

# Top Global University Project (Type A) University of the Tsukuba

## 1. Outline

### 【 Name of project 】

Transforming Higher Education for a Brighter Future through Transborder University Initiatives

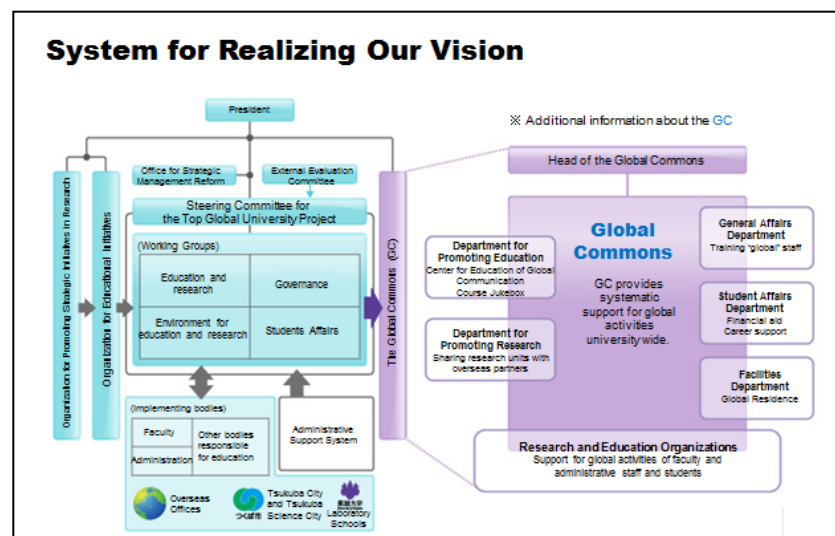
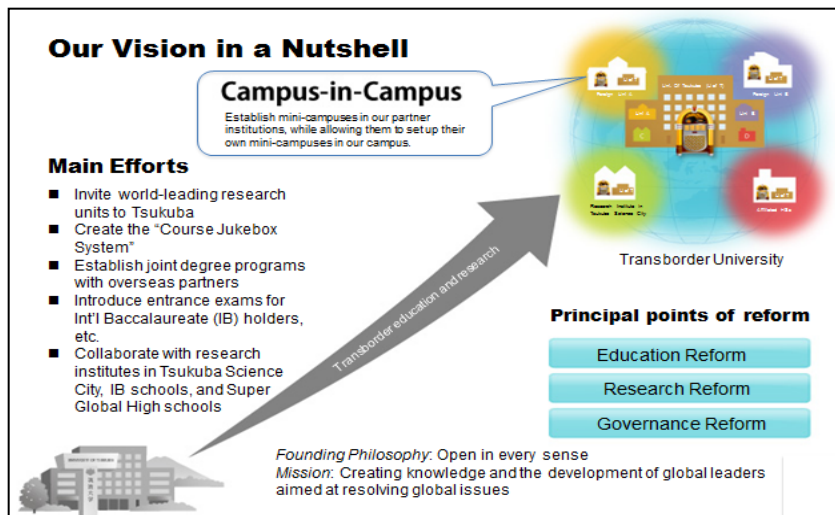
### 【 Future vision of the university planned in TGU project 】

- University that exponentially enhances mobility of its students, faculty members, and administrative staff by allowing everyone to partake in independent projects that go beyond national or organizational boundaries
- University that engages in world premier education and research that take advantage of all available global resources by transcending national and organizational barriers
- University that opens the “inward-looking” higher education and society in Japan to the world and paves the way to a brighter future by taking the initiative

### 【 Summary of project 】

Through the Campus-in-Campus (CiC) initiative, we intend to establish mini-campuses at 13 of our overseas partner universities by 2023 and vice versa. CiC will enable us to share educational and research resources with partner universities on a complementary and reciprocal basis as well as foster a transborder environment where students, faculty members, and administrative staff can freely intercommunicate across organizational barriers and national borders. The main features are given as follows.

- Invite overseas research units conducting world-leading research to our university to perform joint research and offer research guidance for our students.
- Create the “Course Jukebox System” comprised of courses provided by our university and our partners’ where students could take courses from any university as if they were from their own.
- Establish joint degree programs with overseas partners by utilizing the Course Jukebox System
- Introduce the Entrance Examination for International Baccalaureate (IB) Holders, Entrance Examination for Super Global High School graduates, and external English proficiency tests that check all four language skills for university-wide admissions. Make sure to accept globally-minded and proactive high school students both from Japan and abroad. Create suitable undergraduate degree programs for such students.
- Foster collaborative networks with research institutes in Tsukuba Science City, our laboratory schools, Super Global High Schools, International Baccalaureate schools, as well as our overseas partner universities.



## **【Summary of the 10-year plan】**

### **1. Implementing the Campus-in-Campus (CiC) initiative**

The CiC initiative aims to embed campuses of our overseas partner universities as well as industry-academia-government bases on our campus and vice versa. Owing to such a setup, we would be able to bilaterally share education and research environments for the benefit of our own and our partner's students, faculty, and administrative staff. It differs from previous concepts of extension campuses, exchange programs, e-Learning, or visiting lectures, since it is a joint venture aimed at developing sustainable and university-wide bilateral cooperation in actual environments at all times. We intend to establish 13 CiCs by 2023.

### **2. Inviting overseas research units**

Overseas research units conducting world-leading research will be invited to our university to perform joint research and offer research guidance for our students. We will hire eminent researchers from overseas institutes as PIs (Principle Investigators) via the joint appointment system and station fixed-term associate or assistant professors as deputy PIs. We also aim to promote bilateral collaboration by sending our research units in the fields of our strength such as sports science to our overseas partners. By incorporating the courses offered by the research unit into the Course Jukebox, we hope to be able to provide students with opportunities to get in touch with cutting-edge research and receive adequate guidance. By 2023, we will invite 9 such units in total to our campus.

### **3. Course Jukebox System**

The Course Jukebox System enables the University of Tsukuba and its overseas partner universities to interchangeably provide courses to each other's students by numbering courses like on a jukebox. This way we can share all available courses with any number of partner universities. Grade evaluations will be based on standards of the course-providing institution while granting credits will be left up to the student's home institutions. By 2023, we intend on incorporating 500 courses from 13 CiC partners into the Course Jukebox and provide access both for our own and our partners' students.

### **4. Joint degree programs that utilize the Course Jukebox System**

We hope to further promote bilateral student exchanges by making the best of our CiC partnership network and the Course Jukebox System. By 2023, we will establish 12 degree programs that utilize the Course Jukebox.

### **5. Reform of admission procedures and the establishment of new degree programs**

We will introduce the entrance examination for International Baccalaureate (IB) holders, entrance examination for Super Global High School graduates, and external English proficiency tests that check all four language skills for university-wide admissions. In order to actively recruit more globally-minded high school students both from Japan and abroad, we intend to provide 33% of all courses (both undergraduate and graduate) in foreign languages by 2023 as well as raise the number of programs where students can obtain a degree entirely in a foreign language to 28%.

### **6. Liaison with domestic institutions**

We will attempt to involve the entire Tsukuba Science City in the CiC initiative by creating our mini-campus in resident institutions and companies. Through this undertaking, we hope to foster "internationalization of everyday city life." Further, by partially opening up the Course Jukebox to our laboratory schools as well as Super Global High Schools (SGHs) and Super Science High Schools (SSHs), we hope to contribute to the internationalization and sophistication of secondary education and create the base for cooperative educational programs between high schools and universities.

## **【Featured initiatives (Internationalization, University reform, Education reform)】**

- We aim to create a flexible and diverse HR system as well as secure and cultivate extraordinary teaching staff. To do so, we intend to further expand the annual salary system, primarily targeting faculty members appointed through the allocation of external funds, so that by 2023 40% of all full-time teaching staff will receive their wages based on the said system.
- We drew up the "Basic policy for internationalization of everyday campus life (maintaining and improving language proficiency)," which aims to create a campus environment where Japanese and non-Japanese students and staff alike can sense every day that they are members of global society. In order to facilitate communication between administrative staff and non-Japanese students and faculty, we intend to increase the ratio of full-time employees fulfilling foreign language criteria (TOEIC score: 500) to 37% by 2023.
- Regarding admission selection, we announced in March 2015 that we will introduce external English proficiency tests that check all four language skills (reading, listening, writing, and speaking), such as GTEC-CBT, TOEFL, TEAP etc. We are currently in the process of deliberating on the method of implementation of said exams for admissions to each educational organization as of February 2017. However, we hope that by 2023 we will be able to utilize them for all undergraduate schools.

## **【Measures for the promotion of collaboration with foreign universities】**

Already, the University of Bordeaux, University of California, Irvine, and the National Taiwan University have expressed interest in participating in the Campus-in-Campus initiative. However, we are still consulting multiple other institutions regarding the possibility of further extending the CiC network to their campuses as well. In the future, we hope to be able to expand our network of CiC partners primarily around our overseas offices, of which we have 13 in 12 different countries and regions (Germany, France, Vietnam, Indonesia, Malaysia, China, Tunisia, Uzbekistan, Kazakhstan, USA, Brazil, and Taiwan), as well as institutions with which we have existing exchange agreements (As of May 2015, we have concluded 299 exchange agreements with universities, research institutes, and international organizations from 60 countries and regions.). By complementary and reciprocally sharing educational and research resources with our partners, we hope to foster a transborder education and research environment where our students, faculty members, and administrative staff may enjoy free mobility across organizational and national boundaries.

## 2. FY2014 Progress

### ■ Common indicators and targets

#### Internationalization

##### 1. Inviting overseas research units

To the Faculty of Humanities and Social Sciences, we have invited researchers from the Department of Indian and Tibetan Studies at the Asia-Africa Institute of the University of Hamburg. Further, to the Faculty of Medicine, we have invited a researcher for a collaborative research project from the Department of Molecular Cell Biology at the Leiden University Medical Center, a world authority on molecular cell biology.

##### 2. Education and research environments under Campus-in-Campus (CiC)

●We have made arrangements for the establishment of CiCs at three of our partner universities (National Taiwan University, University of Bordeaux, and University of California, Irvine).

●Further, in February 2015, we held a meeting with representatives of the above three universities where we discussed the prerequisites for the realization of the CiC initiative and decided on the details of implementation agreements.

##### 3. Kick-off symposium

●In February 2015, we held a TGU kick-off symposium titled "Thinking about Ways to Strengthen Our Global Presence," where we introduced our proposal centered on the CiC initiative to the general public and expert colleagues.

●Specifically, we invited representatives of partner universities (National Taiwan University, University of Bordeaux, and University of California, Irvine) as well as both domestic and overseas experts to attend featured lectures and panel discussions. Through this event, we managed to exchange opinions on what should be done to raise the global presence of Japanese higher education institutions, shared awareness on common issues, and fostered firm networks for the future.

●Simultaneously, we also organized a meeting of our external evaluation committee, where we received feedback on our TGU proposal from both domestic and overseas experts.



President Nagata explaining the CiC initiative at the kick-off symposium

#### University reform

##### 1. Establishment of the TGU Office

On October 1, 2015, we reorganized the TGU Preparatory Office and established the TGU Office. The office is staffed with three administrators who provide overall support in regard to the TGU Project for the whole university.

##### 2. Improved environment for foreign language education

We have established the Center for Education of Global Communication in April 2015 by merging the Foreign Language Center and the Japanese Language Division of the International Student Center. The newly enhanced center is charged with providing both Japanese and international students with the communication skills necessary for success in a globalized world.

##### 3. Proactive employment of non-Japanese teaching staff

We have employed teaching staff from overseas educational and research units.

#### Education reform

##### 1. Course Jukebox System structure

●While preparing to implement the Course Jukebox System, we carefully reviewed which of our courses would be eligible for provision through the system (applicable courses are scheduled to be posted online during fiscal 2015).

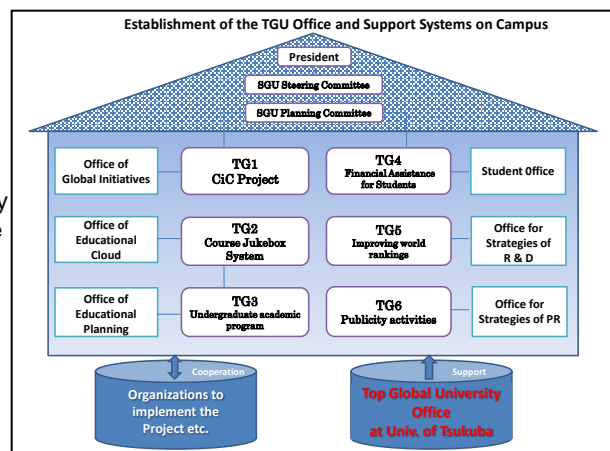
●At a meeting with officials from previously mentioned partner schools, we received confirmation that they would be interested in providing courses through the Course Jukebox System.

##### 2. Development of new degree programs

We intend to establish two new programs. First, the "All-round Undergraduate Degree Program," which would be centered on acquiring knowledge and skills necessary to tackle global challenges, project based learning (PBL), studying abroad, and late specialization. Second, the "Japan Expert Undergraduate Degree Program," which would primarily target international students and have a focus on achieving high Japanese language proficiency and deep understanding of Japanese culture and society while drawing on expertise from fields such as art, care science, Japanese language education, and agriculture. In respect to the establishment of these programs, we have conducted a review of their purpose, potential coordinating faculty members, curricula, and administrative structure as well as took the necessary steps towards the establishment of a preparatory committee.

##### 3. Implementation of global entrance examinations

In order to promote global human resource development, we have begun to implement the Entrance Examination for International Baccalaureate (IB) Holders.



## ■ University's own indicators and targets

### 1. Number of Campus-in-Campus partners

In order to prepare for the establishment of our CiCs at three of our partner universities, namely the National Taiwan University (NTU), University of Bordeaux (UOB), and the University of California, Irvine (UCI), we have held meetings with relevant coordinators and university officials.

### 2. Number of courses offered through the Course Jukebox System

We have selected 70 undergraduate and 63 graduate courses, or a total of 137 Courses, that will be offered through the Course Jukebox System. They are scheduled to become available in AY 2015.

### 3. Number of degree-seeking international students

We attempted to increase the number of degree-seeking international students by creating our own original scholarship programs and promoting projects by international student support groups.



Meeting on CiC at the NTU Tsukuba Office (from left: Dr. Lander of UCI, Associate Prof. Ohniwa of UT, and Dr. Lee of NTU)

## ■ Initiatives for the enhancement of international reputation

### 1. Enhancing University of Tsukuba's international reputation based on educational excellence

We have begun the transition towards an internationally compatible degree program system. We are also considering the establishment of entirely new undergraduate degree programs (tentatively titled the "All-round Program" and the "Japan Expert Program") that would help us cultivate global and innovative professionals fit for working in international environments. For that purpose and with the aid of core members, we began setting up a preparatory office.

Further, in order to enhance comparability of curricula across national borders and "tune" our degree programs with those in our partner universities abroad, we have established the Tuning Project Promotion Committee, made preparations for the employment of a full-time faculty member, hired supporting staff, gathered information on both domestic and overseas educational systems and the tuning system in Europe, held a FD training session, and laid the groundwork for studies and research on tuning.

We have also implemented global entrance examinations including the entrance examination for International Baccalaureate (IB) holders.

### 2. Enhancing University of Tsukuba's international reputation based on research excellence

We have been promoting internationally prominent research at our International Institute for Integrative Sleep Medicine, Center for Cybernetics Research, Core Laboratory for Algal Biomass and Energy System, and Life Science Center of Tsukuba Advanced Research Alliance.

In terms of strategic measures to enhance our research capacity, we have implemented the International Tenure Track system and supported the focal research centers as well as academic centers through our Organization for the Support and Development of Strategic Initiatives. We have also established a new system that enables us to invite overseas research units.

In terms of basic measures to enhance our research capacity,

we increased the number of research administrators, ensured their successive staffing and departmental assignment, established the AIST-UT Combo Fund and special joint research projects, as well as promoted the joint-use of cutting-edge research equipment through the Open Facility Network Office.

### 3. Governance Reform

Regarding resource allocation, in FY2015 we shifted from "partial optimization" to "comprehensive optimization" of our budget policy under the President's leadership. In regard to HR, we have established a university-wide strategic frame for the proactive employment of female, non-Japanese, and young candidates among our faculty members.

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

● Working towards implementing the Campus-in-Campus (CiC) initiative, we have established overseas offices on campuses of our key partners—National Taiwan University (NTU), University of California, Irvine (UCI), and the University of São Paulo (USP). In return, we invited the representatives of NTU, UCI, and USP for the launch ceremony of their Joint-use Tsukuba Office, which is expected to further expedite mutual exchanges among our institutions.

● Additionally, after the establishment of our São Paulo Office in March 2015, we have applied for strategic funding from the "2015 Re-Inventing Japan Project: Support for the Formation of Collaborative Programs with Universities in Latin America and the Caribbean, Turkey." By linking these efforts, we have paved the way for expanding the CiC initiative in Latin America.

● Furthermore, focused primarily on our Gene Research Center and the Graduate School of Life and Environmental Sciences, we have set up an international joint laboratory in conjunction with the Bordeaux Centre of the French National Institute for Agricultural Research. Most recently, the University of Bordeaux joined as well, and we held a signing ceremony for the expansion of the international joint laboratory on March 27, 2015, with representatives from all 3 institutions. We expect this endeavor to foster a ripple effect in the field of research owing to the CiC partnership with the University of Bordeaux.

## ■ Free description

### Showcasing Top Global Universities

Within the scope of the kick-off symposium held on February 15, we also featured a showcase introducing 29 universities selected under the Top Global University Project. The session served as a forum for information sharing and opinion exchange among participants, who included representatives from both domestic and international universities as well as experts from related fields. This showcase proved to be an invaluable opportunity for conveying the significance of initiatives undertaken by each of the selected universities to society.

