

Outline of the Top Global University Project (Type A) at Keio University

1. Proposal for TGUP at Keio University

Program Name

Enhancing Sustainability of Global Society Through *Jitsugaku* (Science)

Keio's Aspirations for the Top Global University Project

Keio University will continue to educate the next generation of leaders who will play active roles on the world stage. Based on the spirit of *jitsugaku* (science), an educational philosophy espoused by Keio founder Yukichi Fukuzawa, we will make positive contributions to world development as an institution of higher education that can propose innovative social systems to the world. By achieving this, Keio University will gain recognition as a top global research university among the world's top 100 in the world university rankings.

Summary

The Top Global University Project at Keio integrates education and research in the humanities and sciences to enhance the sustainability of global society through *jitsugaku* (science). Keio aims to strengthen ties with international academic communities and industry while making positive contributions to the world. In this way, we hope to bolster Keio University's international reputation by building on our existing strengths and achievements. Specifically, under the integrative theme of Sustainable Development of a Super Mature Society, Keio has established three global initiatives: Longevity, Creativity, and Security.

The Headquarters for the Top Global University Project is currently consolidating University resources in each initiative to better support world-class education and research across the disciplines. Within each initiative, Keio will greatly improve its human resources management and educational systems; improvements include changes to the faculty salary policy, new cross appointment and tenure track positions, expanded degree programs offered in English, and a new visiting research co-advisor scheme for doctoral candidates. The University hopes that these human resources and academic policies will help increase international jointly authored research and the number of academic papers written in English, which in turn will lead to more citations and better representation of Keio's research abroad. The University will revamp its research information infrastructure in order to share its research findings with the world. This will enhance the University's international presence and reputation for education and research, which are measured by the number of citations and worldwide reputation surveys.

In order to reinforce university governance and presidential leadership, Keio will establish the Global Advisory Council as well as a discretionary fund that the president can use to distribute swiftly and flexibly in order to accelerate reform. Presidential leadership will promote new initiatives in Keio University's endeavors to become a world-leading research university.

Keio's Global Initiatives Across the Disciplines



Reaching Out to the World

Extensive Network of World-leading Partners
Pioneer of Double/Joint Degree Programs
Keio's Education and Research Abroad

Diversifying Our Education

Doubling the International Student Population
Degree Programs Offered in English
Short Programs in Tokyo & Yokohama

Welcoming Internationally-Minded Researchers

New Tenure Track Opportunities for Young Researchers
Cross Appointment Opportunities for International Research Experts
Recruitment of Qualified Academic Faculty

Bolstering Our Research

Firm Ties with Industry
Creating and Protecting Intellectual Property
Sharing the Wealth



Summary of 10-Year Plan

○ Establishment of Keio's Global Initiatives

The University will launch the three initiatives of Longevity, Security, and Creativity to conduct transnational, transdisciplinary education and research to be shared with the world. These three initiatives form the basis of the Top Global University Project at Keio University.

○ Expansion of Double/Joint Degree Programs

As of 2014, Keio boasted 23 double degree programs with many leading universities around the world—the most of any university in Japan. The number of programs will increase to 35 in ten years' time.

○ Improving Overseas Research Hubs

Keio has plans to expand its overseas research hubs from 3 to 15 in fields spanning the natural and social sciences, humanities, and medicine. The University plans to use these hubs to promote partnerships for global research and define Keio's position as a world-leading research university.

○ Increased Employment of Foreign Faculty

The proportion of foreign academic faculty employed under the annual salary system/cross-appointment system and Japanese faculty who have either conducted research or earned a degree at an institution overseas will increase to 67.5%, or over two-thirds of the total academic faculty. The University will effectively play to these individuals' strengths to promote organic internationalization of the University's education and research systems.

○ Development of Degree Programs Offered in English & Increasing Inbound/Outbound Student Exchange

The University will launch the Global Interdisciplinary Courses (GIC) Program, an English curriculum across Keio's undergraduate faculties and graduate schools. Each faculty and graduate school will expand upon the common GIC platform with its own specialized curriculum to increase the number of courses available in English, which will lead to an increase in the number of degree programs available to international students. Combined with newly designed short-term summer programs, Keio will greatly increase its international student population. Within the next ten years, the University aims to create an environment where all Keio students have international experience of some kind, through short-term and long-term study abroad, internships, or otherwise.

○ Implementation of Initiative-based Human Resources Management

The University will formalize visiting research co-advisor appointments, which have been piloted by Keio's All-Round Program for Leading Graduate School, making the appointments available to all graduate schools. Moreover, under this framework, the University will devise a system within each initiative that supports and encourages joint research and jointly authored papers with researchers from Keio's partner institutions overseas. By 2023, foreign researchers will participate in doctoral candidates' research across the entire university.

Additionally, the University will establish a tenure track system that employs around five foreign faculty members per initiative to be the catalysts for joint research and jointly authored academic papers. Tenure track candidates must be highly motivated to conduct research and author academic papers.

Defining Characteristics of TGUP at Keio University

○ Giving Back Through Education/Research Findings

Under the integrated theme of Sustainable Development of a Super Mature Society, Keio will create three global initiatives: Longevity, Creativity, and Security. The University will consolidate university resources within each initiative to conduct practical, globally-applicable education and research that transcend traditional disciplinary boundaries and integrate the natural sciences, social sciences, and humanities. The University will serve as a model of social service and contribution to the world and gain prominence as a top world-leading research university. The initiatives form a university-wide system for research where academic faculty members from Keio's undergraduate faculties and graduate schools can engage in both basic and applied research.

○ Global Interdisciplinary Courses (GIC)

The Global Interdisciplinary Courses (GIC) Program, Keio's first university-wide English curriculum across the undergraduate faculties and graduate schools, will offer general education and specialized courses in English in an environment where students of all nationalities from different faculties and graduate schools can learn together. Moreover, the GIC Program will incorporate activities from each of Keio's global initiatives to foster students' ability to conduct research in English and author internationally relevant research.

Policies for International Collaboration

The University will utilize the cross appointment system and quarter system to invite foreign researchers and conduct international collaborations in research and education in capacities such as visiting research co-advisor. At the same time, Keio University faculty may also go abroad to serve as visiting research co-advisors for graduate students conducting research under foreign faculty and offer opportunities to advise joint research. This system will not only dramatically increase the mobility and international contributions of Keio's academic faculty, but will also make it possible to produce a new generation of academic researchers who are ready to succeed globally due to prior collaborative research and joint authorship.

Moreover, the University will work closely with its overseas partner institutions, who are some of Keio's most important assets, to promote the establishment of overseas research hubs for the purpose of collaborative research. The University will leverage its research and technological assets to form institutional relationships with universities and industries overseas that promote international collaboration. This signifies a move away from the volatility that researchers may experience when personally organizing joint research to a more stable mechanism that allows the University to provide the organizational support necessary to bolster new international developments. In addition to these measures undertaken by Keio University leadership, each undergraduate faculty and graduate school is also encouraged to pursue international collaborations of their own.

2. Keio's Current Progress Concerning Top Global University Project Initiatives (as of June 2015)

◆ Common Performance Indicators for TGUP

International Initiatives

○ Platform for Keio Research Released

The Keio Research Highlights website was released as a platform to deliver the latest information about the innovative research and revolutionary findings in the natural and social sciences and humanities at Keio, thereby increasing Keio's international research presence.

Visit the site: <http://research-highlights.keio.ac.jp/>

○ Establishment of All-English Global Interdisciplinary Courses (GIC)

The Global Interdisciplinary Courses (GIC) Center was established in 2014 to design the GIC Program, which started in April 2015. Keio's first university-wide curriculum conducted in English, the GIC Program is available to students across all of Keio's undergraduate faculties and graduate schools and will function as a platform that works towards developing courses which allow more students to study and graduate in English. The GIC Program launched with 13 Core Courses and 172 Research Courses that offer GIC credit.



Keio Research Highlights

○ A University-wide GPA Standard

Many of Keio's undergraduate faculties and graduate schools already use the grade point average (GPA) scale as an evaluation tool for advancement and graduation, academic advisement, scholarships and awards for academic excellence, and study abroad. In 2014, the University decided to formulate an institutional standard of evaluation to be implemented upon consensus among undergraduate faculties and graduate schools.

Governance Reforms

○ Appointment of Tenure Track Faculty

As defined by Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT), the “tenure track system” is a mechanism that enables young researchers to gain the experience needed to establish themselves in their field during a fixed term of service before obtaining a permanent tenure position. The research they produce during this period is strictly evaluated when considering them as candidates for tenure. While tenure track positions already exist within some undergraduate faculties and graduate schools, the University has now established “Regulations for the Top Global University Project Tenure Track System” in order to implement a university-wide tenure track system. As of Spring 2015, the University employs 36 tenure track faculty members, surpassing its tenure track target for 2020.

○ Establishing the Global Advisory Council

In 2014, the University established the Global Advisory Council (GAC), which acts as an advisory body to the Keio president, the university's head decision-maker. The University hopes to benefit from the expert opinions and international standpoints of GAC members, all of whom are presidents of distinguished universities overseas.

○ Establishment of a Presidential Discretionary Fund

The University has established a discretionary fund for the President to use swiftly and flexibly in order to inject funding and accelerate reform. This fund has made it possible for the University to prioritize and selectively consolidate resources on exceptional projects in need of funding. This fund helped bring together leaders from the business, academia, and government from throughout the Asia-Pacific region for candid discussions concerning key issues for the future of the Internet at the Association of Pacific Rim Universities' (APRU) Internet Business Offsite: “The Internet in the Asia-Pacific – Looking Ahead to 2025,” which was held from March 10-11, 2015, at Keio University.



The Internet in Asia: Looking Ahead to 2025

Academic Reforms

○ Increased Number of Degree Programs Offered in English & Introduction of Third-Party Test Scores on Entrance Examinations

The Faculty of Economics has announced the “Programme in Economics for Alliances, Research and Leadership (PEARL),” a brand-new economics program offered entirely in English. The Faculty of Economics will begin accepting applications for the inaugural September 2016 admission in October 2015. This program, coupled with the Global Interdisciplinary Courses (GIC), will offer students a comprehensive education entirely in English, from general education requirements to areas of specialization. Designed to foster global economic leaders of tomorrow, PEARL equips students with a global perspective and a specialized knowledge of economics. PEARL students who qualify also have the opportunity to earn both their bachelor's and master's degree within a five-year period. Selection for the program will be based on overall academic readiness and English ability. Applicants' overall academic readiness will be evaluated using assessment tools such as the International Baccalaureate (IB) and SAT. English ability will be assessed using scores from the TOEFL, IELTS, and other approved third-party tests.

Additionally, the GIGA Program, which was launched at Shonan Fujisawa Campus (SFC) in 2011 under the Faculty of Environment and Information Studies, will expand to include the Faculty of Policy Management in September 2015.

◆Keio University's Original Performance Indicators for TGUP

○ Visiting Research Co-Advisors

The University has developed a new scheme to invite researchers from abroad under a cross-appointment system as visiting research co-advisors to advise doctoral candidates. During a short-term pilot program in late 2014 and early 2015, the University invited over thirty visiting research co-advisors. In a post-pilot survey that reviewed outcomes of advisement, all parties involved—primary advisors, visiting research co-advisors, and doctoral candidates—expressed a high degree of satisfaction with the scheme. The University hopes to build enduring relationships with visiting research co-advisors who will contribute to joint research, joint editorship, and/or joint authorship with Keio's academic faculty and doctoral candidates, thereby helping to raise Keio's international reputation in the future.

○ Research Growth

In 2014-2015, Keio's research greatly exceeded many of its research targets. For example, the total amount of commissioned research grew 23% to 64 billion yen, and the total number of domestic/foreign patents grew 53% to 988. The University also established a hub for collaborative research with the U.S. National Institute on Aging, a world leader in aging and longevity research.



Open Research Forum

○ Double Degrees & Joint Degrees

The University added three new double degree programs to bring the total number of double degree programs to 26—more than any other university in Japan. This surpasses Keio's target for 2016. The three new programs are between the following:

- Graduate School of Economics and Bocconi University;
- Graduate School of Science and Technology and the Free University of Brussels; and
- Graduate School of Science and Technology and Université catholique de Louvain.

Keio continues to promote active collaboration in education and research with universities overseas.

○ Keio's Global Initiatives

In 2014-2015, the University launched the three transdisciplinary initiatives of Longevity, Security, and Creativity. Kick-off symposiums for each initiative marked the beginning of advanced education and research within and between initiatives. As of June 2015, research centers for each initiative have been set up within Keio Advanced Research Centers (KARC) with a total of nine initiative-based research projects currently selected to receive internal research funding. This research will serve as the basis to attract other research projects and obtain external research funding to invite exceptional researchers from overseas for joint research. Keio expects to attain better international visibility by publishing high-quality papers jointly authored with international researchers and ultimately boost the University's international dimension.



Keio Creativity Initiative Symposium

Partnerships with Universities Overseas

In 2014-2015, Keio University leadership played a leading role in strengthening ties with universities overseas by instating a pilot cross-appointment scheme for visiting research co-advisors, establishing the Global Advisory Council (GAC), and developing new overseas research hubs. Keio's faculties and graduate schools have also driven efforts to strengthen collaboration with universities abroad. One of these programs is the "Joint Project Based Global Learning" between Master's students at Keio Media Design (KMD) and the Stanford University's Graduate Schools of Engineering and Education. This program gives students the opportunity to engage in a short-term collaborative project related to the application of new media and involves two-week stays at both Stanford University and KMD. Faculty members from each participating graduate school are appointed as project advisors. Though brief in duration, students encounter the distinctive educational methods of each of the graduate schools and experience the cultures and lifestyles of both the Silicon Valley and Tokyo. The program is intended for students to take their first steps on the road to global citizenship.

Commemorative Events

○ Keio Delegation to Harvard University: Celebrating 125 Years Since the Establishment of the First University Departments at Keio

The history between Keio and Harvard dates back to 1890, when then-President of Harvard, Charles Eliot, nominated three professors to head Keio's first three university departments of literature, economics, and law. To celebrate the 125 years since the first departments were established, a Keio delegation to Harvard in March 2015 was made possible with the cooperation of Harvard's Reischauer Institute of Japanese Studies and the Program on U.S.-Japan Relations, the Weatherhead Center for International Affairs.

President Seike met with Harvard President Drew Faust before giving a lecture as part of Keio's Longevity Initiative, titled "Japan's Aging Society and the Role of Higher Education," to a large audience which included many researchers and students. At the reception that followed, researchers from both institutions discussed opportunities to strengthen the Harvard-Keio relationship through joint research and academic exchange. Many Harvard students also showed a keen interest in studying in Japan at the information sessions held by Keio staff the following day.



President Seike gives a lecture at Harvard

The Top Global University Project at Keio University in AY2015-2016

Project-wide Performance Indicators and Target Goals

International Initiatives

Establishment and Operation of All-English Global Interdisciplinary Courses (GIC)

The Global Interdisciplinary Courses Program started in earnest across undergraduate faculties and graduate schools in AY2015-2016. As of May 1, 2016, a total of 1,162 students are enrolled in 75 core courses established within the GIC Center. This total increases to 8,337 students enrolled in 471 courses when all other GIC courses (international center courses, research courses, etc.) are included. We expect even higher enrollment with the incoming class in Fall Semester. The GIC Program is Keio's first university-wide curriculum conducted almost entirely in English and is available to students across all of Keio's undergraduate faculties and graduate schools. It functions as a platform for English-language courses that allows more students to graduate entirely in English.

International Student Dormitories

Keio has gradually added international housing with the increase in international student numbers, and in March 2016 the university opened the doors to the Okurayama Dormitory, the university's newest housing complex designed with international students in mind. In March 2017, Hiyoshi International Dormitory*, the university's first attempt at a truly international dormitory, is slated to open. Additionally, Keio has plans to open another international student dormitory at Tsunashima Sustainable Smart Town in Yokohama by March 2018.



3D rendering of Hiyoshi International Dormitory* (*Name tentative)

Increasing International Partner Institutions

In 2014, the total number of partner institutions at Keio University was 261. This number includes both department-level and university-wide partnerships for academic exchange and joint research. As of May 1, 2016, this number has increased to 310. As partnerships continue to thrive and grow, Keio has placed particular emphasis on increasing the number of exchange students through university-wide agreements by partnering with selective institutions abroad, which are limited to the most selective universities in the world. Partnership agreements are signed only after confirming real possibilities for exchange, and, as a result, we have experienced a steady but incremental net increase in student exchange numbers. Moreover, Keio is committed to strengthening its relationships with current partners by revisiting former agreements and negotiating increased student quotas.

Governance Reforms

Development of a Medium-Term Plan

Keio has raised objectives and guidelines for a medium-term plan, which formed the basis for individual policies established as short-term measures. Keio's selection for the Top Global University Project made the institution reflect on what Keio should look like by the end of the project in 2023 and resulted in the Keio Vision for 2023, which divides the years up to 2023 into three periods. First unveiled in 2015, the plan is in the midst of the first of these periods. This first period, dedicated to the promoting the Top Global University Project at Keio, focuses on communications, internationalization, and personnel system reform. Keio has committed to a proactive communications strategy in order to better convey its interdisciplinary, international strengths in advanced education and research, which are firmly rooted in the three initiatives of Longevity, Security, and Creativity.

Academic Reforms

Development of Short-Term Programs

The development of short-term programs is underway to increase the number of international students who come to Keio. Thesis@Keio, a program geared towards graduate students, began in 2015. Graduate students at the master's or doctoral level who are accepted to the program are allowed to conduct research at Keio and gain access to university resources. They may conduct fieldwork and interviews and receive advisement from Keio faculty members for their research. This new system provides students from other universities direct access to Keio academic faculty in order to further their research while Keio benefits by building an international academic network with talented graduate students and early-career researchers from abroad. Additionally, numerous new programs are slotted for Summer 2016 and beyond across many different faculties and graduate schools.



Keio Short-Term Japanese Studies Program

PEARL Applications Begin

The Faculty of Economics began accepting applications for the "Programme in Economics for Alliances, Research and Leadership (PEARL)," a brand-new economics program offered entirely in English. The university has received a large volume of applications from students of various backgrounds from Japan and abroad. As of June 2016, inaugural applicants are finishing their final admissions procedures.

University-specific Performance Indicators and Target Goals

Improving and Increasing Overseas Research Hubs

Keio is dedicated to building an environment that makes it easy to deliver world-leading research findings and promote international joint research. The university is enhancing collaboration with research hubs abroad to improve its visibility abroad and increase its number of internationally co-authored publications. Since 2014, Keio has increased its number of research hubs abroad from four to sixteen. The university will continue to increase these hubs in both quality and quantity and provide the high degree of mobility essential to successful joint research.

International Partnerships (As of May 1, 2016)

Australia	University of New South Wales	Singapore	Keio – Nus CUTE Center
Australia	University of Sydney	Switzerland	The European Organization for Nuclear Research
Austria	University of Vienna The Faculty of Historical and Cultural Studies	USA	National Institute on Aging Intramural Research Program
Austria	University of Vienna The Faculty of Psychology	USA	Broad Institute of MIT and Harvard
France	The Centre National de la Recherche Scientifique	USA	Georgia Institute of Technology
France	Commissariat à l'énergie atomique et aux énergies Alternatives	USA	University of California, Berkeley Precision Manufacturing Center in the Department of Mechanical Engineering
France	The ITER International Fusion Energy Organization		
India	Indian Institute of Technology Hyderabad		
Korea	Yonsei University Center for Information Technology and Governance	USA	Washington University in St. Louis School of Medicine

Visiting Research Co-Advisor Scheme in Full Swing

The university commenced full operation of its cross-appointment scheme to employ researchers from abroad as visiting research co-advisors to advise doctoral candidates at Keio. In AY2015, Keio welcomed a total of 60 co-advisors. Just as the year before, all parties involved—main research advisors, visiting research co-advisors, and doctoral candidates—expressed a high degree of satisfaction with the scheme. Several joint research and co-authored papers have been or are currently in the process of being published. The university expects their contributions will have a positive impact on citation and ranking indices.



A visiting research co-advisor meets with a Ph.D. candidate

Expanding Global Visibility

Communicating Keio Research Better Than Ever

In November 2015, Keio implemented Pure, a researcher information system made by Elsevier, to announce the findings and contributions of Keio research to the world. The research findings of full-time academic faculty recorded on Scopus, the world's largest abstract and indexing database of research information, are released on Pure. Making this information readily available to other institutions and researchers, especially those abroad, joint research.

Keio Ageing Week

Keio Ageing Week was held from Sunday, October 4, to Friday, October 9, 2015. Organized by Keio University with the collaboration and cooperation of various organizations, including the World Economic Forum (WEF), the World Health Organization (WHO), and Osaka University, the week consisted of an international conference and various events including lectures focused on healthy ageing, or more specifically, exploring solutions to challenges related to an ageing society. World-leading researchers convened to discuss issues related to a super-ageing population and cognitive decline as part of Keio University's ongoing research on longevity, one of Keio's global initiatives and a field in which Keio has long had a strong reputation. This meeting provided new insights needed to spark joint research on building a society that can cope with an ageing population through ongoing interdisciplinary and international research.



International Conference on Cognitive Decline and its Economic Consequences Co-hosted by Keio University and the World Economic Forum

4. The Top Global University Project at Keio University in AY 2016

■ Project-Wide Performance Indicators and Target Goals

Internationalization

○ Courses Delivered on FutureLearn

Keio University signed a Course Distribution Agreement with FutureLearn, the UK-based MOOC provider, making it an official member and the first from Japan to join the platform. In the 2016 academic year, two courses were provided: “Japanese Culture Through Rare Books” which looks at Japanese culture through writings from the earliest period in which books were written in Japan (8th century) to the Meiji Period (1868–1912), and “An Introduction to Japanese Subcultures” in which students study Japanese youth culture from the 1970s onwards. Both courses were taken by many people from around the world and received good reviews.



FutureLearn registration page

○ Hiyoshi International Dormitory Opened

At the Hiyoshi International Dormitory, international students from around the world and Japanese students live together in units. It is Keio's first dormitory of this type, which is designed to allow students to interact and learn from each other on a daily basis to foster international mindedness. There are a total of 200 rooms (4 students per unit × 50 units) in the building. Each unit contains four highly soundproof private rooms (two for Japanese students and two for international students) and a shared living space, shower room, and wash basin. This setup ensures that the students have both their own private space and a space for interaction. Furthermore, there is a courtyard, meeting room, lounge, etc., where they can plan various exchange activities by themselves. A shared kitchen, dining room, a large communal bath, laundry room, etc., are also available inside the facility for students to use.

Two additional international dormitories, the Motosumiyoshi International Dormitory (tentative name) in Nakahara Ward, Kawasaki City and Tsunashima SST International Dormitory (tentative name) in Kohoku Ward, Yokohama City, will open in March 2018. When these are open, Keio University will operate 10 dormitories with a total capacity of 1,524 residents.



Hiyoshi International Dormitory

Governance Reforms

○ Development of a Medium-Term Plan for the Second Period

Following on from the medium-term plan for the first period, a three-year medium-term plan for the second period, from the 2017 to 2019 academic years, was developed and announced. The medium-term plan for the first period focused on communications, internationalization, and personnel system reform. It was decided to continue focusing on these three areas to promote the Top Global University Project at Keio University, but the medium-term plan for the second period also makes reference to concrete numerical goals. In order to achieve the various goals that center on globalization, the medium-term plan, which is designed to bring about the university's progress in stages, will be boldly and steadily implemented.

Academic Reforms

○ Law School: Master of Laws (LL.M.) in Global Legal Practice

In addition to its existing Juris Doctor (J.D.) program, Keio Law School (KLS) launched a new Master of Laws (LL.M.) program in Global Legal Practice. This new program will permit a select number of students to obtain an LL.M. degree in one year, with instruction entirely in English, and is the first of its kind offered at a law school in Japan. The LL.M. program welcomes lawyers who aspire to work globally and legal staff of global corporations and international institutions. It also welcomes Japanese lawyers and law school graduates who wish to improve their practical skills using English, international students who are interested in Japan and Asia, and university graduates who wish to work in an international institution in the future.

○ Partnership with Washington University in St. Louis

The McDonnell International Scholars Academy partnership agreement was signed between Washington University in St. Louis (WUSTL) and Keio University.

The McDonnell International Scholars Academy is managed directly by the chancellor of WUSTL and provides scholarships and an educational experience at WUSTL to talented students from around the world who have the potential to become future leaders in academia, government, and the corporate world. Currently, it has partnerships with more than 30 universities in over 20 countries, and its partner universities in Japan are the University of Tokyo and Keio University. Keio students selected for the McDonnell International Scholars Academy program are expected to develop into future leaders who will thrive and compete on the global stage.



Signing ceremony

○ PEARL Launched

The Faculty of Economics launched the Programme in Economics for Alliances, Research and Leadership (PEARL), an all-English degree program, in September 2016. Admission to this program is limited to 100 students. During its first three application periods, over 300 applications were received and 99 students were admitted to the program (including students from affiliated schools). For entry in 2017, over 350 applications have been received in just the first two application periods.

■ University-Specific Performance Indicators and Target Goals

○ Expansion of Double Degree Programs

A double degree agreement between the Faculty of Business and Commerce and ESSEC Business School in France, and another between the Law School and the University of Washington School of Law in the US brings the total number of double degree programs to 28. Keio and ESSEC enjoy a long-standing history of exchange going back more than 30 years, and there is currently already a double degree program between ESSEC and the Keio University Graduate School of Business Administration. At the Law School, the Master of Laws program in Global Legal Practice has become a central program, like at the University of Washington. There are plans to develop a curriculum that takes into account studying for an LL.M abroad as well as obtaining legal qualifications overseas through the signing of double degree agreements with other partner law schools in the US and other countries.

■ Expanding Global Visibility

○ Keio University Global Research Institute Established

The Keio Global Research Institute (KGRI) was established on November 1, 2016 as a base to facilitate the further globalization of the university and become an international research university that can contribute to the betterment of society. KGRI will collaborate closely with Keio's academics and researchers whose work is related to the three transdisciplinary initiatives of Longevity, Security, and Creativity, and extensively share these research findings with the international community.



Inaugural symposium

○ World's First InterNational Cyber Security Center of Excellence (INCS-CoE) Established

In November 2016, Keio University established the world's first InterNational Cyber Security Center of Excellence (INCS-CoE) in collaboration with US, UK, and Japanese universities. Researchers from 13 universities, five from the US, four from the UK, and four from Japan, have been invited as members. Cyberspace is effective and unique in that it is a borderless environment, but this also makes it difficult for any one nation or organization to adequately monitor and take countermeasures against cyberthreats. It is essential, now more than ever, to strengthen and advance international collaborations to collectively address and solve these issues. INCS-CoE's initial mission is to make use of the neutral environment that universities are known to provide to contribute a space that allows researchers to take on challenges and work on issues that span beyond organizational and national confinements. The future goal of INCS-CoE is to expand out towards a multi-stakeholder environment, collaborating internationally with governments, academia, and corporations.

○ Research-Intensive Universities from around the World Voiced the Need for Continued Support for Frontier

The "Global Network of Research-Intensive University Networks: 2016 International Annual Meeting" international conference was held at Keio University's Mita Campus for two days from November 7 to 8, 2016. The purpose of this conference was to bring representatives from research-intensive university networks from different countries and regions of the world together to discuss common issues, and work towards solutions through mutual collaboration. RU11 (Japan), of which Keio University is a member, has been part of this global network since 2014. In addition to RU11 members, approximately 30 representatives from networks including, AEARU (East Asia), C9 + HK3 (China), German U15, Group of Eight (Australia), LERU (Europe), and U15 Canada participated. Keio University, which is in charge of international matters of RU11, hosted and chaired the conference.



Tokyo Statement signing ceremony

At this conference, which was held in Japan for the first time, it was reaffirmed that although it has become more difficult worldwide to get research funding, research-intensive universities are playing a vital role to create innovation and to contribute to the growth of the world economy. Through the release of the Tokyo Statement, an appeal to governments of member institutions was made to make sufficient long-term investments in cutting-edge frontier research.

[International Partnerships]

The university added two new double degree programs to bring the total number to 28, 13 new universities with agreement on academic linkage and collaboration to bring the total to 323, and four new overseas research hubs to bring the total number to 20. The university is working to further strengthen individual exchange between researchers by making these agreement-based international joint researches between the organizations. In November 2016, a joint workshop on the topic of Longevity was held at King's College London (KCL) in the UK. A total of 18 researchers from KCL and Keio University who work in different fields, such as medicine and economics, participated in the event. In addition, President Seike gave a talk about Japan's ageing society. Similar activities have been carried out at other overseas universities Keio University visits and it is believed that these efforts will lead to stronger partnerships in the future.

■ Other Activities

○ Study Abroad Program for Keio's Affiliated Schools

This program sends excellent students from Keio's five affiliated high schools to study abroad for one year at a prestigious boarding school in the US or the UK. Students are screened by both the high schools and host schools and those selected are awarded scholarships to cover tuition and other fees at the host school.

The program was launched in 2014, and in July 2016 a debriefing meeting was held with members of the first group of students who participated in the program. It was apparent that by living with the brightest students from around the world and interacting with them through studying and extracurricular activities, the students were able to not only improve their English, but gain new perspectives and the ability to proactively take action and seek new challenges. It is hoped that these students will create a ripple effect of inspiration among their classmates.



Study abroad debriefing meeting

5. The Top Global University Project at Keio University in AY 2017

■ Project-wide Performance Indicators and Target Goals

International Initiatives

Enhancing Overseas Partnerships

We are working to enhance our partnerships with overseas universities and research institutions centered on the Keio Global Research Institute (KGRI), which was established in November 2016. Keio research teams visit overseas universities and deploy projects such as the “Keio Caravan” in every region of the globe through exchange with counterpart researchers, to build collaborative relationships in education and research. These projects are facilitating steady outcomes, such as the conclusion of a collaborative research agreement with the Einaudi Center for International Studies in Cornell University in March 2018.

Opening of International Student Dormitories

In March 2018, two new international student dormitories, the Motosumiyoshi International Dormitory and Tsunashima SST International Dormitory, both located in the vicinities of Hiyoshi Campus, were opened. Both facilities allow students from around the world and from Japan to live together and learn from and interact with one another to hone an international mindset. Between the two dormitories there are a total of 319 single-residency dormitory rooms. One of the dormitories, the Tsunashima SST International Dormitory is located in the next-generation smart town, Tsunashima Sustainable Smart Town (Tsunashima SST). Electricity for the dormitory is supplied by an energy center in the town, and Tsunashima SST is also uniquely characterized by being partially run on solar energy. It is anticipated that the exchange studio in the first-floor town management center will go on to become a base for collaborative research between Keio and Panasonic as well as with the local area. This studio is intended to be a hub for SST experimental facilities which will facilitate cutting-edge demonstration experiments. With this, Keio University now has a total of 10 student dormitories with an overall capacity of 1,524 residents. There are ongoing plans to strategically maintain and expand Keio University's international dormitories to ensure the seamless hosting of students from countries throughout the world, the numbers of which are increasing year-on-year, and to enhance Keio's global outlook.



Inside the Dormitory

Governance Reforms

The Global Engagement Office

The Keio University Office for the Top Global University Project; the KGRI Office; the Planning Section, Office of the President; and functions for promoting international public relations and global ties have been strategically integrated, and a reorganization to officially institute mutual allocation and sharing of duties has been implemented. This agenda takes in the integration of education, research, and informational content; improving international public relations content; and the enhancement of brand management. Further, the mid-term plan for the 2018 academic year lays out particulars for the planned establishment of the Global Engagement Office (provisional name), which will optimize the effects of this structural reorganization, and encourage closer ties and more flexible administrative responses. Preparations towards implementation of this plan have now begun.

Academic Reforms

Questionnaire Survey on Global Interdisciplinary Courses (GIC)

The Global Interdisciplinary Courses (GIC) has gotten on track and increased its number of registered students since its inception in the 2015 academic year. A questionnaire survey focusing on the approximately 70 core subjects offered as part of the course was conducted this year to mark the three years which have passed since GIC began.

Survey Questions

1. Could you understand the English in classes?
2. Were classes in line with your expectations?
3. Was the content of the classes international and transdisciplinary as per the GIC objectives?
4. Would you rate this class as worthwhile overall?

(Answer: 1. Not at all 2. Not particularly 3. Somewhat so 4. Very much so)

Approximately 90% of students surveyed responded with 4. or 3., which indicates a high degree of satisfaction with the classes being deployed. Meanwhile, in terms of class administration, ongoing challenges such as disparities in the levels of participant student English proficiency and the relative English proficiency of educators have also been identified.



GIC class

Renewing International EQUIS Accreditation

On June 17, 2017, the Keio University Graduate School of Business Administration was reaccredited under the European Quality Improvement System (EQUIS) as issued by the European Foundation for Management Development (EFMD; headquarters Brussels), a body which evaluates the global quality of management education. This is the second renewal of the accreditation, following the renewal in 2014. Both the EQUIS reaccreditation and accreditation by the Association to Advance Collegiate Schools of Business (AACSB), an American organization for the evaluation of education standards, first granted in 2000 (since renewed), indicate the widespread international recognition for the quality of education and research at KBS, as well as for the activities of faculty members, current students, and alumni.

■ University-specific Performance Indicators and Target Goals

Expansion of the Visiting Research Co-Advisor Scheme

This scheme, which has been in place since the Top Global University Project commenced, this year again successfully invited many researchers from abroad under a cross-appointment system, in the capacity of visiting research co-advisors advising doctoral candidates. While short-term anticipated outcomes include the generation of internationally-visible academic papers, since the 2018 academic year, the call for applications under this scheme has expanded its scope to include implementation of classes and workshops in graduate schools which give consideration to internationalization in the mid- to long-term. This will facilitate master's-level students also having access to tuition by visiting research co-advisors.

■ Enhancing Keio's Reputation Abroad

Global Dissemination of Information by KGRI (Research PR)

New international public relations projects have been initiated by the Keio Global Research Institute (KGRI) to provide the infrastructure for renewed progress facilitated by internationalization of the university's activities and to allow Keio to become a research university capable of contributing globally. One of these projects is called Research Frontiers. Research Frontiers introduces video clips in which researchers give simple summaries in their own words of the latest research papers which have been released into the world, in order to facilitate deeper understanding of the research and researchers. Subsequently, by directly targeting this information to the media, journalists, and researchers in every region of the world, rather than only putting it on the web, we have begun to see its inclusion on a myriad of news sites, with enquiries also now beginning to be fielded from overseas.



Research Frontiers

Transfer of APRU-Aging Research Hub Functions

Jurisdiction for the Population Aging Program (PAP) of the Association of Pacific Rim Universities (APRU) has now been transferred from the University of New South Wales (UNSW) to Keio University. Research relating to longevity is currently being promoted as part of the university's Longevity Initiative towards the solution of challenges associated with a super-aging society, with which society is now directly confronted. This research ties together various fields including medicine, economics, and engineering. APRU implement programs which leverage the collective research capacities of member schools, under respective themes to contribute solutions to the challenges of the pan-Pacific region. PAP, which is one of these programs, concluded its 1st phase of 2015-2017, with UNSW as its research hub. Further expansion and development which succeeds and builds upon the research foundation laid down by UNSW will be pursued, with the aim of enhancing networks for research on aging societies and realizing research outcomes which have a societal impact, centered on the Graduate School of Medicine and KGRI.

Asia's Sole IBM Q Network Hub

An IBM Q Network Hub was established as a center for cutting-edge quantum computer research within the Quantum Computing Center at the Faculty of Science and Technology at Yagami Campus. IBM Q is a cutting-edge quantum computer for general use developed at IBM (United States), and this will become the sole hub in Asia enabled to use IBM Q's cloud computing system. The hub will contribute alongside four corporate members to quantum computer studies, skill development, and implementation, with the aim of facilitating advances in quantum computing. Keio University, with developers from participating corporations, will access the 20-quantum-bit commercial IBM Q quantum computing system equipped at the New York State hub through the cloud, and thus promote development of quantum applications in close cooperation with educators, researchers, and students.



Common Room of the IBM Q Network Hub

Outcomes of Partnerships with Universities Overseas

In the past academic year, Keio University added one new double degree program to bring the total number to 29; 22 new universities with agreement on academic linkage and collaboration to bring the total to 345; and four new overseas research hubs to bring the total number to 24. Research teams from Keio have been placed at universities overseas, and outcomes from the activities of the Keio Caravan, which were anticipated to deepen exchange among fellow researchers and facilitate systematic joint international research, are coming to fruition. Meanwhile, research teams from overseas have also been hosted at Keio and activities intended to encourage exchange with our researchers implemented. In February 2018, a Japanese art research team from the University of Vienna was hosted and the relationships among researchers deepened, by means of an international symposium and other endeavors, with discussions also conducted on potential future joint research and double degrees. We are steadily enhancing ties with universities overseas through these kinds of activities.

■ Other Activities

Holding of International Cybersecurity Symposium "Cyber3 Conference Tokyo 2017"

This symposium, jointly hosted by Nikkei Inc., Nikkei Business Publications, the Cyber Security Research Center at Keio University, and other entities, saw many lectures, panel discussions, and workshops with various themes. These included: "Next Generation Security Operation Center for the AI Era"; "Leadership for Cybersecurity Management"; and "Roles and Responsibilities of the Government and Private Sectors." A signing ceremony was also held at the opening of the symposium proceedings for an academic partnership agreement with the Georgia Institute of Technology as part of the activities of INCS-CoE. Lively industry-government-academia exchanges, bringing together governmental actors and prominent experts in the cybersecurity field and delegates from universities participating in INCS-CoE from Japan and overseas, were seen at the venue.



During the symposium

Project-wide Performance Indicators and Target Goals

International Initiatives

○ Increase in the number of international students accepted by expanding short-term study abroad programs that leverage the quarter system (+ 133 students)

By offering short-term study abroad programs (inbound) in the 2nd quarter, there has been an increase in international students from countries such as the United States, where it was difficult for students to come to Japan for a semester or a year due to curricula-related matters. In addition, we proactively accepted study trip students from overseas partner universities, etc. Universities from where students came include:

USA: University of Notre Dame, Allegheny College, Northwest University (State of Washington)

Singapore: Nanyang Technological University, National University of Singapore

Netherlands: University of Groningen, Erasmus University Rotterdam

○ New research and education partnership agreements

The following are examples:

Conclusion of an agreement between the Reischauer Institute of Japanese Studies at Harvard University and the Keio University Global Research Institute (KGRI) (May)

Conclusion of a comprehensive agreement with the Beijing Foreign Studies University (October)

Conclusion of a comprehensive agreement between the Medical University of Innsbruck and the School of Medicine (November)

○ Establishment of international research centers

Keio University Cyber Civilization Research Center (CCRC)

In April, the Cyber Civilization Research Center was established within KGRI. Dr. David Farber, who led research at Carnegie Mellon University and the University of Pennsylvania was invited as a co-director. A kickoff event was held on July 18, followed by the "KGRI Great Thinker Series – Cyber Civilization: Prologue" symposium on December 7. Professor Farber was **elected as a Fellow by the American Association for the Advancement of Science (AAAS) on 27 November.**

IBM Q Network Hub @ Keio University

In May, the IBM Q Network Hub, a forefront quantum computing research base was established in the Faculty of Science and Technology. IBM Q is a state-of-the-art general-purpose quantum computer being developed by US technology company IBM, and this hub is **the only facility in Asia** enabled to use IBM Q's cloud computing system.



Signing ceremony with the Beijing Foreign Studies University. An event introducing research at Keio and a panel discussion were also held for local students.



CCRC kickoff event

Governance Reforms

○ The second Global Advisory Council (GAC) instituted and in operation

Some new members of the Global Advisory Council, which comprises presidents of prominent overseas universities, have been selected.

○ Organizational reform to strengthen university governance

In April, the Office for Equity, Diversity, and Inclusion was established with the aim of developing a campus environment that recognizes diversity. In November, the Global Engagement Office (GEO) was established to expand IR and international public relations activities.



Global Engagement Office website

Academic Reforms

○ Implementation and operation of the Center for Global Interdisciplinary Courses

A program taught in English and other foreign languages for all undergraduate students. While enrolled, undergraduate students who acquire 40 or more credits from courses established or approved by the Center for Global Interdisciplinary Courses receive a certificate. In AY 2018, the 4th year since these courses were established, 42 students completed the program. A total of **47 students** have completed the program.

○ Implementation of distance learning classes between the University of Cologne in Germany and the Faculty of Economics and Graduate School of Medicine

Joint classes were held in English with the University of Cologne using a distance learning system during the Fall Semester of AY 2018 (**approx. 120 students took classes at Keio**). With "longevity" as the theme, lecturers specializing in various fields such as medicine and economics gave remote lectures, and those in attendance exchanged opinions. Credits are awarded at both universities. A decision was made to hold these classes again in the next academic year.

○ New course launched on FutureLearn, the free online learning platform

A new course was launched in September on FutureLearn, a MOOCs platform, titled "Exploring Japanese Avant-garde Art Through Butoh Dance." We now offer a total of **6** courses on FutureLearn.

■ University-specific Performance Indicators and Target Goals

- **Reached target number for registered patents in Japan and abroad**
At a **cumulative total of 1,591 patents**, Keio's registered domestic and overseas patents has exceeded 1,290, the target initially set for the end of the final year of the project.
- **QS World University Ranking by Subject 2019**
Keio University got a ranking in 20 specific subjects, covering all 5 broad subject areas in the QS World University Ranking by Subject 2019. Of these, **1 broad subject area and 3 specific subjects were ranked in the world's top 100**.
Broad subject area ranked in the world's top 100:
Social Sciences & Management **82nd**
Specific subjects ranked in the world's top 100:
Anatomy & Physiology **36th (tied)**
History 51st-100th
Politics & International Studies 51st-100th
- **Clarivate Analytics 2018 Japanese research institution rankings for number of high impact papers**
With 174 highly cited papers, accounting for 0.9% of all highly cited papers published, Keio was ranked 15th (1st among Japanese private universities). For rankings by field, Keio was placed 9th in biology and biochemistry, 5th in immunology, and 8th in molecular biology and genetics.

■ Expanding Global Visibility

- **International conferences and events**
 - Keio-APRU Population Ageing Hub's High-Level Policy Discussion Meeting with Dr. Victor J. Dzau, President of the United States National Academy of Medicine (April 14)**
Part of the research being carried out by the Association of Pacific Rim Universities (APRU) Population Ageing Research Hub. Policies were discussed by Japanese and American researchers and experts.
 - CESUN Conference (June 20-22)**
The Graduate School of System Design and Management jointly hosted the Council of Engineering Systems Universities (CESUN) Conference, CESUN 2018, **for the first time in Asia**.
 - AI for Everyone: Benefiting from and Building Trust in the Technology (August 31)**
Cross-disciplinary research project by APRU and Google on social applications of AI. Keio is taking the academic lead of this project. The project is being carried out at the Hong Kong University of Science and Technology.
 - Visit by UUKi Representatives (October 31)**
Representatives of Universities UK International (UUKi) and British universities visited. Views were exchanged on promoting education and research between universities in the UK and Japan.
 - Joint IBM and Keio University Symposium, "Innovation and Technology: A Look at the Future" (November 6)**
Discussion of issues such as the impact of AI on society and the development of a workforce that can effectively put AI to use.
 - 8th Experience Japan Exhibition (November 17)**
A study in Japan fair organized with the British Council and held in London. About 500 people visited.
 - Chancellor Merkel Visits to Talk with Keio students (February 5)**
An event at which the German Chancellor, Angela Merkel, conversed with students.  Chancellor Merkel talking with students
 - Center for Contemporary Korean Studies Hosts "Conceiving a New Order for Northeast Asia" Symposium (February 9)**
The current situation of the Korean peninsula was analyzed, evaluated, and discussed by Korean and Japanese experts.

[International Partnerships]

Keio has **29 partner universities with which it has double degree program agreements**; the number of exchange agreements increased by 1 from last year, bringing the total to **528**; and the number of our partner universities is now **355**, an increase by 2 from the previous year. Through the Guest Professors (Global) who have been appointed by the undergraduate faculties and graduate schools using the cross-appointment system, research collaboration with overseas universities has strengthened. **94** researchers have been employed through the cross-appointment system.

■ Other Activities

- **Globalization through exchange with the British Olympic Association (BOA) and British Paralympic Association (BPA)**

To prepare for the British Olympic and Paralympic teams' preparation camps for Tokyo 2020, which Keio will host, we have been holding test camps for athletes and receiving visits from staff members to inspect the facilities. In addition to exchange through sports, we are engaged in a variety of other exchanges involving education, research, maintenance of facilities, and adaptability as an organization working with different cultures. In October, the BOA held a seminar for students, faculty, and staff members titled "Sustaining Performance," covering themes relevant to study, research, and business operations.



BOA seminar