

# Tohoku University Vision 2030 and International Strategy

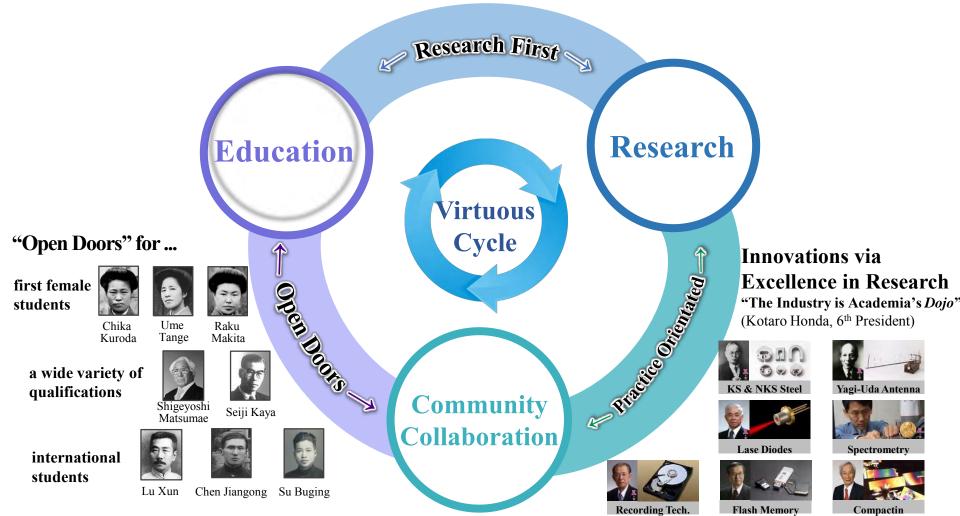




### Tohoku University: From Tradition to a New Challenge

### As a University Engaged with Society

Based on Research First, Open Doors and Practice Orientated Research & Education





### Vision 1

Nurturing
Future Leaders
via Excellence
in Education

Education

Vision 4
Management Reform

Creating Social Benefit via Excellence in Education & Research

Vision 3

Creating New Social Values via Synergetic Partnerships

Co-Creation with Community

Vision 2

Creating
Knowledge via
Excellence in
Research

Research

Community Collaboration

Industry Co-Creation



### General Education for Future Leaders

- Developing practical education to help students acquire a global mindset, AI/data skills, and a sense of entrepreneurship which are essential these days
- Developing expanding programs that respond to students' "challenging minds"

Global Mindset

AI/Data Skills

Entrepreneurship

Education



Education for the new generation

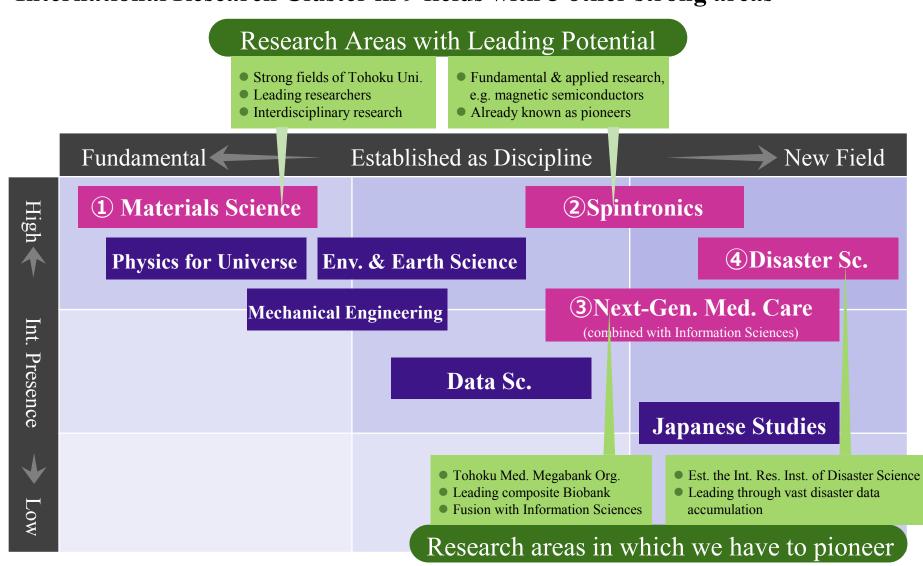


Provide all undergraduate students approx. 2,500



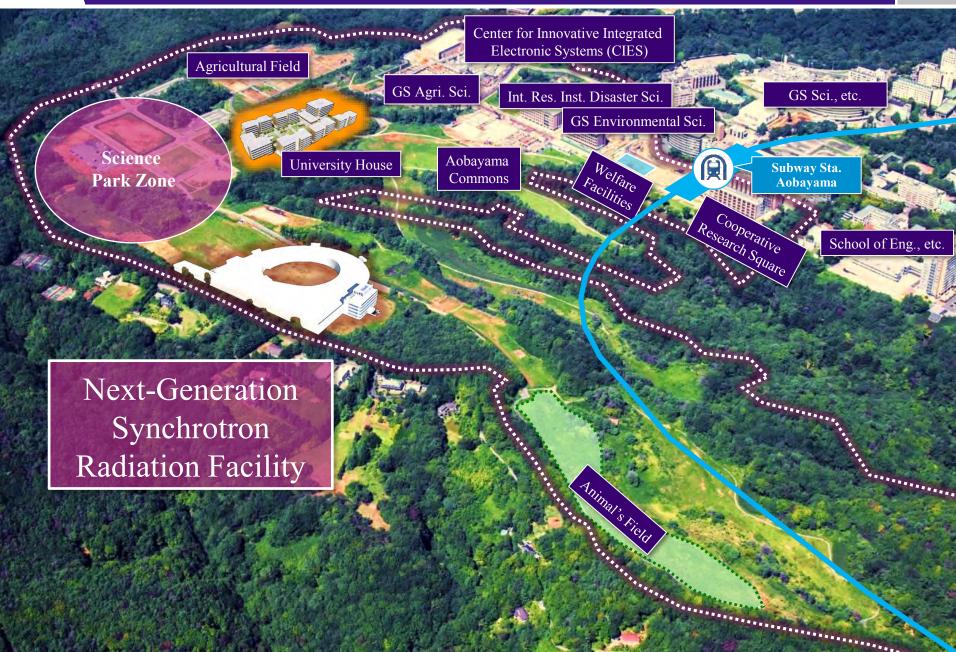
### Priority Objective: World Leading Research Centers

- Prioritized promotion of World Leading Research Centers in 4 research areas
- International Research Cluster in 9 fields with 5 other strong areas





### Global Innovation Campus





### From Disaster Recovery to the Development of Tohoku University SDGs

### April 2011 Establishment of the IDRRR

Promotion of prioritized research and its implementation within society for reconstruction and regeneration

## July 2015 Initiation of "Research with Social Impact"

30 cross-sectoral and interdisciplinary research developments aimed at solving important social issues



# Academia Contributions "close the science-policy gap"



Sendai Framework for Disaster Risk Reduction



#### 2015:

**Establishment of Three Major Agendas** for the International Community



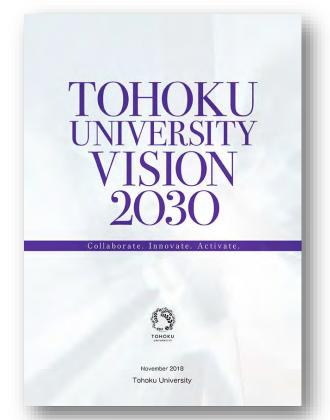




### International Strategy at Tohoku University

### **International Strategy**

Realization of the University Mission and Vision through the Advancement of International Collaborations and Comprehensive Internationalization



- Strategic advancement of international collaborations (Main Policy 56 of Vision 2030)
- University-wide, cross-sectoral globalization on campus (Main Policy 57 of Vision 2030)



### Direction in International Strategies

### Times of Global Change

- Globalization and Localization
- The 4th Industrial Revolution, Digital Innovation, etc.
- Knowledge-based Society

### **Issues and Objectives**

- SDGs
- Sendai Framework for Disaster Risk Reduction
- Paris Agreement
- Aging and Population Decline

### **Tohoku University's Identity:**

### To be a Global University with Creativity and Innovation

- Creation of global cutting-edge knowledge
- Accept a wide range of talents involved in the community
- Leading the development of Tohoku and Japan



Talk at Liaison Office Session 2017

# We need more **Strategic** and **comprehensive** approach

Strategic international partnerships are a hot topic in higher education right now. Collectively, we seem to be moving away from an initial philosophy of "let's sign as many MOUs with foreign institutions as we can," to an approach that emphasizes careful planning, deliberate action, and attention to quality, depth, and sustainability.

Helms (2016) Higher Education Today



### Processes and Targets of our International Strategy

### **Process 1: Advancement of International Collaborations**

We will bring together the wisdom with a variety of external partners and advance autonomous international collaboration

### Process 2: Comprehensive Internationalization

Through cross-border "Open Doors", we will develop a hub for diverse talents, resources, and networks from around the world

### Target 1: Education with a Global Perspective

We will attract talented students and faculty members from home and abroad, and foster future leaders with a global perspective for the times of global change

### Target 2: Cutting-Edge Research

We will create innovations and become pioneers in new academic fields through the cutting-edge research and knowledge creation

### **Target 3: Cross-border University- Industry Collaboration**

We will develop international universityindustry collaborations through the global innovation campuses and international networks

### **Target 4: Solving Worldwide Social Tasks**

Through Community Collaboration, we will play a leading role in solving various global social challenges

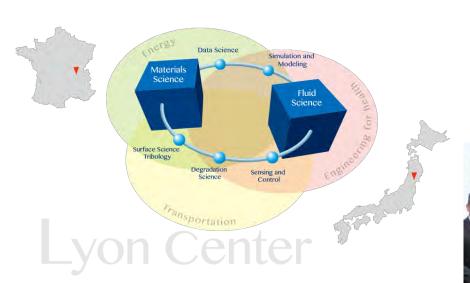


### Process 1. Advancement of International Collaborations

- We will develop international exchanges in a more open manner through the clear guidelines for international academic exchange agreements
- We will strategically strengthen partnership with overseas universities with whom Tohoku University can build mutually beneficial relationships
- We will activate the international exchange through effective monitoring and assessment based on an integral database on international exchange
- We will effectively use overseas bases and participate inter-university consortia actively
- We will activate international exchanges tailored to each region and country using networks inside and outside the university
- We will enhance the Tohoku University overseas network beyond regions and generations by using such organizations as the overseas alumni associations
- We will improve of our international presence through the development of our international public relations



### Selective strategic partnerships





### **Strategic partnerships:**

- Selection under the presidential leadership and mutual agreement
- Intensive support and monitoring for enhancing university wide exchange and collaboration

### Candidates for strategic partners:

•UCL •Melbourne •Tsinghua •Lyon •Washington and others



- Research Collaboration by Matching Fund Scheme (Seed Fund)
- Usage of Inter-University Consortia
- Joint Laboratories
- Liaison Offices & Overseas Offices
  - and others



### Matching Fund Schemes with World-Leading Universities



### **Tsinghua University**

Research Areas	3 areas (Materials Science, Spintronics, Disaster Science)	
Number of applications	6 applications	
Projects supported	6 projects (4 in Materials Science, 1 in Spintronics, 1 in Disaster Science)	
Funding Period (for 2 academic years)	Tohoku: April 1, 2019 to March 31, 2021 Tsinghua: April 1, 2019 to December 31, 2020	
Funding amount	JPY3.3M max per project for 2 years from each university	





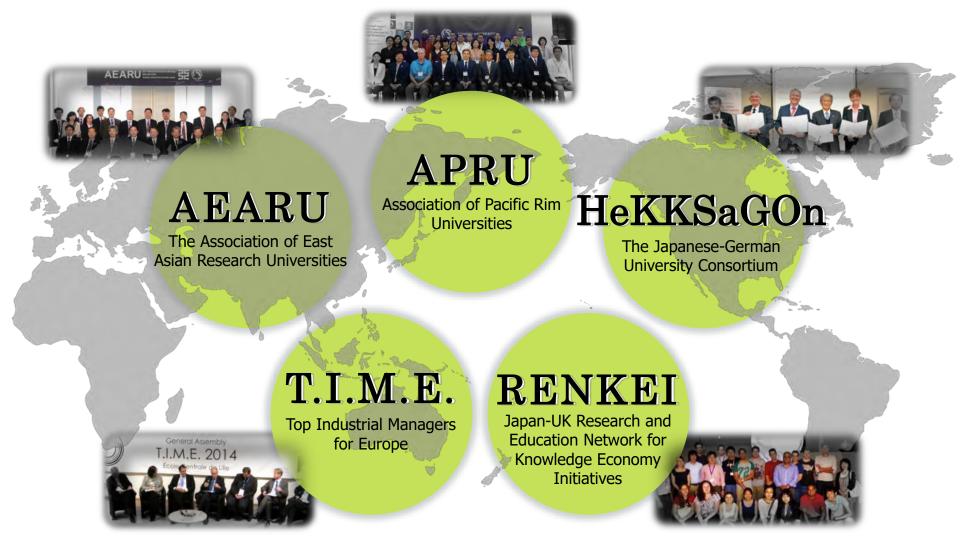
### **University College London (UCL)**

Research Areas	All areas (6 prioritized areas: Disaster Science, Neuroscience, Materials Science, Data Science, Higher Education, Equality & Diversity)	
Number of applications	13 applications	
Projects supported	7 projects (1 in Disaster Science, 2 in Neuroscience, 2 in Materials Science, 1 in Data Science, 1 in Equality & Diversity)	
Funding Period (for 1 academic year)	Tohoku: June 1, 2019 to March 31, 2020 UCL: June 1, 2019 to May 31, 2020	
Funding amount	JPY700,000 max per project for 1 year from each university	





### Consortia with World's Top Universities





### International Research Expansion: International Joint Laboratory Centers

### Japan-France Joint Laboratory (ELyTMaX)



Tohoku University – National Chiao Tung University Joint Laboratory



Established in January 2016 by Tohoku University, Université de Lyon and CNRS

#### -Achievements-

- Peer-reviewed International Conference Proceedings: 7 papers
- Presentations at over 40 international conferences
- Fund acquisition:
  Grants-in-Aid for Scientific Research (Scientific Research A, B), Nuclear Decommissioning Joint Program, Private Companies (DENSO etc.)

Tohoku University – University of Science and Technology Beijing Joint Research Laboratory



**Seattle** 



### University of Washington – Tohoku University Academic Open Space (UW-TU:AOS)



An administrative framework to catalyze collaborative research, education and information exchange between UW and TU.



Started in April, 2017

Current Achievements: 9 research workshops, 10 educational collaborations, 16 joint papers\*

(\*including "those in preparation")



#### Education/Research Base and Overseas Alumni Associations

#### Thailand Office @Chulalongkorn



#### TohokuU. Seminar/ Alumni Gathering Dinner



#### Tohoku U. Center @ FTU, Vietnam



Study Abroad Program in Vietnam





Alumni Association @Vietnam

FGL Challenge



### Systemic usage of overseas offices

#### **Overseas Representative Offices**

- 1 China Office @JSPS Beijing (Apr 20,2007)
- 2 Thailand Office @Chulalongkorn University(Mar 14,2016)
- 3 UW-TU Academic Open Space @University of Washington (Apr 14. 2017)

#### **Joint Laboratories**

(December 1, 2011)

- 1 ElytMax @Université de Lyon (INSA-Lyon) (Mar 5, 2018)
- 2 Top Mass @University of Science and Technology Beijing (Nov 17,2016)
- 3 @National Chiao Tung University (in process)



#### **Liaison Offices** (established by the departments' Initiative)

Seoul National University (College of Engineering) South Korea

1	The University of New South Wales (International Office) Australia (May 17, 2002)	8	Royal Institute of Technology (Faculty of Mechanical Engineering) Sweden (June 28, 2012)
2	Moscow State University (Faculty of Physics) Russia (June 21, 2002)	9	The University of California, Riverside, USA (February 1, 2013)
3	Syracuse University (L. C. Smith College of Engineering and Computer Science) USA (November 11, 2003)	10	Université de Lyon (June 2, 2015)   Based on the Liaison office @INSA-Lyon since January 23, 2004 (Institute for Fluid Science)
4	Korea Advanced Institute of Science and Technology (Department of Mechanical Engineering) South Korea (December 18, 2003)	11	Foreign Trade University, Vietnam (December 19, 2015)
5	Research Institute for Tropical Medicine, Philippines (May 1, 2007)	12	National Chiao Tung University (College of Electrical and Computer Engineering) Taiwan (May 4, 2017)
6	Institut Teknologi Bandung, Indonesia (August 2, 2011)	13	Sichuan University (West China School of Stomatology) China (March 1, 2018)