

University of Tsukuba

- Mission-based Research and its Assessment -

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筑波大学
University of Tsukuba

Unique History of 46+101 Years

147 Years of History and Tradition

Founded as Higher Normal School (1872)

→ Tokyo University of Education (1949)

→ University of Tsukuba (1973)



3 Nobel Laureates

Dr. Sin-Ichiro Tomonaga (Physics, 1965)

Dr. Leona Esaki (Physics, 1973)

Dr. Hideki Shirakawa (Chemistry, 2000)



110 Olympic + Paralympic Medals (as of 2018)



Medalists at Rio de Janeiro
Olympic + Paralympic 2016



Three Key Features

Tsukuba Science City



Legacy of Higher Normal School



Trans-border University

- Trans-disciplinary research & education
- Open to the global society



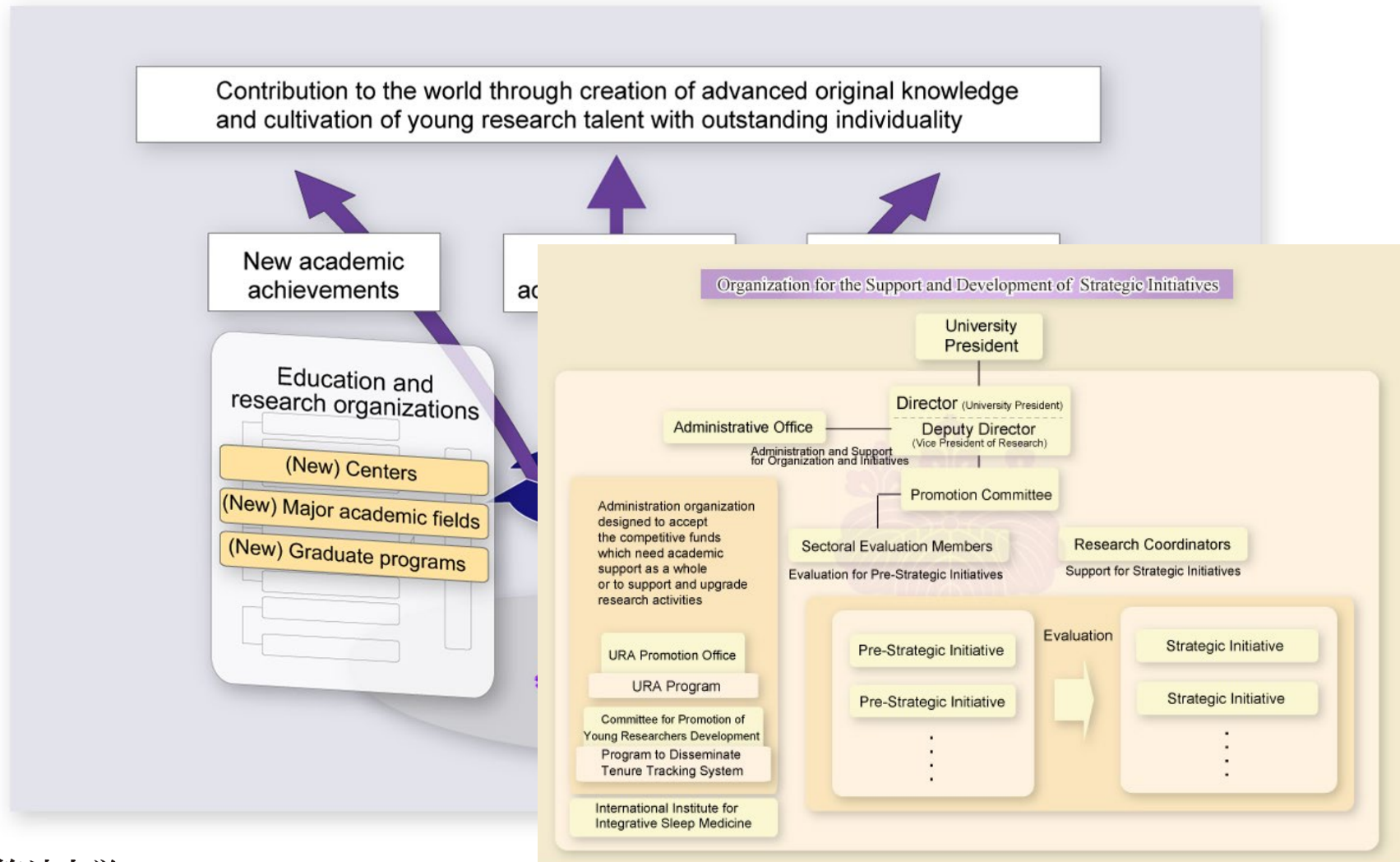
Our mission

- Creating knowledge that can contribute to the resolution of the global issues we face today
- Developing global human capital that can help lead efforts to the resolution of these issues

SUSTAINABLE DEVELOPMENT GOALS



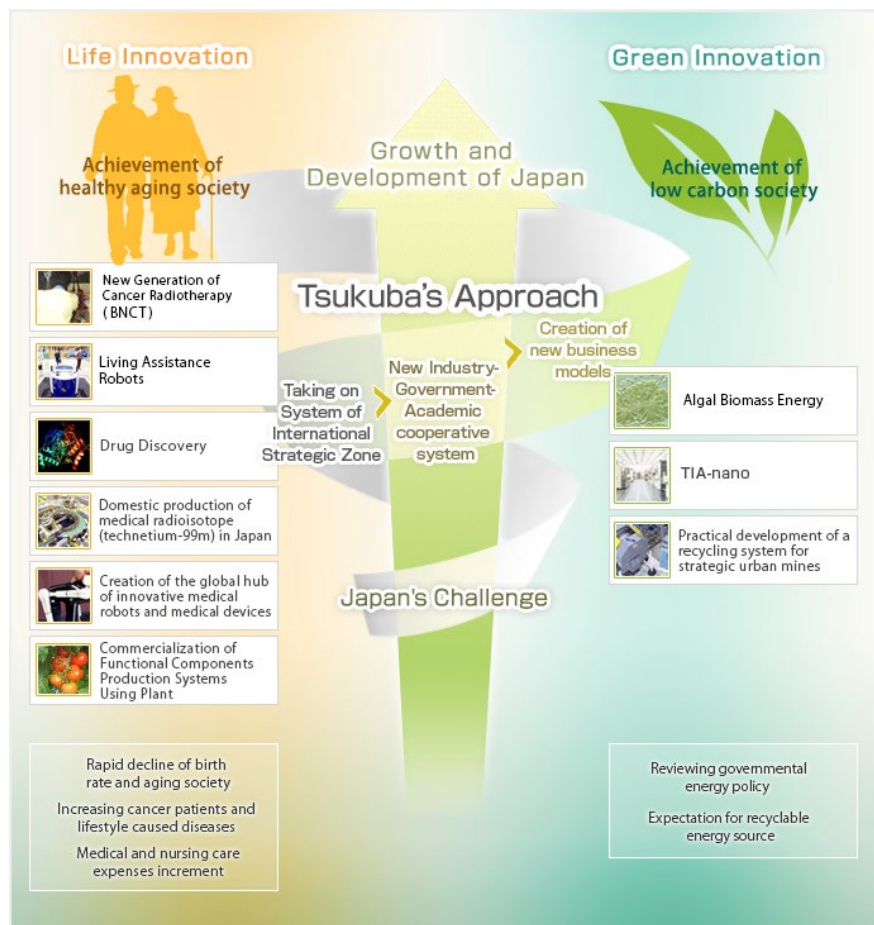
Organization for the Support and Development of Strategic Initiatives



Tsukuba Science City

Center of Research and Development

Tsukuba International Strategic Zone



Project 1

Development and Implementation of BNCT

Project 6

Domestic production of medical radioisotope (technetium-99m) in Japan

Project 2

Living with Personal Care Robots

Project 7

Creation of the global hub of innovative medical robots and medical devices

Project 3

Practical use of algal biomass energy

Project 8

Practical development of a recycling system for strategic urban mines

Project 4

TIA
A platform for open innovation

Project 9

Commercialization of Functional Components Production Systems Using Plant

Project 5

Drug Discovery

Research Centers for Innovation

Research centers

- Center for Computational Sciences
- Life Science Center of Survival Dynamics (TARA)
- Tsukuba Plant Innovation Research Center (T-PIRC)
- Shimoda Marine Research Center
- Plasma Research Center
- Alliance for Research on Mediterranean and North Africa
- Center for Cybernics Research
- Center for Isotopes and Environmental Dynamics (CRiED)
- Proton Medical Research Center
- Microbiology Research Center for Sustainability
- ... and others

Research core

- International Institute for Integrative Sleep Medicine (IIIS)

R&D centers

- R&D Center for Algal Biomass and Energy System
- R&D Center for Precision Medicine
- R&D Center for Sport Innovation
- R&D Center for Engineering Future Society
- R&D Center for Health Services
- R&D Center for Tailor-Made QOL
- R&D Center for Frontiers of MIRAI in Policy and Technology

Classification and Assessment of Research Centers

Advanced Research Centers

R1: World-level research centers

R2: National-level research centers

R3: Priority development research centers

R4: Training research units

Institutional support

Strategic SS

Strategic S

Strategic A

Pre-Strategic

Research centers entirely supported by external research funds

- Research performance is evaluated every 5 years.
- Can be subjected to promotion or demotion according to research performance.

R&D Centers

Research Support Centers

Centers engaged in managing research facilities and infrastructure

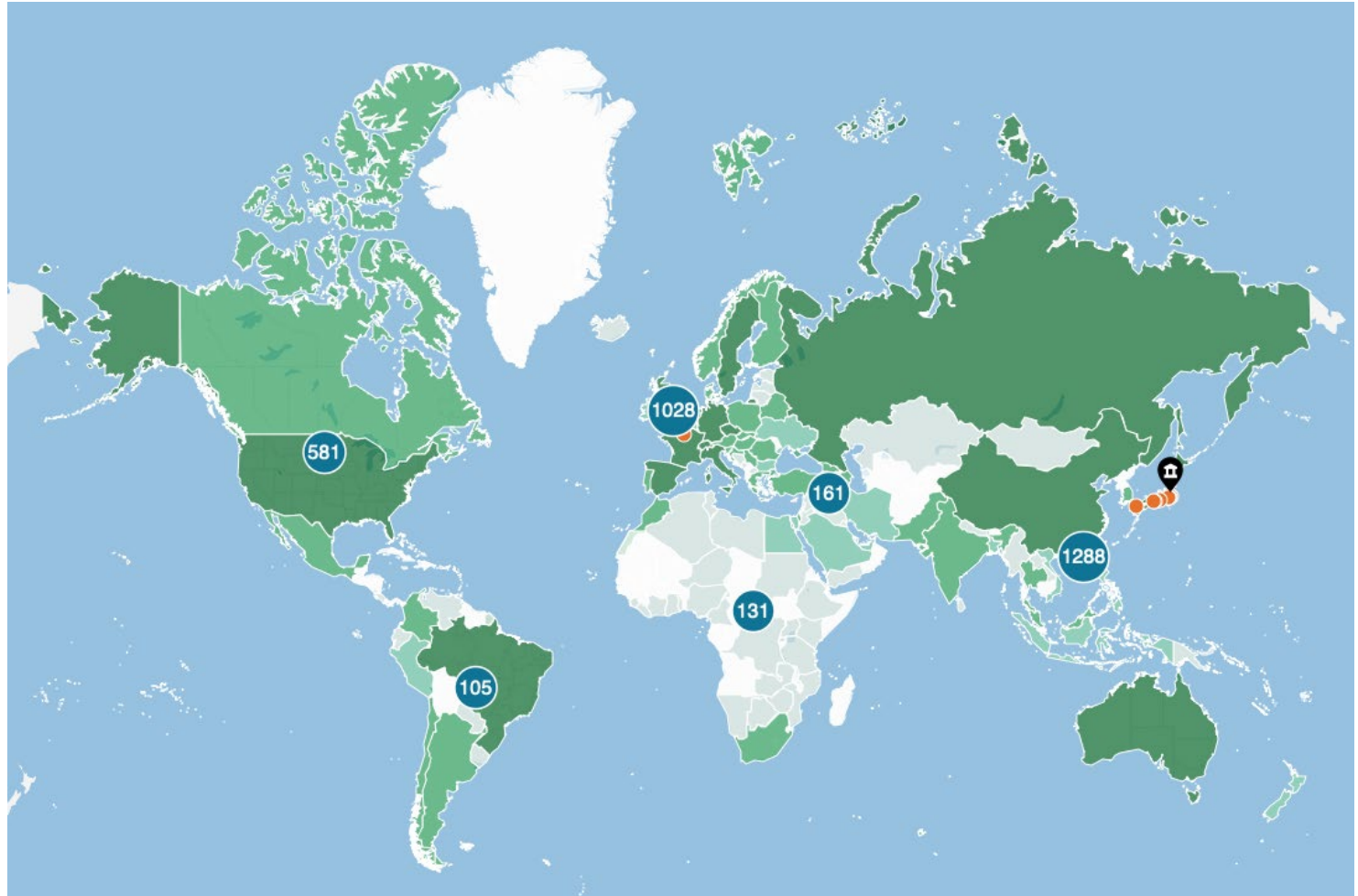
- Not subjected to research performance evaluation

Education and Student Support Service Centers

Centers engaged in education and training of students, faculty and staff and specific missions such as health care and admission

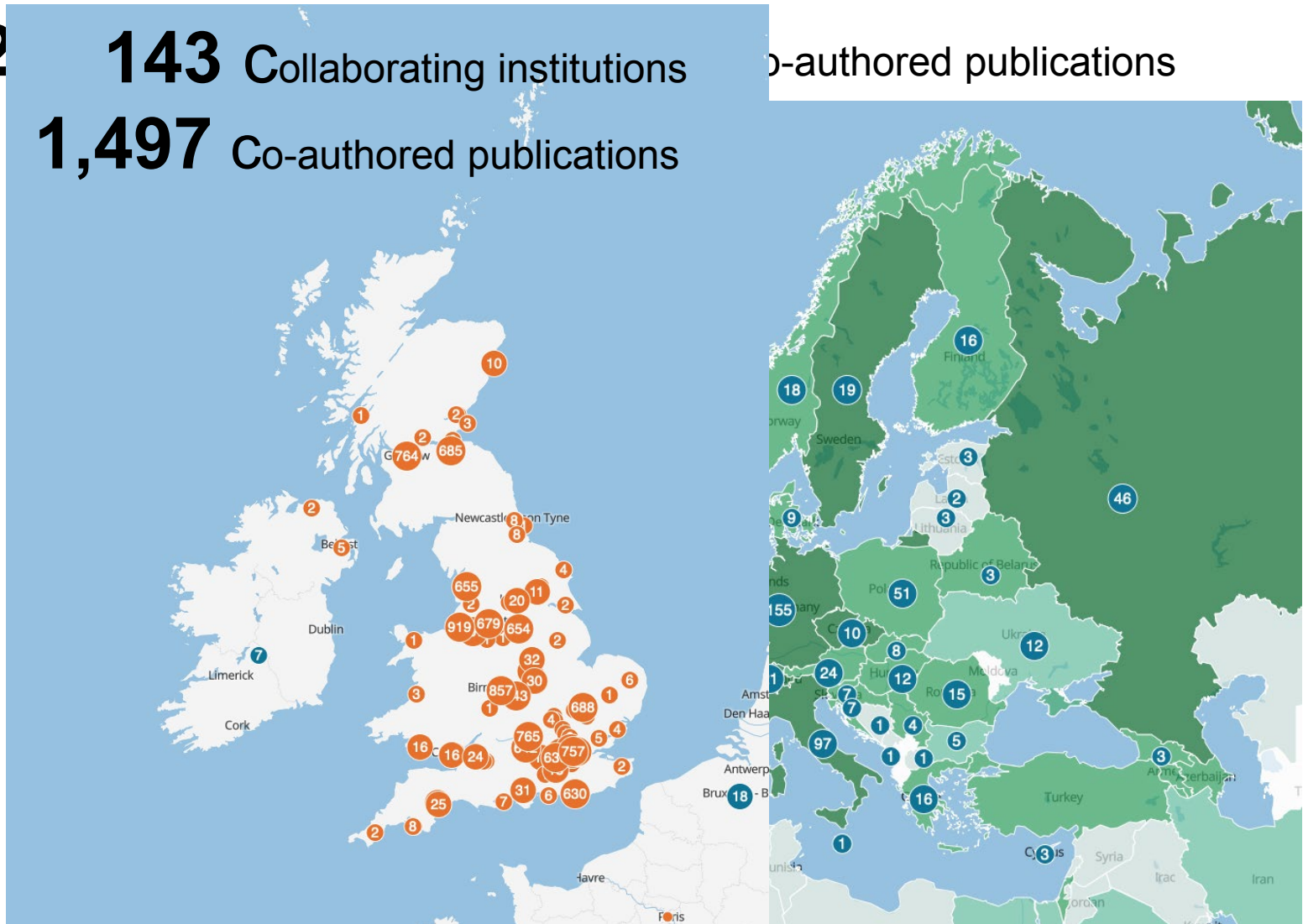
International Research Collaboration

3,294 Collaborating institutions **15,008** Co-authored publications



International Research Collaboration

1,021 Collaborating institutions
1,497 Co-authored publications





BigClout
Big data meeting
citizen clout in s

BigClout overall concept

GRENOBLE



Business Tourism
Monitoring



Industrial Estates
Monitoring

FUJISAWA



CrowdSensing



City Infrastructure
Management



CS
ATIONAL TECHNICAL
IVERSITY OF ATHENS

KUBA

TSUKUBA
UNIVERSITY



Our mission (again)

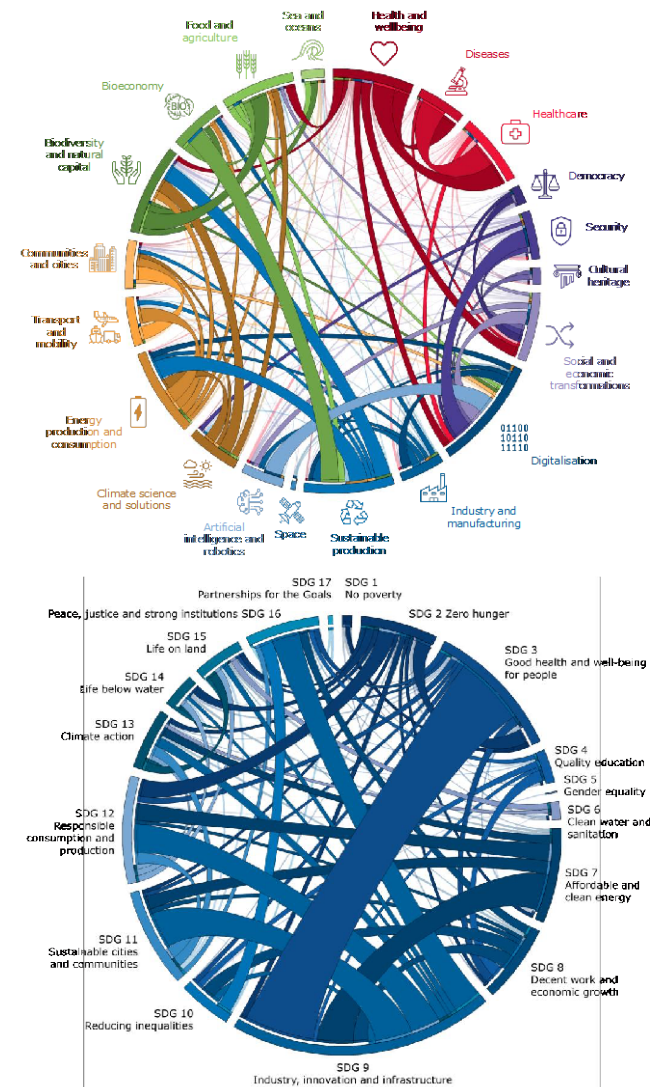
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SUSTAINABLE DEVELOPMENT GOALS



Trends in EU Mission-Oriented Research

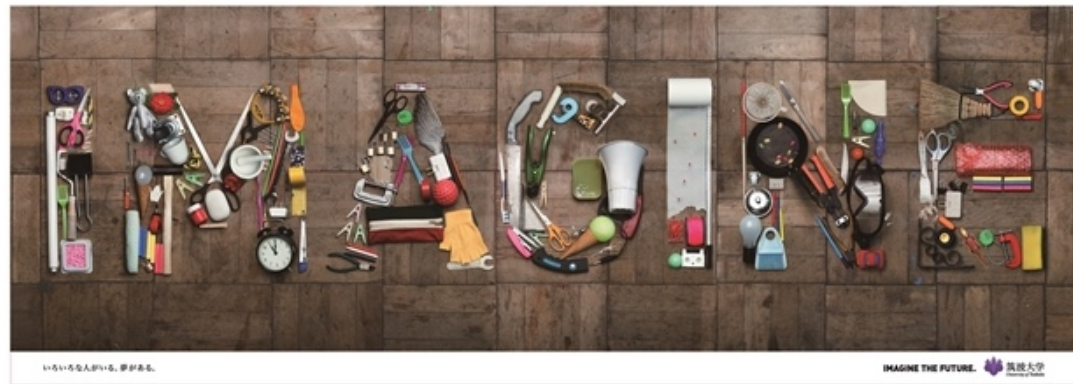


Towards Society 5.0 & e-Wellness and Smart Wellness City



Perspectives of Research Collaboration

- **Backcasting:** Imagine a desirable future and work backwards to identify and implement all-encompassing projects necessary.
- **Open Science and Innovation:** Share and work together beyond borders (countries, regions, institutions, disciplines, sectors...).
- **Involving New Insights:** Participation of young researchers, entrepreneurs and social leaders.



Tsukuba Conference For Future Shapers

October 2-4, 2019
Tsukuba International Congress Center, Japan

Keynote Topic: How science, technology and innovation can contribute to solving various social issues – in the context of Society 5.0 and SDGs

Expected keynote speakers

Representatives from the World Economic Forum

Representatives from the World Cultural Council

Nobel laureates

Presidents from world-renowned universities



TOKYO ● 2020

Tsukuba is only 45 min from Tokyo.
Why don't you visit Tsukuba during the
Tokyo 2020 Olympics?
Please mark your calendars, thank you.