materials Chemistry and Engineering

Research Field

Organic Electronics, Polymer Chemistry,
Materials Chemistry, Supramolecular Chemistry

Through this program, I have learned about university governance and other measures that we do not have so many opportunities to learn at Japanese universities. This will definitely help my future career as a researcher. In addition, it will be a good opportunity for me to build an international network. Actually, the collaboration with a foreign mentor is a good experience for me. I think the SENTAN-Q is well designed program.

Since I have my roots in Europe, I would like to be a bridge between Japan or other Asian countries and Europe in the future. Also, I would like to become a world top-class scientist and perform more international collaborations.

No.2

FURUTA Michiko *Lecturer*

Affiliation

Division of Oral Health, Growth and Development,
Faculty of Dental Science

Research Field

Dental Public Health



My research focuses on exploring the population-based approach for preventing oral disease in the promotion of oral health. I should proceed my research from the international perspective to find a new approach for preventing oral disease. By the SENTAN-Q program, it is possible to incorporate new knowledge from many different fields. I would like to improve my research and educational skills by the SENTAN-Q program. I am in the middle of training, and I could expand the network of overseas researchers and develop my research under the SENTAN-Q program.

I feel that diversity and inclusion are important for the development of university and society. By collaborating with people with diverse backgrounds, we can create new ideas and uniquely solve the problems which we are currently facing. Through the SENTAN-Q program, I would like to create the diverse and inclusive environment.

Second term Trainees

No.3

FUYUNO Miharu *Assistant Professor*

Affiliation

Department of Content and Creative Design,
Faculty of Design

Research Field

Applied Linguistics



I have been lecturing and supervising students including international students for years. This experience made me realize the importance of understanding for diversity. I thought SENTAN-Q program was a great chance to deepen my understanding. I am now taking the program as a trainee. The contents have many hands-on activities and they are also quite enjoyable. I am already feeling that they are useful to improve my supervision and teaching. The SENTAN-Q lectures has opened-up my eyes and I believe that its outcome will be my asset. Now I would like to be a mentor for young female students and faculty in the future.

No.4

MAEKAWA Hiromi *Lecturer*

Affiliation

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

Research Field

Molecular Cell Biology, Yeast Genetics



The reason for participating in SENTAN-Q program is its unique contents. Through the program, we can learn about the various aspects of a university such as its governance, diversity of the research environment and effective teaching methodologies in English. The program gives us valuable opportunities to interact with other researchers in various research fields. Also, it is a good chance to start international collaborations.

By taking the lectures of SENTAN-Q program, I can extend my research subject and bring it up to the new stage. I would like to make the most of this program and adopt what I have learned into the education in classroom to guide younger students in the laboratory and promote awareness of diversity inclusive.

No.5

MARUYAMA-NAKASHITA Akiko

Associate Professor

Affiliation

Department of Bioscience and Biotechnology,
Faculty of Agriculture

Research Field

Plant Science, Plant Nutrition



Since I have had no experience of conducting research at overseas university, I thought the SENTAN-Q program will provide me with practical opportunities to improve my international research and educational skills under the mentoring of the world top-class mentors. Also, we can further increase our knowledge about the university governance, diversity, and inclusion which are quite important for the development of our university.

Through the SENTAN-Q program, I would like to become more active in my research field and motivate younger generations to lead the world top-class research.

No.6

OHTA Shinri *Lecturer*

Affiliation

Department of Language and Literature,
Faculty of Humanities

Research Field

Linguistics, Cognitive Neuroscience



I would like to develop my ability to teach students with diverse academic, cultural, and socioeconomic backgrounds, as well as to offer better educational opportunities for my students. As a principal investigator at Kyushu University, I have been supervising undergraduate and graduate students, who have diverse backgrounds, and trying my best to develop their research skills. Understanding the educational needs of each student has been one of my challenges in my teaching. Through this program, I would like to learn more about effective and practical teaching methodologies.

As a teacher, I want to produce the next generation of researchers in our field. To achieve this goal, I actively seek opportunities to expand my knowledge on diversity. I strongly believe diversity, equity, and inclusion in the laboratory are the most important things to advance interdisciplinary research, including the neuroscience of language. Expanding my knowledge on diversity and enhancing the quality of teaching is the key to better research and education.

Second term Trainees

No.7

SATO Kaori *Assistant Professor*

Affiliation

**Division of Earth Environment Dynamics,
Research Institute for Applied Mechanics (RIAM)**

Research Field

Atmospheric Physics, Spaceborne Active Remote Sensing,
Optics



The SENTAN-Q program is a well-designed unique program. Interaction with professionals and pioneers in different fields facilitates our thinking to build our own strategy to deal with grand challenges.

Climate research is complicatedly related to issues in other fields and needs to be viewed within a broader context. The SENTAN-Q program will play an ideal role in this endeavor, creating diverse and effective international partnerships that will also lead to a better design for future space missions.

No.8

TANAKA Manabu *Associate Professor*

Affiliation

**Department of Chemical Engineering,
Faculty of Engineering**

Research Field

Chemical Engineering, Plasma Chemistry, Plasma Physics,
Nanomaterial Science



The main purpose of my research is to understand fundamental phenomena in high-temperature plasmas, namely thermal plasmas. Second purpose is to utilize thermal plasmas in various kinds of industrial application fields.

Through the SENTAN-Q program, I would like to improve my international research and educational skills as well as gaining the better understanding of university governance and management. As regards of my research fields, I think that thermal plasma can effectively solve many international issues such as environment problems, so I would like to collaborate with overseas researchers and work together to establish the international plasma laboratory in the future.

No.9

THOMAS Diego *Assistant Professor*

Affiliation

**Department of Advanced Information Technology,
Faculty of Information Science and Electrical Engineering**

Research Field

Computer Vision



I think SENTAN-Q is a wonderful opportunity to connect with other faculties in the different research fields and to open my mind. I think that we can get new innovative ideas by thinking about our research from another viewpoint. Also, we can apply teaching methodologies of active learning into our own lectures to increase the interest of younger students.

My future goal is to become a worldwide leader in the 3D vision community. In particular, I want to bring new innovative ideas that will bridge cutting edge technology in computer vision and computer graphics. As a French researcher living in Japan, I am also eager to create new connections with researchers all around the world, especially with researchers in France.

No.10

TODO Taiki *Associate Professor*

Affiliation

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

Research Field

Computer Science and Economics



My major research lies in an interdisciplinary field between computer science and economics, where researchers with various backgrounds have actively participated in the community. Diverse viewpoints that I learned in STEP 5 will help me to follow and contribute to the state-of-the-art.

Unfortunately, all the planned on-site activities in STEP 6, including both on-site teaching and offline discussions with students are difficult to conduct due to COVID-19. It was, however, a good experience to arrange possible activities and negotiate how they can be conducted as a part of this program with Kyushu University and the overseas institutes.

Third term Trainees

No.1

IKEGAYA Naoki *Associate Professor*

Affiliation

Department of Advanced Environmental Science and Engineering / Faculty of Engineering Sciences

Research Field

Wind engineering, Environmental engineering



The program provides me various opportunities to become a top-level researcher as well as established educator. We, university faculty members, are required to be researchers having genuine global competitiveness and understanding the importance of diversity. The mentoring steps in the program are great chances for me to enhance the international network in my research fields, as well as to improve my supervising skills. The improvement of my research skill is essential to facilitate students to conduct their research activities effectively and enjoyably. Based on such activities, I will lead an attractive laboratory for many overseas students as a hub in my fields. Moreover, various lectures provided in the program make me contemplate how the diversity-inclusive thoughts have positive effects on our faculty and university. To maximize the outcomes in research and educational activities at university, we are requested to consider and accept the diversity of faculty members and students. As a trainee of the program, I would like to ingrain the thoughts for our generation.

No.2

INOISHI Atsushi *Assistant Professor*

Affiliation

Department of Advanced Device Materials / Institute for Materials Chemistry and Engineering

Research Field

Electrochemistry



SENTAN-Q is a great opportunity to become a world-class educator / researcher with lectures on university governance, diversity, and active learning, as well as recurrent education and practical education, research guidance using English. Therefore, I applied this program. I feel that the opportunity to receive guidance from the world's top university lecturers is extremely valuable and useful. I learned active learning-type teaching methods, and I found that there are many ways to teach, and I can learn myself. In the future, I will give lectures in this training program, and I would like to use it at that time. Now I study the development of battery materials, and I usually have many opportunities to talk with researchers in the field of chemistry, but in this training, there are members from various fields. I feel this is a very useful opportunity to interact with researchers in other fields. In addition, I would like to promote international joint research with the world's top-level researchers.

No.3

KANEKO Naoki *Assistant Professor*

Affiliation

Department of Dental Science / Faculty of Dental Science

Research Field

Immunology



I have had the privilege of meeting many incredible mentors. They understood the needs of students from diverse backgrounds and educated them with precision and passion. I applied for the SENTAN-Q program because I want to be that kind of mentor and educator for my students.

In the SENTAN-Q program, I participated in various training such as university governance, active learning methods, and inclusion for diversity and super global teachers. I feel that my self-confidence has expanded. Through this program, I would like to hone my skills as an educator and engage in the education of global students who can be accepted worldwide.

No.4

KUSABA Akira *Assistant Professor*

Affiliation

Division of Renewable Energy Dynamics / Research Institute for Applied Mechanics

Research Field

Materials Engineering, Crystal Growth



SENTAN-Q is a training program that gives even young faculty members the opportunity to learn about international standards of university governance and teaching methods. I applied for this program because I wanted to acquire the necessary skills through the training program in order to step up to become a principal investigator. The practical training I received in English on active learning methods gave me confidence. As for supervising the research of exchange students and overseas students, I will do my best as a research supervisor, from planning the theme to guiding the writing of the paper.

I am conducting research on the use of artificial intelligence (AI) in materials process design. In the future, I will manage my laboratory by accepting students with various backgrounds in mechanical engineering, chemical engineering, applied physics, and informatics. I would like to make use of my experience in learning about diversity and inclusion and the network with overseas researchers that I gained through the program.

Third term Trainees

No.5

LIU Huixin *Associate Professor*



Affiliation

**Department of Earth and Planetary Sciences /
Faculty of Sciences**

Research Field

Space Physics, Space Weather,
Atmosphere-ionosphere coupling, Climate change

For me, Steps 2, 5 of SENTAN-Q are very unique, as they help to expand a research's capacity into multi-dimensions, i.e., from being just a researcher to being a responsible faculty member, who cares not only her/his own research, but also research and education at larger scales and at university level. Through the recurrent education in Step 5, I've built connections with other researchers in different fields, and hopefully we will find common interest to start inter-disciplinary collaboration soon. Also, using knowledge gained from training on diversity and inclusion in Step 2, I wish to help improve the DEI environment of the university, making it an enjoyable place to work and study.

As a researcher, I hope one day we will be able to do space weather forecast as good as the weather forecast, so that we could contribute to manned-space explorations. As a faculty member, I hope to contribute to internationalization of the university, and make Kyushu University attractive to many foreign scholars and students.

No.6

MORIMOTO Yuki *Assistant Professor*



Affiliation

**Department of Content and Creative Design /
Faculty of Design**

Research Field

Computer Graphics

The research field of computer graphics is a highly applied research field involving several academic areas. SENTAN-Q is designed to provide connections with faculty members from other fields, as well as diverse perspectives in terms of education and management, which is very interesting. There are also training programs for education and overseas research, which I am looking forward to.

As for my future goals, I would like to realize a better society through computer graphics and related technologies, as the world has become increasingly digital and online in recent years. I would also like to think and work flexibly for the future of universities and the way of life of human beings, aiming to be in tune with the times.

No.7

NAKABAYASHI Koji *Assistant Professor*



Affiliation

**Department of Advanced Device Materials /
Institute for Materials Chemistry and Engineering**

Research Field

Carbon Material, Carbon Neutral Society

I am researching with a high interest in carbon-neutral society. Among them, I am conducting research to convert unused carbon into carbon materials. The SENTAN-Q program offers a broader perspective on international governance, diversity and inclusive education. I also strongly felt that I wanted to be a part of it. Besides, I receive advice from internationally renowned researchers through the SENTAN-Q program and I can also learn how to nurture the younger generation. My future goal is to be a world-class researcher in my field of expertise.

No.8

SUEMATSU Koichi *Assistant Professor*



Affiliation

**Department of Advanced Materials Science and
Engineering / Faculty of Engineering Sciences**

Research Field

Functional inorganic materials, Electrochemistry,
Gas sensing

I had studied in a German laboratory when I was a student, and I felt that their students and researchers with various backgrounds enjoy their own work to push forward the whole research. Now I found that it is the atmosphere of diversity-inclusion, and the German laboratory is one of my target laboratories. When I manage the laboratory, I would like to create an atmosphere in which members can perform to their fullest potential. Thus, I applied to the SENTAN-Q program because I would like to learn the skills for communication and research education to create such a research environment and atmosphere.

My research is the development of gas-sensing devices based on the fundamental understanding of functional nanomaterials. In my research field, a collaboration of various research areas such as materials, electronic-device, and device design is necessary for social implementation. Thus, I would like to create an international network in SENTAN-Q program, and finally, my purpose is to establish the international research and education community in the future.

Third term Trainees

No.9
Ade Irma Suriajaya *Assistant Professor*

Affiliation
**Department of Mathematics /
Faculty of Mathematics**
Research Field

Mathematics (Analytic Number Theory)

I knew of SENTAN-Q Program the first time through internal recommendation, and I was excited to participate in it from the very first time. The third-term program is more or less reaching halfway with lectures on STEP2 university governance and STEP3 teaching skills all completed and the first student guidance in STEP4 is conducted halfway. I still have lectures to attend as a part of STEP5 recurrent education and STEP6 as the final examination which will include teaching abroad and the second student guidance, which preparations are now mostly done. I have now experienced the benefits of this program and can now be sure to say that this is a very fruitful faculty development program.

First of all, I am an assistant professor currently in the third year, and have surely no experience in university governance, nor did I ever have the opportunity to teach major classes. It is such a valuable chance to get to know a little bit about university governance in advance, and the teaching skills we learned involve active learning which is not yet applied in my field of study, Pure Mathematics as a large category. The latter is helpful to have myself prepared to use active learning teaching techniques when I get to teach major classes in the future. Secondly, it is undoubtedly fun to get the opportunity to learn things outside of my area of expertise through 1-to-1 active learning classes. Finally, as an assistant professor in the math department, I am not yet allowed to guide graduate students. SENTAN-Q Program has given me the opportunity to train myself as a research educator before having the full responsibility to independently be one.

No.10
TUDA Midori *Associate Professor*

Affiliation
**Department of Bioresource Sciences /
Faculty of Agriculture**
Research Field

 Population ecology, community ecology, evolutionary ecology,
molecular ecology, population genetics, biological control

SENTAN-Q is a great opportunity to broaden my view in research, education, and university governance from an international perspective. I also would like to bolster diversity in academia by becoming an active participant in that myself. SENTAN-Q training is interactive and inspiring. I am learning differences between Japan and the US in university governance and diversity inclusion. I am also learning interactive teaching methods and performed an online interactive lecture. Lecturers and trainees are diverse in gender, age, and race. They are enthusiastic and I feel very lucky to have this opportunity. I'd like to apply knowledge and methods I've learnt over this training to my teaching and research. I also feel that I can work more effectively with a greater range of international researchers and students. Looking to the future, I have an ambition to develop a new research field focused on my own field of ecology and biocontrol in tandem with AI and nano technologies.

No.11
YOSHIOKA Hiroaki *Assistant Professor*

Affiliation
**Department of Electronics /
Faculty of Information Science and Electrical Engineering**
Research Field

Laser engineering

I am currently conducting on the research of printable microlasers with the creation of innovative laser light sources as the core of my research. It is useful in advanced applications such as next-generation integrated quantum devices, optical integrated circuits, and ultra-sensitive biosensing. Through the SENTAN-Q program, I would like to increase my presence in these fields of application that require international competitiveness.

A few years ago, I promoted international joint research through a long-term overseas dispatch. However, due to the high time cost spent on building a research environment and taking experiments, I couldn't promote enough activity on the perspective of "improvement of international research and teaching skills." Therefore, I applied for SENTAN-Q program in order to acquire new knowledge and achieve "improvement of international research and teaching skills".

Plan for the FY 2022 term (April 1, 2022 to March 31, 2023)

In FY 2022, the 2nd trainees will have completed STEP5 and STEP6. STEP6 can be replaced with online lecture and research guidance using Zoom in case of travel restriction barring overseas travel from Japan.

The 3rd trainees will continue STEP4 and STEP5 in FY 2022. They will proceed to STEP6 in August after being certified that they have successfully completed STEP4.

The nomination process for the 4th trainees will begin from March 2022. After the selection, the 4th trainees will start their program from August.

2 nd Trainees	3 rd Trainees	4 th Trainees
<p>STEP5</p> <p>Up-to-date field-specific recurrent training</p> <p>STEP6</p> <p>Final examination Overseas training more than 8 weeks</p> <p>*The 2nd trainees started STEP6 from August 2021 and will complete in July 2022.</p> <p>**It can be conducted online in case of travel restriction being in place due to COVID-19.</p>	<p>STEP4</p> <p>Directed study and guidance of international students</p> <p>STEP5</p> <p>Up-to-date field-specific recurrent training</p> <p>STEP6</p> <p>Final examination Overseas training more than 8 weeks</p> <p>*The 3rd trainees will start STEP6 from August 2022.</p>	<p><i>March to May:</i> Application for the nomination of candidates</p> <p><i>June:</i> Screening process by application documents</p> <p><i>July:</i> Interview</p> <p><i>Early July:</i> Final selection of the 4th trainees</p> <p>Start the program of SENTAN-Q</p> <p><i>August to March:</i> STEP2 <i>September to March:</i> STEP3 <i>August:</i> STEP4 and STEP5</p>

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

MEXT Support Program for the Development of Human Resources
in Science and Technology
“Initiative for Realizing Diversity in the Research Environment”

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

Guideline for 4th Term Trainees
(Feb. 21, 2022)



1

Objective of this program

- The program is made to provide outstanding female and young faculty members with opportunities for strengthening their research and educational skills that meet the highest global standards to become attractive and competitive in the world's academic research.
- Trainees in this program are selected through highly transparent screening process from candidates recommended by each department and are expected to attain promotions to senior or management positions within a few years. In principle, trainees will take two-years diversity & global training course. When trainees reach the targeted learning level, certificates will be given and tenure or one-level promotion will be granted within one year.
- Through the program, trainees can acquire research and educational skills that meet the highest global standards, and the wide knowledge required for senior or management researchers. Furthermore, the formation of on-campus network that goes beyond the boundaries of male and female crossing different research fields are expected (as well as the elimination of unconscious bias)



2

Contents of this program

- This program consists of STEP1 to STEP6
 - STEP1 Selection of trainees
 - STEP2 University governance, diversity and inclusive education (on campus)
 - STEP3 Teaching methodologies for active learning in English (on campus)
 - STEP4 Directed study and guidance of international students (on campus)
 - STEP5 Up-to-date field-specific recurrent training(on campus)
 - STEP6 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 is to be implemented for six rounds from FY 2019 to FY 2024 as a JST project. The continuation after 2024 has not been decided. The program is expected to promote about 60 trainees through six application rounds.
- Trainees who complete the courses from STEP 1 to STEP 6 will receive certificates from the President and are granted tenured position or one-level promotion within one year of the completion of the program.
- The program is being implemented with the cooperation of the entire university as part of administrative reforms centered around “young, women and foreign researchers” as set forth in Kyushu University’s Mid-term objectives and Mid-term plan and the National University Administration Reform Facilitation Project etc. with the adoption of MEXT’s Initiative for Realizing Diversity in the Research Environment.



3

Details of this program(1/6)

STEP1 Selection of trainees (on campus)

Trainees are selected through highly transparent screening process from candidates recommended by each faculty.

- Qualified applicants: Female faculty, or male faculty aged 37 years old or younger at the end of FY in which the program starts (associate professor, lecturer and assistant professor)
 - (1) Tenured faculty (2) Untenured faculty but scheduled for a tenure review
- Application period: March 7, 2022(Mon) to May 16, 2022 (Mon)
- Application documents: Forms 1 to 4
- Interview Date: Early July 2022 (scheduled)
 - Place: Kyushu Univ. Ito Campus (details will be announced later)
- Selection criteria
 - (1) Sufficient research achievements (2) Having a positive attitude to learning about new issues surrounding universities and society with the acceptance of Kyushu University’s policy that faculties should learn with students (3) Being motivated to improve global research and educational skills including overseas training
- Selection Committee members: President and board members of Kyushu University, professors emeritus in Institute for Advanced Study and external experts (about 10 members in total)
- Language: English and Japanese
- An unconscious bias check sheet should be provided to the judges before review
- Number of applicants (planned): 5-10 people / year
 - male : female = 1:1, humanities : science = 1:1 in principle
- Result announcement : Early July 2022
- Orientation meeting for successful applicants: Late July 2022
- Training course start : August 1, 2022 (Mon)



4

Details of this program(2/6)

STEP2 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-class universities (mandatory course)

Diversity and inclusion

- Period: 1-2days intensive lectures in the first year
- Place: Kyushu Univ. Ito campus (It can be conducted online under certain conditions)
- Learn about the importance of diversity and inclusion in university and society and about various innovation cases born from these concepts.
- Lecturers are experts invited from overseas

University governance

- Period: 1-2days intensive lectures in the first year
- Place: Kyushu Univ. Ito campus (It can be conducted online under certain conditions)
- Learn about a vision of what a university should be from a long-term perspective and university management.
- Lecturers are university vice president or former vice president invited from the world's top-class universities (overseas).



5

Details of this program(3/6)

STEP3 Teaching methodologies for active learning in English (on campus)

Objective Learn about the latest teaching methodologies for active learning from lecturers invited from the world's top-class universities (mandatory course)

- Period: 2-3 days of intensive lectures in the first year
- Place: Kyushu Univ. Ito campus or Fukuoka City (It can be conducted online under certain conditions)
- Classes are conducted in English. Intensive and interactive lectures.
- Lecturers are experts invited from overseas.



6

Details of this program(4/6)

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

Objective Learn how to conduct research guidance in English for international students while receiving guidance from the world's top-class senior researcher as a mentor

- Period: 1 year starting from August, 2022
- Place: Trainees' laboratory
- Setting research theme, conducting research guidance in English and writing international co-authored paper etc. with international students (maximum 2) supervised by an overseas mentor
- An overseas mentor should be a university researcher who meets the requirements of Progress 100.
- Selection of international students and overseas mentor should be done by a trainee in principle.
- Web-conferencing system can be available for overseas communication. (In FY 2019, Kyushu University purchased a web-conferencing system and installed it in the Office for the Promotion of Gender Equality. A device can also be made available for lease.)



7

Details of this program(6/6)

STEP6 Final Examination: Teaching and directed study (overseas)

Objective Overseas training constitutes the final examination of SENTAN-Q. It determines whether the trainees have developed research and educational skills that meet the highest global standards.

- Period: 1 year starting from August 2023 to July 2024 (overseas staying period should be more than 8 weeks)
- Place : Overseas partner university (or another world's top-class universities)
- Only trainees who have completed the STEP2 to STEP4 can participate in STEP6
- Conduct lectures at an overseas partner 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 partner university with a mentor. In principle, as in STEP 4, writing of one international co-authored paper as a principal investigator is required.
- The trainee selects an overseas partner university and mentor
- Expenses necessary for overseas training are borne by the SENTAN-Q program.



9

Details of this program(5/6)

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

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

- Period: Take two or more courses from the list between August 2022 to July 2023 as the mandatory-elective course.
- Place: Kyushu Univ. campuses
- Lecturer: Kyushu Univ. faculty members in principle. Lecturers can also be invited from outside the university upon request from trainees.
- Select the extra-professional field. 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 method



8

Evaluation of the trainees' achievements

STEP2, STEP3 , STEP5

- Quantitative evaluation of trainees' achievements based on rubric tables should be done by lecturers.
- A self-evaluation by the trainees will also be done at the same time to feedback on the efficiency of the program for the next year

STEP4, STEP6

- An overseas mentor from the world's top-class university determines whether the trainees have developed research and educational skills that meet the highest global standards in consideration of the achievement of internationally co-authored papers.

Final certification of the training (after the completion of two-years program) is decided by the President after deliberation by the committee



10

Appendix

- This program is designed to empower female and young faculty members by the direct guidance of the world's top-class researchers and being assessed on their research and educational skills. The goal is not simply to increase the number of female and young faculty members in senior or management positions, rather to make them to be competitive and attractive in global research market.
- The ultimate goal is to identify and nurture outstanding female and young researchers at Kyushu University who can lead the world's academic research and to appeal their skills to the world.
- The trainees should understand the objective of this program and make the best use of this training opportunity for their own learning and achievements.



Unconscious bias checklist

Diversity and Super Global Training Program for Female and Young Faculty 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 situations. 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.

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.

Name (please print)

Date

Signature or seal

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