

# Top Global University Project (Type A) Hokkaido University

## 1. Outline

### 【 Name of the project 】

Hokkaido Universal Campus Initiative  
- Collaborate with the World -

### 【 Future vision of the University planned in TGU project 】

Improve competitiveness to increase research and education resources, and gain a reputation as a university that contributes to the resolution of global issues.

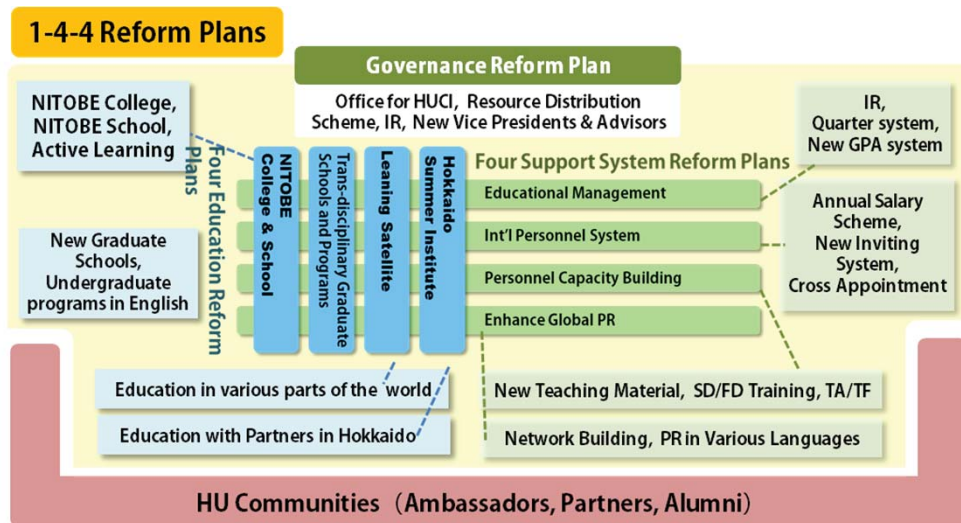
### 【Summary of Project】

Approaching its 150<sup>th</sup> Anniversary in 2026, Hokkaido University (HU) has developed a strategy of university reform entitled “Future Strategy for the 150<sup>th</sup> Anniversary of Hokkaido University” by demonstrating a vision, “HU for the resolution of global issues.” The HUCI is a project implemented under this strategy.

Based on our strengths and characteristics, the HUCI will establish “Universal Campus,” a framework to offer education in various parts of the world in collaboration with universities and research institutions that have achieved remarkable outcomes for the resolution of global issues as well as people who have demonstrated outstanding leadership in such activities.

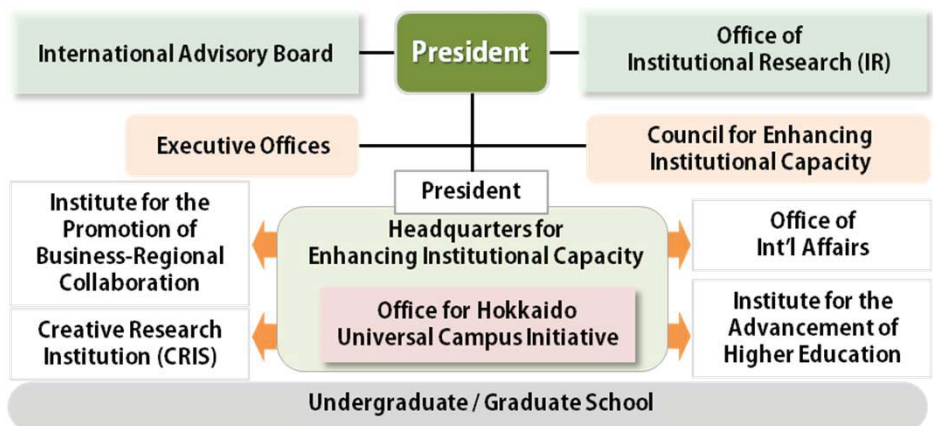
The “1-4-4 Reform Plans” are the backbone of the HUCI.

- One plan to reinforce governance: Establishment of Office of Institutional Research to support quick decision-making by the President as well as a framework to ensure various decisions;
- Four educational reform plans: Development and implementation of degree programs and short-term programs to provide education in collaboration with universities across the world; and
- Four system reform plans: Functional enhancement to effectively achieve educational reform while introducing high-quality education research resources from across the world.



### 【Implementation system】

The HUCI is directed by the Headquarters for Enhancing Institutional Capacity, an organization established for the comprehensive reformation of the University in education and research through the leadership of the President. The Office for HUCI (the Director is the Executive & Vice president) was set up in the Headquarters. The Office will plan, design, and verify activities relating to the 1-4-4 Reform Plans in collaboration with four institutes.



**HOKKAIDO**  
UNIVERSITY

## 【Summary of the 10-year plan】

### ◆ From 2014 to 2015 <Startup stage>

With the intention of enhancing the President's governance, establish new organizations such as the Office for HUCI to supervise this project and the International Advisory Board to advise the President. At the same time, initiate various measures including the NITOB Education System and Resource Redistribution Scheme to orchestrate the University reform.

### ◆ From 2016 to 2017 <Output initiation stage>

Along with commencement of the Learning Satellite Program (LS) and the Hokkaido Summer Institute (HSI), embark on collaborative education for students in our University and overseas with top researchers across the world and partner universities. Establish multiple graduate schools in cooperation with world-leading universities. Taking the opportunity of ASEAN Office establishment, increase student exchanges by further enhancing cooperation with alumni, HU Ambassadors, and HU Partners in the ASEAN region. In parallel with these new activities, we will have our first graduates from the NITOB Education System.

### ◆ From 2018 to 2021 <Output increase stage>

Expand measures to achieve the goal by reviewing the approaches already implemented and introducing improvement ideas. In particular, improve frequency and quality of exchanges between HU and universities in North American region by establishing a North American Office, while taking advantage of networks between alumni, HU Ambassadors, and HU Partners in the region.

### ◆ From 2022 to 2023 <Transient stage to next phase>

Based on review of the activities during the past decade, plan how to implement this project in a continuous and developmental manner even after termination of the financial support period of the Top Global University Project, aiming to achieve the goal established in the Future Strategy for the 150<sup>th</sup> Anniversary by 2026.

## 【Featured Initiatives (Internationalization, University reform, Education reform)】

### ◆ Governance Reform

In advancing this project, it is characteristic that the "Resource Redistribution Scheme" is introduced first. This scheme aims to distribute financial resources to HU faculty based upon the results of evaluation measured by a series of indicators established by the President in exerting his leadership to ascertain how faculty are addressing and contributing to this project. Information required for the faculty in the project is collected and analyzed by the Office of Institutional Research to be newly established.

### ◆ Educational Reform / Internationalization

Another characteristic of the strategy lies in a stance to drastically change educational methods throughout the University by introducing multiple education programs in which all undergraduate/graduate schools are involved. There are four education programs. The "Nitobe College" and "Nitobe School" programs offer sub-major subjects to selected excellent students. The LS and HSI programs offer opportunities to a larger number of Japanese and foreign students to learn together in specialized fields from world-leading researchers. When a student or teacher hopes to participate in these four programs, each department and major, or each school, is required to implement various reforms to ensure quality of education; for instance, introducing quarter and grading systems compatible with universities around the world; increasing the subjects provided in English and active learning classes; improving the quality of the syllabus; introducing teaching evaluation systems and student portfolios; and collaborative education with researchers and alumni who are active at the forefront of the world.

## 【Promotional Measures for Coordination with Foreign Universities】

Find new overseas partner institutions and create new collaboration opportunities with existing partners by dramatically increasing interaction between world-leading researchers and our faculties.

### ◆ Learning Satellites (LS) Program, Hokkaido Summer Institute (HSI) Program

LS and HSI, which offer educational courses abroad and in Hokkaido, are a good start for collaboration. The researchers can collaborate with certain units of one course or multiple credits, joining independently as lecturers or along with their students.

### ◆ Joint Degree Program (JD), Cotutelle (Joint supervision for doctoral dissertations)

Move from collaborations that last only a few days or several weeks a year in LS and/or HSI to further committed collaborations: both organizations agree to offer JD or Cotutelle in our new graduate school curriculum.

### ◆ Joint Research

Joint supervision for graduate students will lead to joint authorship and research. Aiming to strengthen the relationship, a new staff invitation system and a cross appointment system are now available to hire counterparts for research. This leads to exploring opportunities for new collaborative activities.

## 2. FY2014 Progress

### ■ Common indicators and targets

#### **Internationalization**

##### ◆ Ensuring Diversity

- Based on the renewed system, 40 distinguished researchers and teaching faculty from around the world were invited to study at HU for several months. Also, as a result of introducing various measures, the number of international faculty reached 177 persons as of May 2015, increasing by 13% compared to the previous year.
- In order to ensure further diversity, the incentive for the faculty to employ foreign and female teaching faculty members will be increased from the fiscal year 2015.
- As a result of making it possible to accept exchange students in a variety of forms, the number of exchange students as of November 2014 reached 1,768, which was 9.8% of the total number of students, an increase of 167 students from the previous year.

##### ◆ Mobility, Overseas Study Support System, Openness of the University

- A new GPA system that is in line with academic results tables and standards of overseas universities was established, which will be applied to students enrolling as undergraduates from the fiscal year 2015.
- Decided to adopt a new entrance examination system from the fiscal year 2018, where the International Baccalaureate and American uniform exams (SAT, ACT) will be utilized for academic assessment for admission to departments.
- Created a faculty manual to certify credits that were acquired at partner universities overseas.

#### **University reform**

##### ◆ Personnel System

- From January 2015, an annual salary system was adopted for the regular faculty. In relation to the goal, 215 persons applied for the system during a three month period, and exceeded the target of 80 persons.
- Based on the "Cross Appointment System," four professors were employed as regular faculty in the GI-CoRE from Stanford University, the University of Melbourne, and the National University of Ireland, Dublin.

##### ◆ Governance

- An executive & Vice President in charge of international affairs was appointed as a director of the Office for HUCI.
- The President appointed three faculty members in the fiscal year 2014 and one member in the fiscal year 2015 as Vice Presidents to support his decision making and execute decisions made. They manage gender equality, Nitobe College, Nitobe School, the overseas offices, and the International Student Center.
- Commissioned three persons possessing worldwide networks as "Executive Advisors for International Coordination."
- Started interviews in English in the recruitment examination for administrative staff, and developed training programs to increase personal capability of existing staff. As a result, the number of staff with TOEIC scores of 700 points or more had increased to 8.3% as of May 2015 from 5.9% in the previous year.

#### **Education reform**

##### ◆ Implementation of a Teaching Fellow System

- While maintaining the traditional Teaching Assistant (TA) system, in order to further improve the teaching abilities of doctoral students and to enhance undergraduate education, a "Teaching Fellow (TF) system" was introduced from the fiscal year 2015.

##### ◆ Advancing the Implementation of the Active Learning Method

- Conducted teaching faculty training directed towards the utilization method of active learning, with a total of 72 participants. In addition, 24 persons participated in a model class that adopted flipped classrooms using digital teaching materials and active learning methods.



Prof. Quynh-Thu Le (left) and President Yamaguchi (right) at the Appointment Ceremony

## ■ University's own indicators and targets

### ◆ NITOBE education system

- 222 applicants for the second phase of Nitobe College were admitted from a total of 413 applicants. The number of students of the College who studied abroad significantly increased from 23 in 2013 to reach 110 in 2014 because of the increase in short-term study abroad programs. The College received the highest S assessment in its midterm review (only 5 universities received an S assessment out of 42).
- With a view to opening in May 2015, "The Nitobe School International Symposium" was held, attracting 98 participants, to foster understanding about this School. A total of 64 inaugural class students will enter the School (118 applicants).
- Students will graduate for the first time from both Nitobe College and Nitobe School in March 2017 as planned.



Opening remarks by  
President Yamaguchi

### ◆ Collaborative education

- With a view to developing collaborative education with world-leading researchers, financial support was provided to 64 plans proposed by faculties to begin negotiation with overseas universities. As a result, more than 10 Learning Satellite courses, which award credits, will be held overseas in 2015. More than 60 preparatory activities will be conducted in Hokkaido this year with an aim to inaugurate the Hokkaido Summer Institute in 2016. Some of the initiatives will be developed into joint-degree programs and cotutelle (joint supervision for doctoral dissertations).

### ◆ International joint papers

- Both the number of international joint papers as well as the total number of papers increased from the fiscal year 2014. The ratio of international joint papers amongst the total papers increased by 0.3% to reach 25.3%.

### ◆ Hokkaido University ambassadors and partners

- The President of HU organized alumni social gatherings in March 2015 to meet candidates for HU's Ambassadors and Partners to develop a stronger human network and support the establishment of alumni associations. The President called for cooperation of HUCI with 112 participants in Jakarta (Indonesia) and 79 participants in Bangkok (Thailand). On this occasion, "The HU Indonesia Alumni Association" was established. Furthermore, it was decided to establish "The HU Thailand Alumni Association."

### ◆ Redistribution of internal resources

- In the fiscal year 2015, approximately 420 million yen - more than double the amount of the previous year - is scheduled to be distributed based on evaluation of the measures taken by the faculty, taking into account the contribution to this HUCI project.

## ■ Initiatives for the enhancement of international reputation ■ Free description

- Launched in April 2014, GI-CoRE invited world-leading research units, established two global stations, and initiated joint research. One is "The Global Station for Quantum Medical and Engineering" established in the radiotherapy field with Stanford University (United States); the other is "The Global Station for Zoonosis Control" established with Melbourne University (Australia), University College, Dublin (Ireland), and King Abdullah University of Science & Technology (Saudi Arabia). In April 2015, it was decided to establish a third station, "The Global Station for Food, Land and Water Resources."
- The joint study with the unit of Stanford University was reported on the website of the academic journal "Medical Physics" and a paper was published in the journal. Moreover, a joint paper with University College Dublin was published in the academic journal "Nature Communications." Furthermore, the number of interviews by international media is on the rise thanks to active research activities.
- To take advantage of the results of GI-CoRE, a preparatory committee was launched to establish the "Graduate School of Quantum Medical and Engineering," the "Graduate School of International Infectious Diseases," and the "Graduate School of Food Resources" (tentative names) in April 2017.

## 【Cooperation record with overseas universities】

- HU submitted the educational plan of the "East Russia-Japan Expert Education Consortium (RJE3)" with five Russian universities (Far Eastern Federal University, North-Eastern Federal University, Sakhalin State University, Pacific National University, and Irkutsk State University). As a result, the plan successfully obtained Japanese government financial aid for five years and started mutually dispatching students and professors to these universities. At the same time, the Arctic Research Center was established in April 2015 to strengthen cooperation with universities and research institutes in the region.

### 3. FY 2015 Progress Report

#### ■ Common indicators and targets

#### Internationalization

##### ◆ Towards a Diversified Institution

•The number of international students exceeded the immediate target figure of 10% of all students and reached 1,875 (10.4%;as of November 1, 2015) because of continuous efforts to increase the number of overseas partner universities and short-term inbound programs.

•Concerning the establishment of the *Diversity Promotion Office*, daily office e-mails sent from the administrative bureau have been translated into English since January to create a better working environment for international staff and students.

##### ◆ Mobility, Overseas Study Support System, Openness of the University

•In accordance with the *Manual for Credit Transfer with Overseas Universities* formulated in fiscal year (hereinafter, FY) 2014, all undergraduate and graduate schools have introduced statutory rules for credit transfers and increased courses in which overseas-university credits and academic achievements can be recognized. As a result, 273 students earned a total of 546 credits in FY2015 for overseas studies (50 students and 100 credits more than the previous year).

•Guidelines for a cotutelle program were produced to promote a jointly supervised doctoral degree program in co-operation with overseas universities, and a related briefing session was held on campus in March. In FY2016, the Graduate School of Agriculture plans to enter an agreement on a cotutelle program with the University of Sydney, and the Graduate School of Environmental Science plans to enter a similar agreement with the University of Tasmania.

•Support was provided for the establishment of overseas alumni associations in order to promote greater networking among previous students. Alumni associations were established in Zambia and Thailand, following similar establishments in Brazil, China, Indonesia, South Korea, and Taiwan.

#### University Reform

##### ◆ Personnel System

•The *Cross-appointment System* has been used to appoint faculty members from Stanford University, Melbourne University, and University College Dublin since FY2014. The system added members from the King Abdullah University of Science and Technology, and brought the total number of recruited members to 12.

•To increase the number of international faculties, a *10-year Tenure Track System* was established, and five assistant professors were employed through international open recruitment.

•The newly established *Distinguished Professor System* honored nine faculty members who are making world-class achievements and are expected to further advance in research and raise the profile of Hokkaido University (hereinafter, HU). They were granted the title of “Distinguished Professor” and a special allowance. One of them is Dr. Jian Ping Gong who is engaged in innovative research on soft and wet materials created with hydrogels.

##### ◆ Governance

•For ensuring the implementation of President Yamaguchi’s vision, three presidential advisors were added, thereby increasing the total to 22, which includes six women and one non-Japanese national. Each of the four Executive Offices employed an international faculty member to enhance its diversity.

•The *Office of Institutional Research* was established in July to support the HU president in managing HU. Five special staff members were assigned to the office, and the *HU Fact Book* was compiled with various data.

•The *Higher Education Training Center* was established in April to further promote the development of faculty and administrative members, as well as graduate students. The Center organized nine workshops for deans and project management training for middle-level faculty and administrative members to improve the university’s management capacity.

•A TOEIC-IP test was conducted to gauge the English proficiency levels of the full-time administrative staff. It was taken by 508 staff members. The results were analyzed and used for rebuilding the human management and development system.

#### Education Reform

• The *Modern Japanese Studies Program* was established, and 16 students from 11 countries were admitted into it. These students share some classes with the Japanese students from the Nitobe College honor program and learn together in English.

• Detailed information on the admissions policy was released for a new international entrance exam system being launched in FY2018. The International Baccalaureate and other external tests such as SAT will be used for undergraduate admission. The new system is intended to appeal to internationally minded individuals.

• The results of class questionnaires completed by undergraduate students have been fed back to faculty members in charge of classes and to the staff responsible for course subjects. Information on issues raised by students and the improvements made by faculty members is posted on the website in the interests of class improvement and progressive information disclosure.



HU president & Thai alumni

## ■ University's own indicators and targets

### ◆ NITOBÉ Education System

- The Nitobe College honor program requires at least one semester or two short terms of overseas study. In FY2015, 22 students engaged in a study abroad experience that lasted over three months, while 132 students engaged in a short-term overseas experience. The number of students studying abroad increased, as students in the inaugural class of a hundred students graduated at the end of FY2016.
- The Nitobe School honor program for graduate students was founded in May with 64 students, including ten international students. Ten courses, including the "Problem-Solving Course," have been started. The first year proved to be successful, increasing the average TOEIC score of students by 55 points and improving the target abilities as seen in the results of the SEQ competency assessment test.

### ◆ International Degree Programs

- Proposals to establish the Graduate School of Biomedical Science and Engineering, the Graduate School of Infectious Diseases, and the Graduate School of Global Food Resources (provisional names) were submitted to MEXT in March 2016. These institutions will be established through international joint efforts made in the GI-CoRE. The establishment of new graduate schools is being planned along with the re-organization of existing graduate schools and educational reform.

### ◆ Learning Satellite and Hokkaido Summer Institute (see the last section of this page)

### ◆ International Joint Research Papers

- The percentage of international joint research papers by HU members has reached 30.1%. The target of 29.0% for FY2016 has already been achieved several months ahead of schedule.

### ◆ Hokkaido University Ambassadors and Partners

- The *Hokkaido University Ambassador and Partner System* was designed to enhance HU's international presence based on personal connections. The delegation of ambassadors and partners will begin its activities in the beginning of FY2016, with South Korea at the top of the list. It will support graduates who are active in various countries.

### ◆ Redistribution of Internal Resources

- Activities in FY2014 were evaluated, and the departments actively working to achieve the university's objectives were prioritized for budget allocation totaling 420 million yen in FY2015. Some evaluation indexes were reviewed for FY2016 allocation to support the achievement of objectives in the Top Global University Project.

## ■ Initiatives for the enhancement of international reputation

- *The Global Station for Food, Land, and Water Resources* was established as the third project organization of the GI-CoRE. It invited three world-class researchers, including an ex-UNESCO Assistant Director-General, as its advisors.
- It was decided that three more Global Stations (hereinafter, GS) would be established in April 2016. The *GS for Soft Matter* hosts research units from the University of North Carolina, the *GS for Big Data and Cyber Security* hosts those from the University of Massachusetts, and the *GS for Arctic Research* hosts those from universities in several northern countries. As a result, six international education and research projects will be conducted simultaneously under the management of the president in FY2016. New graduate schools and the re-organization of existing graduate schools are planned as outcomes of each GS activities.

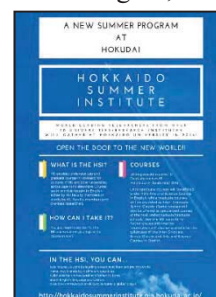
## ■ Free description

- *The Arctic Research Center* was established in April 2015 to support the expansion of HU's strengths. In its role as a Japanese hub for interdisciplinary and international research/education toward the resolution of global issues, the Center works to strengthen collaborative relationships with Russia's North-Eastern Federal University and the USA's University of Alaska, as well as universities and research institutes in Norway, Finland, and Germany. It successfully attracted an office for a joint international research project on Ecosystem Studies of Sub-Arctic Seas (ESSAS) in March 2016.

## 【Results of the promotion of collaboration with foreign universities】

- The *Learning Satellite* project was launched to promote collaborative work between faculty members from HU and overseas universities in teaching specialized subjects overseas. A total of 22 subjects, which has already exceeded the target of FY2016, were taught in collaboration with several institutions, including Karolinska Institutet in Sweden, the Swiss Federal Institute of Technology, and the National University of Singapore, in ten countries and one region, and 88 HU students were sent abroad.

- HU started the *Hokkaido Summer Institute* (hereinafter, HSI), a collaborative educational program of HU faculty members and overseas researchers, on a trial basis, and took measures to address related issues before the inauguration in 2016. A total of 212 students from overseas were hosted for 24 educational activities in collaboration with overseas universities, including the University of British Columbia in Canada, the University of Pisa in Italy, and National Taiwan University. A total of 71 courses, exceeding the FY2016's target of 50 courses, have been prepared for summer 2016 and a call for students worldwide has been posted on the website (<http://hokkaidosummerinstitute.oia.hokudai.ac.jp/>).



A flyer for HSI 2016

## 4. FY2016 Progress

### ■ Common indicators and targets

#### Internationalization

##### 1) Expand the Number of International Staff Members

Continuing the employment systems introduced last year, 15 international faculty members were recruited under the Incentives Offering System and 56 international researchers holding outstanding achievements were recruited in 8 different departments via the International Faculty Invitation System.

The *Diversity Promotion Office* was established in October to provide better English translations for such as e-mails sent from the administrative bureau to create a better working environment for international researchers and students.

##### 2) Education Programs for International Students

19 students were admitted as the second cohort of the *Modern Japanese Studies Program* (MJSP), a Bachelor's program for international students interested in the humanities which started from the 2015 fiscal year (FY). Other students to join as the third cohort in FY2017 took the Intensive Japanese Course preceding the program.

Preparations, setting the curriculum, trial course runs, etc., for the *Integrated Science Program* (ISP), a combined Bachelor's and Master's science program, were made. The first cohort will start in autumn FY2017.



Modern Japanese Studies Program

##### 3) Raise Students' English Proficiency Levels

To gauge the English proficiency levels of the students, TOEFL-ITP and TOEIC-IP tests were held and taken by 673 students. As a reflection of the university's English language education, a new and improved system manages these scores in a database and analyzes them.

#### University reform

##### 1) Internationalization of Personnel System

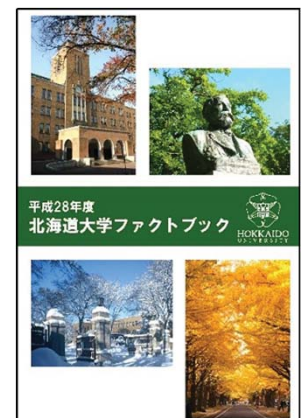
Hokkaido University (HU) amended the criteria to recruit faculty and began to openly recruit on an international level. The period of sabbatical training was also changed so that it includes at least three months of training. The personnel salary system, introduced last year, helped raise the number of full-time faculty members under the adopted annual salary system to 520 and the number of recruited members by the *Cross-appointment System* to 29.

##### 2) Enhancement of Institutional Research

The *Office of Institutional Research* (established FY2015) continuously collected and analyzed data related to education, research, and university management. Alongside reporting the results to the Executive Office, they also compiled the 2016 HU Factbook with additional 10+ items and published in March.

##### 3) Improvement of Administrative Staff Members' Skillsets

To provide better international support, HU offered various training opportunities for administrative staffs, including lectures to improve English conversation skills, internships in Australia, Canada and other countries, and partly covered the expenses of those who were self-learning. Due to these continued efforts, the percentage of full-time administrative staff members who scored 700+ on TOEIC has increased to 14.4%.



HU Factbook

#### Education reform

##### 1) Improvement of the Education System

HU started the four-semester system in every undergraduate department and 10 graduate schools, and surveys were distributed about the effectiveness of the new GPA system (introduced in FY2015). In addition, faculty members were encouraged to use the class-evaluation questionnaire for at least one course a year. It was implemented in every undergraduate school and in 11 graduate schools. HU also began to consider the use of online questionnaires.

##### 2) Raise the Quality of Education

Teaching training courses covering communication skills, English pronunciation, and techniques such as active learning were provided to improve the university's quality of education. Furthermore, the number of classrooms which can be used for active learning methods was increased.

##### 3) Introduction of Various Entrance Exams

In addition to MJSP, ISP require applicants to get a certain score on TOEFL or other external tests. A basic guideline for international student admission which accepts International Baccalaureates and other qualifications was published to be implemented in FY2017. The use of TOEFL and other external tests for graduate school admissions was encouraged and adopted by 35 (out of 47) divisions for Master's courses and 12 (out of 49 departments) for Doctoral courses in FY2016.

## ■ University's own indicators and targets

### 1) NITOBÉ Education System

*Nitobe College*, an educational program training undergraduate students to be the next generation of global leaders, selected their fourth cohort of 203 students. The College graduated its first cohort of 15 students who satisfied the program's strict requirements. The curriculum includes programs offered by alumni and a study abroad component, and was revised by reviewing past activities for the new semester in FY2017.

78 students enrolled in *Nitobe School's* graduate program. The School graduated 46 students who satisfied the program's requirements. The basic curriculum surrounds studying different languages and cultures, and engaging in active learning. A new, advanced program for doctoral degree students was trialed so it could be implemented in FY2017.

### 2) Joint International Educational Programs

The number of Joint International Education programs, e.g. the Double Degree Program and Cotutelle Program, increased to 20 and involved eight new programs offered in corporation with overseas universities. Other universities were investigated to further expand the Double Degree program.

### 3) The Hokkaido Summer Institute (HSI) and Learning Satellites

The HSI ran from June to September and offered a variety of courses in English by world-class researchers. 1,562 students participated in a total of 76 different classes involving 120 international and Japanese researchers. Furthermore, 169 students were sent to the Learning Satellite programs in 15 countries and regions in Asia, Europe, and the USA. Also, a total of 47 specialized courses were offered by HU faculty in the world's forefront of education and research.

### 4) Hokkaido University Ambassadors and Partners

99 Ambassadors and Partners were named mainly from alumni living overseas in 25 countries and regions. Information of recent HU activities was dispatched in English through magazines, newsletters, and social media to the world and the Ambassadors and Partners supports. Furthermore, alumni associations were established in two other countries to strengthen ties with other alumni associations worldwide and to continue expanding the university's community.



Nitobe College Closing Ceremony



The Hokkaido Summer Institute



The Learning Satellite Project

## ■ Initiatives for the enhancement of international reputation

### 1) New International Graduate Schools from GI-CoRE

New international graduate schools, the Graduate School of Biomedical Science and Engineering, Graduate School of Infectious Diseases, and Graduate School of Global Food Resources, were approved in August to be launched in FY2017. Based on the distinguished research achievement as the university's strengths and specialisms, these graduate schools are originated from the former Global Stations (GS): the *GS for Quantum Medical Science & Engineering*, *GS for Zoonosis Control*, and *GS for Food, Land, and Water Resources*. In addition, new GSs, the *GS for Soft Matter*, *GS for Big Data and Cyber Security*, and *GS for Arctic Research* were established.

【 Results for the promotion of collaborations with foreign universities 】

- Introduction of Joint International Educational Programs
  - Double Degree Program: University of Montreal, Vietnamese Academy of Science and Technology, National Taiwan University, the University of Tasmania, Nanjing University
  - Cotutelle program: the University of Sydney, Xiamen University, National Taiwan University
- Hokkaido Summer Institute: Stanford University, University of Oxford, National University of Singapore, Swiss Federal Institute of Technology, UCLA, and others
- Learning Satellites: National University of Singapore, Swiss Federal Institute of Technology, the University of British Columbia, Seoul National University, the Chinese University of Hong Kong, and others

## ■ Free description

### 1) IAU-ISAS

HU undertook the *Internationalization Strategies Advisory Service 2.0 (ISAS)* organized by the *International Association of Universities (IAU)* by reexamining the university's strategy and its progress of *Hokkaido Universal Campus Initiative (HUCI)*. Based on a self-study report submitted to the IAU in August, a site visit took place between October 5<sup>th</sup> and 7<sup>th</sup>, and the world's first ISAS Learning Badge Award was bestowed to the HU in November. An assessment report was received in December from the IAU.

### 2) HUCI Forum

Three HUCI Forums were held concerning the university's internationalization and overseas collaborations in education. They were complemented by panel discussions encouraging participants to discuss current and future internationalization efforts.



The ISAS Learning Badge Certificate



## 5. FY 2017 Progress

### ■ Common indicators and targets

#### Internationalization

##### 1) Integrated Science Program

The Integrated Science Program (ISP), which started from the 2017 fiscal year (FY), is a combined Bachelor's and Master's program for international students and offers all classes in English. The first cohort of 8 students from 6 countries entered in October. It offered 13 courses in foundational and specialized subjects. The 2nd cohort comprising of 20 students from 12 countries will start in October 2018. .



ISP

##### 2) Modern Japanese Studies Program

The Modern Japanese Studies Program (MJSP), featuring Japanese language and Japanese studies, offers classes in both English and Japanese. 22 international students from 15 countries joined as the 3rd cohort, making a total of 48 students in FY2017. 14 international students from 11 countries were admitted to the program for the 4th cohort and 5th cohort. The entire 4th cohort, 20 students from 12 countries, enrolled to take intensive Japanese languages classes preceding the program.



MJSP

##### 3) Outbound Program

Outbound Programs such as the First Step Program (FSP), Overseas Special Short-term Program, and Overseas Short-term English Learning Program were conducted. Furthermore, the Global Internship Program was expanded to the entire of Hokkaido University (HU) from the Nitobe College's attempt of FY2016, by which 19 students were sent to 7 Asian countries and regions.

##### 4) Overseas Satellite Offices

Four new liaison offices were established in the ASEAN region:

Liaison Office in the Philippines located at the University of the Philippines (in March 2017); Liaison Office in Thailand located at Kasetsart University (in May 2017); Liaison Office in Indonesia located at Bogor Agricultural University (in June 2017); and Liaison Office in Beijing China at the University of Chinese Academy of Sciences (in March 2018.)



FSP program participants  
in Indonesia

#### University Reform

##### 1) Enhancement of Institutional Research

The Office of Institutional Research (IR) for Overall Management merged with the Office of IR for Student Engagement (Institute for the Advancement of Higher Education) to collect and analyze data related to education, research, and university management. This reorganization gives the President more governance capacity. The President acts as Director; an Advisor to the President as the Deputy Chief Officer; and a URA as the Advisor to the Director. The FY2016 HU FactBook comprising various data about education, research and university management was made public, and the FY2017 version published internally on the website. The HU Data Portal site was also opened for internal use.

##### 2) Deans and Directors Brain Storming Session

The President, Executives, Deans and Directors exchanged their ideas monthly at the Deans and Directors Brain Storm Sessions to support university management of various measures.

#### Education Reform

##### 1) New Entrance exams

5 students were admitted to enroll for FY2018 as a result of passing the International Baccalaureates or SAT via the International Integrated Entrance. Also, HU staff visited domestic International Baccalaureate world schools to improve and disseminate this new system. Furthermore, a handbook for pre-arrival examinations using teleconference and overseas satellite offices was published internally.

##### 2) Curriculum Maps

Utilizing the completed subject numbering system, curriculum maps for undergraduate and graduate schools were designed. The undergraduate school maps include recommended times/periods to study abroad.

##### 3) Class-evaluation questionnaires

Class-evaluation questionnaires were distributed as a part of the newly developed assessment method. Online questionnaires were made for efficiency, and then applied to 1st year general education classes as a trial.

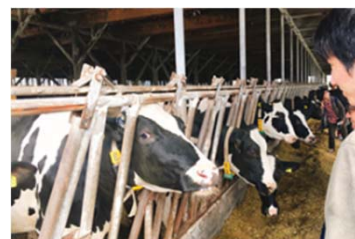
## ■ University's own indicators and targets

### 1) NITOBE Education System

Nitobe College was rearranged as a two-step program: the Foundation Program for the first year and Honors Program from the second year. The Foundation Program which starts in April admitted 212 students, of which 168 students completed the program and were certified. Out of the 104 Master's students taking the Nitobe School Basic Program, 110 students including 44 students who had enrolled before FY2016, completed the program and were certified. All of the 25 students enrolled in Nitobe School's Doctoral Course Advanced Program completed the program and were certified. The NITOBE Portfolios were added team-based learning and other functions and installed to the Graduate School and School of Science.

### 2) Hokkaido Summer Institute (HSI) and Learning Satellites

The HSI2017 ran from May to September and the Satellite School throughout the year. 2,545 students in total participated in 100 different classes involving 143 researchers from many parts of the world. Regarding the Learning Satellite in FY2017, 577 students in total were sent to 50 classes in 18 countries. Please refer to 【Results by promoting collaborations with foreign universities】 for the partner universities.



Nitobe College



Nitobe School

## ■ Initiatives for the enhancement of international reputation

### 1) The President attends Times Higher Education Summit as a panelist

The president attended the Times Higher Education Research Excellence Summit Asia-Pacific 2017, held in Taiwan in May, as a session panelist. This session also comprised representatives from National Chengchi University, Asia University, Seoul National University and Scopus, and addressed issues concerning the impact and the evaluation process of universities rankings.

### 2) Hokkaido University-ImPACT Joint Symposium on Advanced Soft Matter

The Global Station for Soft Matter of GI-CoRE (HU) and Impulsing Paradigm Change through Disruptive Technologies Program (ImPACT, Cabinet Office, Government of Japan) jointly organized this symposium in August. Researchers from university all around the world, including Harvard University and the University of North Carolina at Chapel Hill, gave lectures about cutting-edge soft matter studies. 165 people participated in the 2 day symposium.



THE Summit

### 3) Tackling Global Issues vol.1. Soft Matter: Material of the Future

This magazine, published on the HU website, focused on research contributing to the resolution of global issues such as an aging society, environmental pollution and resource shortages. This first issue spotlighted the study of soft matter, an interdisciplinary field attracting attention from chemists, physicists, biologists and engineers.



Tackling Global Issues

## 【 Results for the promotion of collaborations with foreign universities 】

- Introduction of Joint International Educational Programs
  - Double Degree Program: Zhejiang Univ. , Xian Jiao Tong Univ. , National Cheng Kung Univ. , Bogor Agricultural Univ.
  - Cotutelle program: Univ. of Edinburgh, Kasetsart Univ. , Univ. of the Philippines Los Banos, Pacific National Univ.
- Hokkaido Summer Institute: Univ. of Oxford, Univ. of Cambridge, Swiss Federal Institute of Technology, UCLA, Univ. of British Columbia, National Univ. of Singapore, and others
- Learning Satellites: Univ. of Edinburgh, Swiss Federal Institute of Technology, Aarhus Univ. , Univ. of Bergen, National Univ. of Singapore, Seoul National Univ. , Kasetsart Univ. , Gadjah Mada Univ. , and others

## ■ Free description

### 1) New International Graduate Schools

Three new graduate schools, the Graduate School of Biomedical Science and Engineering, Graduate School of Infectious Diseases, and Graduate School of Global Food Resources, were launched in April 2017. These graduate schools built on GI-CoRE's achievements for international collaborative research and education. The number of new students including Fall enrollment was: 16 Master's course students and 9 PhD students in the Graduate School of Biomedical Science and Engineering; 14 PhD students in the Graduate School of Infectious Diseases; and 17 Master's course students in the Graduate School of Global Food Resources.

### 2) HUCI Forums

The 1st forum, held in December 2017, was titled "Internationalization in Universities —from a risk management view." HU and Fuji Women's University were the main organizers, and Tokai University and Nigata University co-organizers. An external expert concerning international affairs and risk presented a special lecture. There were 89 participants. The 2nd forum, held in March 2018, was titled "Progress of the HUCI and Internationalization of Higher Education." It consisted of two parts, a progress reporting session and a panel discussion with invited external specialists. There were 101 participants

## 6. FY2018 Progress

### ■ Common indicators and targets

#### Internationalization

##### 1) Integrated Science Program

The Integrated Science Program (ISP) is a combined Bachelor's and Master's program for international students and offers all classes in English. In October, 9 students from 8 countries enrolled as second-term students, and 52 subjects were offered in English, including general education and specialized courses. In addition, 12 students from 10 countries and regions out of a total of 83 applicants were accepted into the 3<sup>rd</sup> cohort, which will start in October 2019.

##### 2) Modern Japanese Studies Program

17 international students from 13 countries and regions joined the 4<sup>th</sup> cohort, making a total of 59 students in FY2018 in the Modern Japanese Studies Program (MJSP). In March 2019, 8 students from the 1<sup>st</sup> cohort finished the program.

21 applicants from 15 countries will be enrolled in FY2019, with 18 of them from 12 countries enrolled to take intensive Japanese languages classes preceding the program.

##### 3) Outbound Program

The Global Internship Program enabled 50 students to be sent to 10 Asian countries and regions. This is a significant rise from the 19 students sent in FY2017.

53 students also participated in the First Step Program, and 62 students participated in the Overseas Special Short-term Program.



〈 MJSP's First Commencement 〉



〈 Global Internship Program 〉

#### University reform

##### 1) Enhancement of Institutional Research

The Office of International Research (IR) was reorganized in FY2017, strengthening the office's ability to collect, store, manage, and analyze data in order to establish an IR Strategic Platform that will more effectively and efficiently perform its duties. The collected and analyzed data is used to evaluate departments and the annual salary system. Some of the data are published as the Hokkaido University Fact Book.

##### 2) Departmental Exchange of Opinions

The Department's Opinion Exchange Meeting was held 10 times to bring together upper management so they could exchange their opinions on measures essential to the university. In addition, the International Staff Instructors Liaison Committee for International Cooperation was held to exchange information and views on initiatives related to internationalization and collaborations.

##### 3) Internationalization of the Personnel System

50 staff members were appointed through the Cross-appointment System. In order to improve the system, it was expanded to include private companies and a Cross-appointment Allowance was created as a payroll incentive. The annual salary system was also improved and salary estimations dependent on the time of transfer/hiring were distributed.

##### 4) Administrative Staff Development

In order to provide better international support, 47 administrative staff attended an English conversation course which was restructured in FY2017, and 23 attended a business writing (email) training course. We also continue to connect with institutions we have international agreements with and are sending employees to overseas training programs. 5 personnel have already been dispatched to Canada, New Zealand, and Australia..

#### Education reform

##### 1) Education Management System

We formulated an assessment policy for all faculties and graduate schools based on the Hokkaido University Assessment Policy, which was announced as an implementation policy to manage education at the university.

##### 2) Improvement of Foreign Language Skills

We decided to formulate and announce new foreign language requirements and policies in FY2019. A working group was also set up to devise self-sustaining plans and initiatives which will improve foreign language skills at the university.

##### 3) Promotion of study abroad

In addition to releasing a curriculum map of all the departments that clearly indicates the recommended study abroad period, we adjusted the FY2019 academic calendar so that the first semester of classes would end earlier with the aim of encouraging students to study abroad during the summer vacation period. We also offered an orientation focusing on crisis management.

## ■ University's own indicators and targets

### 1) NITobe Education System

At Nitobe College, 152 students entered the Foundation Program and took the required Nitobe Studies and Global Basic Courses. In addition, 143 students who already completed the Foundation Program entered the Honors Program. Including the 129 graduates from the Foundation Program, a total of 162 students graduated.

At Nitobe School, 125 students entered the Foundation Program in Master's course and 84 students graduated. Furthermore, 24 students entered the Honors Program in Ph.D. course and everyone graduated.

The Nitobe Portfolio is being prepared to provide an introduction to the Nitobe College undergraduate program in FY2019.

### 2) Hokkaido Summer Institute and Learning Satellites

The Hokkaido Summer Institute(HSI) in 2018 ran from June to September and the Satellite Schools ran throughout the year. 3,467 students in total participated in 154 different classes involving 178 researchers from many parts of the world. 813 students in total were sent to 54 classes in 20 countries as a part of the FY2018 Learning Satellite Program(LS). See 【Results for the promotion of collaboration with foreign universities】 for our partner universities.

### 3) Hokkaido University Ambassador Partner

We commissioned 31 new Ambassadors and Partners around the world. Through the Hokkaido University Ambassador and Partner (HUAP) system, we provide information through avenues such as public relations magazines and social media. The HUAP website was also recently established and provides an introduction to the system and the status of its activities. In addition, a system to promote external and internal communications was developed.



〈 HSI 〉



〈 HUAP 〉

## ■ Initiatives for the enhancement of international reputation

### 1) Vice President attends UArctic Congress 2018

Our Vice President attended the UArctic Congress 2018 from September 3rd to the 4th in Oulu, Finland and introduced the University's Arctic research under the theme of "Connectivity."

<https://www.global.hokudai.ac.jp/blog/vice-president-kasahara-attends-uartic-congress-2018/>

### 2) Tackling Global Issues Vol.2. New Era of Radiation Therapy to Fight Cancer

We published Volume 2 of "Tackling Global Issues," which focuses on proton beam cancer treatment but also includes other advanced research topics.

<https://www.global.hokudai.ac.jp/research-and-education/tackling-global-issues/vol-2-new-era-of-radiation-therapy-to-fight-cancer/>

#### 【 Results for the promotion of collaboration with foreign universities 】

- New Joint International Educational Programs
  - Double Degree Program: Polish Academy of Sciences, Chulalongkorn Univ., Univ. of Rome Tor Vergata, Univ. of Indonesia, Univ. of Pisa, Yonsei Univ., Thammasat Univ.
  - Cotutelle program : ESPCI Paris, Beijing Normal Univ.
- Hokkaido Summer Institute: Univ. of Oxford, Stanford Univ., Swiss Federal Institute of Technology, Seoul National Univ. , Tsinghua Univ. ,Univ. of British Columbia, National Univ. of Singapore, Univ. of Edinburgh, and others
- Learning Satellites: Swiss Federal Institute of Technology, Seoul National Univ. , Karolinska Institute, National Univ. of Singapore, Univ. of Edinburgh, and others



〈 UArctic Congress 〉



〈 Tackling Global Issues Vol.2 〉

## ■ Free description

### 1) New International Graduate Schools and Division of Soft Matter

For the Graduate School of Biomedical Science and Engineering, 11 Master's students and 6 Ph.D. students enrolled in the graduate school, and 14 Master's students graduated in March 2019. For the Graduate School of Global Food Resources, 16 students enrolled in the graduate school and 16 Master's students graduated in March 2019. For the Graduate School of Infectious Diseases, 18 Ph.D. students enrolled in the graduate school. The Division of Soft Matter in the Graduate School of Life Science was established in April 2018. 31 students enrolled in the Master's program and 10 in the Doctoral program. A total of 29 international students entered these programs.

### 2) Hokkaido University Presidential Overseas Travel Grant Program for Young Researchers

Following a review of the award system, we established the Hokkaido University Presidential Overseas Travel Grant Program for Young Researchers to cover overseas travel expenses for educational and research purposes for excellent young researchers. 13 researchers were granted this travel grant in FY2018.

### 3) Study-in-Japan Fair in Africa

The Study-in-Japan Fair was held to attract students from the Sub-Saharan Africa region to study in Japan on the 17th and 18th of September 2018 in Cape Town, South Africa; and then again on the 7th of February 2019 in Kampala, the Republic of Uganda.

### 4) Study-in-Japan Fair in Russia

The Study-in-Japan Fair was held to attract students from Russia to study in Japan on the 12th of October 2018 in Moscow, and on the 8th and 9th of February 2019 in Khabarovsk, Russia.

## 7. FY2019 Progress

### ■ Common indicators and targets

#### Internationalization

##### 1) Programs for International Students

The Integrated Science Program (ISP) is a Bachelor's and Master's program for international students and offers all classes in English. In October, 7 students from 7 different countries have enrolled as the third class and 117 subjects (FY2018: 52 subjects) were offered in English including general education and specialized courses.

The Modern Japanese Studies Program (MJSP), a bilingual program taught in both English and Japanese, offers courses for Japanese studies as well as for learning Japanese language. In FY2019, 16 students from 11 countries enrolled as the fifth class, making a total of 63 students in the program. In October, 20 applicants from 11 countries have enrolled early to take intensive Japanese language classes preceding the start of the program in April. MJSP and Nitobe College have started to work together this year, and 1 second-year student of MJSP enrolled in the foundation course of Nitobe College.

##### 2) Outbound Programs

In FY2019, the International Internship Program has sent 73 students to 37 organizations in 14 countries and regions. This is a significant increase from 50 students sent in FY2018. In addition, 20 students have participated in the "Global Career Design", a short program designed to give participants a glimpse into global careers, and 36 students have taken part in the "Short-Term Overseas Study Special Program". The total of 680 students have earned credits by enrolling these and other study abroad programs this year.

##### 3) Established 3 Overseas Offices

As new overseas bases, we opened the Russia Office in Moscow, Russia in May 2019, the ASEAN Office jointly established with VNU University of Science in Hanoi, Vietnam in June, and the North America Portland Office in Portland, USA in July. As a result, the number of the overseas offices of the University is now 11 including the 4 liaison offices managed and operated directly by some of our departments.



< Signing ceremony for ASEAN Office >



< Opening of Moscow Office >

#### University reform

##### 1) Assessment and Recommendations by External Experts

In November, the Council for Enhancing Institutional Capacity was held. The majority of the council members are outside experts from private sectors, academia, and the government including 2 foreign nationals. At the plenary session and the international subcommittee, we received assessment and recommendations on future planning of some of the university's unique international collaborative education programs such as furthering of the Hokkaido Summer Institute and the International Internship Program and the sustainability planning of HUCI initiative.

##### 2) Enhancement of Institutional Research

The Office of International Research (IR) was restructured in FY2017, strengthening the office's ability to collect, store, manage, and analyze data in order to establish an IR Strategic Platform that will more effectively and efficiently perform its duties. The "Hokkaido University Fact Book" was reconstructed as an interactive web page using BI tools.

##### 3) Administrative Staff Development

To enhance practical abilities in English communications, 14 administrative staff has attended English conversation courses restructured in FY2017. In addition, in cooperation with schools with inter-university exchange agreements, we continued overseas training for administrative staff. 2 staff members were sent to the University of Auckland (New Zealand) for 8 weeks, and another 2 were dispatched to Portland State University (US) for a short-term training.

#### Education reform

##### 1) Syllabus in English

We mandated all syllabi to be offered in English. As the result, the percentage of syllabi in English has increased significantly from 32.4% in FY2018 to 92.1% this year.

##### 2) Improvement of Foreign Language Skills

For the purpose of "visualizing" the connection and continuity between the foreign language education of the 1st year curriculum and the foreign language courses and curricula offered in the later years, we have created and distributed "the Foreign Language Learning Help Guide" for undergraduate students. In addition, to aid students attain the level requested by their schools or graduate schools, "Expected Foreign Language Proficiency for the HU Graduate (Undergraduate and Graduate Program)" and "Approach to Improve Student's Foreign Language Ability" have been formulated.

##### 3) Expansion of Quarter System

Quarter system was introduced at Graduate School of Humanities and Human Sciences, Veterinary Medicine, International College of Infectious Diseases, and Graduate School of Public Policy. The Graduate School of Dental Medicine has introduced a flexible academic calendar apart from the semester or quarter system which offers subjects every two months as intensive lectures.

## ■ University's own indicators and targets

### 1) Nitobe College, an integrated undergraduate and master's program

Nitobe College and Nitobe School were integrated as Nitobe College to offer consistent education for students in undergraduate programs as well as in master's programs. Nitobe college offers two programs, the Foundation Program and the Honors Program, and there are the undergraduate education course and the graduate education course in each program. In the undergraduate education course, a total of 453 students, 336 in the Foundation Program and 117 in the Honors Program, were enrolled. 114 students were enrolled in the graduate education course, of which 88 are in the Foundation Program and 26 are in the Honors Program. The undergraduate education course has produced 170 graduates in FY2019, with a total of 543 graduates to date. In the graduate education course, there were 106 graduates in FY2019, and the total number of graduates to date has become 402. We have introduced "the Nitobe Portfolio" for undergraduate students, which is an online system that has been used for the graduate courses for keeping a record of studies and research. This year, "the Nitobe Portfolio" has been implemented in more departments and schools such as "the Frontier Program" of the Graduate School of Engineering and the "the Cultural Enrichment Program" established by the six graduate schools of humanities.

### 2) Hokkaido Summer Institute and Learning Satellites

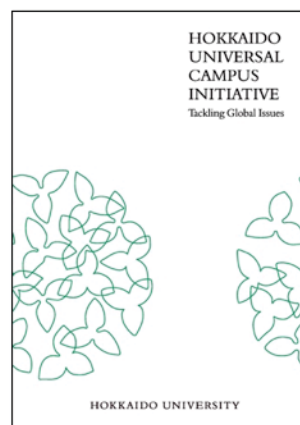
In 2019, Hokkaido Summer Institute (HSI) was held from June to October and the Satellite Schools have run throughout the year. The total of 4,627 students have participated in 176 classes with 210 researchers invited from around the world. 2019 Learning Satellite Program (LS) has welcomed 778 students for 57 classes conducted in 20 countries.\*\*See 【Results for the promotion of collaboration with foreign universities】 for the list of our partner universities for these programs.



〈 HSI 〉

### 3) Hokkaido University Ambassador Partner System

We have commissioned 20 new Ambassadors (7 HUA) and Partners (13 HUP), around the world. By requesting the total of 180 Hokkaido University Ambassador Partners (HUAP) to distribute HU's three new promotional booklets and brochures and broadly circulate our six e-newsletters, we have achieved a widespread international reach in our public relations efforts.



〈HUCI Brochures〉

[https://www.hokudai.ac.jp/international3/HUCI\\_Brochure.pdf](https://www.hokudai.ac.jp/international3/HUCI_Brochure.pdf)

## ■ Initiatives for the enhancement of international reputation

### 1) Press Release of Research Results

52 English press releases on our research results were published. By increasing the number of releases published before its official press release and improving on the distribution methods, the number of articles posted on overseas online media has become 2,198, almost doubled since the previous year. (FY2018: 1,100 cases)

### 2) Promotion of Research and International Public Relations

We have participated in the World Conference of Science Journalists (WCSJ) and the American Association for the Advancement of Science (AAAS) and promoted our research. We also have networked with overseas media and public relations personnel to obtain information on international public relations and promotion of research.

【 Results for the promotion of collaboration with foreign universities 】

#### ● New International Collaborative Programs (Cotutelle Program)

Faculty of Mathematics and Computer Science of University of Bremen, University of Sydney, Thammasat University, Graduate School of Science and Engineering of Al-Falabi Kazakh National University, Mongolian University of Science and Technology

#### ● Hokkaido Summer Institute: University of Oxford, Stanford University, Swiss Federal Institute of Technology, University of British Columbia, National University of Singapore, University of Edinburgh, and others

#### ● Learning Satellites: Swiss Federal Institute of Technology, Seoul National University, Karolinska Institute, National University of Singapore, University of Edinburgh, and others

## ■ Free description

### 1) HUCI Forum

The HUCI Forum: The future of international collaborative education pioneered by Hokkaido University was held on November 5, 2019. The faculty members and students shared the achievements and experiences of HSI and LS to raise the visibility of these International Collaborative Programs and envision developments and expansion in the future.



〈 HUCI Forum 〉

### 2) Hokkaido University Presidential Overseas Travel Grant Program for Young Researchers

In recognition of outstanding achievement, seven young researchers were selected for this project which supports overseas travels for educational and research purposes. The total of 16 researchers including those selected in the previous year has received travel expenses and other support.

### 3) QS-APPLE2019 STUDY in JAPAN Joint Booth

At "QS-APPLE 2019", we have run a booth inside the "STUDY in JAPAN" joint booth. Our focus was largely on HSI, and we have distributed newly issued HUCI brochures to overseas university personnel and promoted our efforts on the program.



〈 QS-APPLE2019 〉