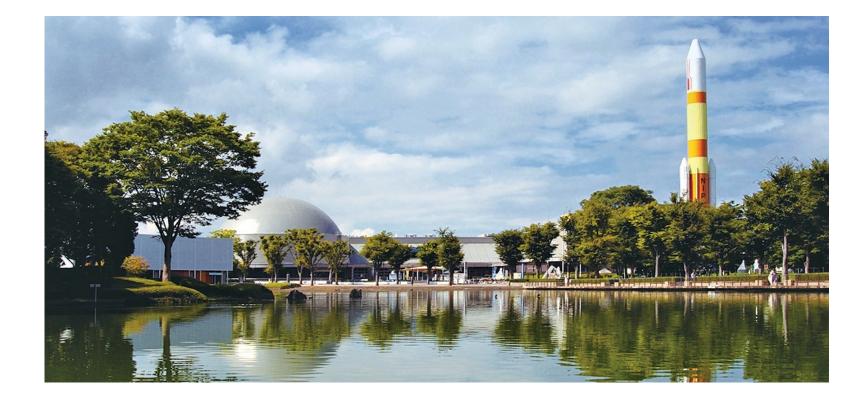


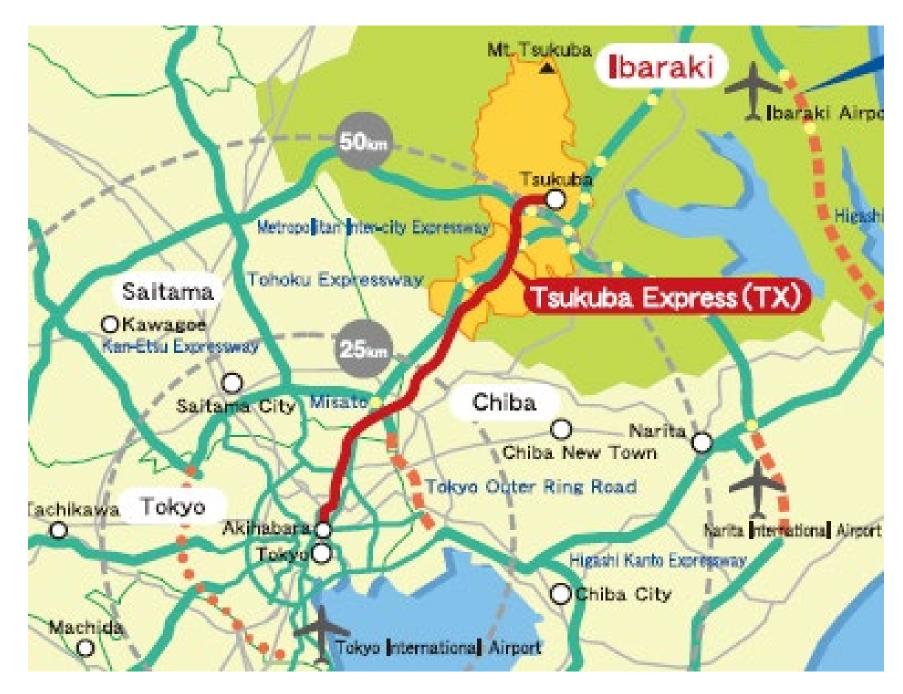
Tsukuba Life Science Promotion Association, TLSK

June 8th, 2021 Takashi Inutsuka, Executive Director of TLSK

Outline of Tsukuba Science City

- ➢ 1963 Cabinet decision to build Tsukuba Science City ➢ Area: 283.72km²
- ➢ Population: 244,528 (Oct., 2020)
- ➢ Population increase: 105.8% (2015 census)
- \succ Foreign residents: 9,457 (Oct., 2020)
- > 300 Research institutes
 - -29 National Research institutes
- ≥ 20,000 Researchers
- ➤ 4 Nobel-Prize winners
- ➢ 2019 G20 Ministerial Meeting on Trade and Digital Economy





➢ 50 km northeast of Tokyo > 45 minutes from Tokyo Station by the Tsukuba Express Line(TX) ➢ 40 km northwest of Narita International Airport



President Makoto Asashima

Name: Makoto Asashima, Ph.D.

Position (present, 2020), Institution

Research Professor, Strategic Innovation and Research Center, Teikyo University

Professor Emeritus, Department of Life Sciences (Biology) Graduate School of Arts and Sciences, The University of Tokyo

Emeritus Fellow, Research Center for Stem Cell Engineering, National Institute of Advanced Industrial Science and Technology (AIST)

Academic Adviser, Japan Society for the Promotion of Science (JSPS)



Professional Career

	1993-1995	Professo
	1995-2003	Professo Sciences
	2003-2005	Dean an and Scie
	2005-2007	Director
	-2008	Vice-Pre
	2007-2009	Managin Universit
	2009-2010	Fellow, 0 of Advan
	2010-	Director
	2011-	Japan S
	2013-	Emeritus Technolo
- 4	2016-2018	Vice Pre

Education

Doctor of Science from The University of Tokyo in March 1972	2009-2010	Fellow, C of Advan
Professional: Developmental Biology, Cell Biology, Organogenesis	2010-	Director
 Mechanism of egg development using from experimental biology to molecular biology 	2011-	Japan So
2. Control of Organogenesis in vitro	2013-	Emeritus Technolo
Aolecular biology of cell differentiation and embryonic development.		Technolo
4. Cloning and analysis of organ specific genes and early embryonic development	2016-2018	Vice Pres



- or at The University of Tokyo, Faculty of Arts and Sciences
- or at The University of Tokyo, Graduate School of Arts and S
- nd Head at The University of Tokyo, Graduate School of Arts ences
- of Life Sciences Network in The University of Tokyo
- esident of Science Council of Japan
- ng Director, Executive Vice President, Visiting Professor in The ity of Tokyo
- Organ Development Research Laboratory in National Institute nced Industrial Science and Technology (AIST)
- of Life Science Center of Tsukuba Advanced Research Alliance
- Society For The Promotion of Science Executive Director
- s Fellow. National Institute of Advanced Industrial Science and ogy (AIST)
- esident, Tokyo University of Science

Tsukuba Life Science Promotion Association, June 8th, 2021

Tsukuba Life Science Promotion Association, TLSK

About TLSK

TLSK was established in February 2012 as a basic organization of the Tsukuba International Strategic Zone, to promote collaborative research & development in the life science field in the Tsukuba district.

TLSK contributes to vitalization of the Tsukuba district and development of life science in Japan through supporting innovation by collaboration of different research institutes, utilizing the accumulated wisdom of Tsukuba Science City.

- **Technical Areas**
- Pharmaceutical \checkmark
- Biotechnology \checkmark
- Agriculture, Food \checkmark
- Bioresource platform \checkmark
- Various others \checkmark

Member Organization

60 institutions



- Private sector (Large companies, Startups, Financial institution) Academic (Universities, National research institutes)
- Government (National governments, Local governments)



Some of the Members of TLSK

送游 筑波大学 University of Tsukuba	University of Tsukuba University of Tsukuba is a research-type university with high research c pursues expertise in each field and promote interdisciplinary collaborati
ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY (AIST)	National Institute of Advanced Industrial Science and Technology, AIS As one of the largest public research institutes in Japan, AIST focuses of technologies that are useful for Japanese industry and society.
RIKEN	Institute of Physical and Chemical Research, RIKEN RIKEN is Japan's largest comprehensive research institution renowned scientific disciplines. It encompasses a network of world-class research
於 農研機構	National Agriculture and Food Research Organization, NARO NARO is an institution that conducts research and development in a wide development of Japan's agriculture and food industry.
NIMS	National Institute for Materials Science, NIMS NIMS carries out fundamental research and generic/infrastructural techr materials science, and with improving the level of materials science and
KEK	High Energy Accelerator Research Organization, KEK KEK is one of the world's leading accelerator science research laborato synchrotron light sources to probe the fundamental properties of matter
② 茨城県 び TSUKUBA	Ibaraki Prefecture/ City of Tsukuba Local governments



n capabilities in a wide range of academic fields. it ration.

IST

es on the creation and practical application of

ed for high-quality research in a diverse range of ch centers and institutes across Japan.

wide range of fields from basics to applications for the

chnology research and development in the field of nd technology.

atories, using high-energy particle beams and ter.

Some of the Members of TLSK

astellas	Astellas Pharma Inc. Capital: 84 million Euro Number of employees: Astellas Pharma Inc. is one of the largest pharmaceutical companies i Treatment, Acute Myeloid Leukemia (AML) Treatment, Metastatic Uro
Eisai	Eisai Co., Ltd. Capital: 37 million Euro Number of employees: 11,000 Eisai positions "neurology" and "oncology" as two strategically importation it can become a front-runner. Accordingly, it is promoting drug discover
➡→大鵬薬品	Taiho Pharmaceutical Co., Ltd.Capital: 1,600,000 EuroNumber of eTaiho has continued to embrace the challenge of developing medicineworked intensively on the development of innovative pharmaceuticals
KYOWA	Kyowa Hakko Bio Co., Ltd. Capital: 8 million Euro Number of employ Kyowa Hakko Bio uses cutting-edge fermentation technology to produce medical care and health around the world.
Nipponham	NH Foods Ltd. Capital: 29 million Euro Number of employees: 2,200 Nippon Ham Ltd. is a major food processing manufacturer in Japan, a such as many processed food products, marine products, dairy produ
KIRIN	Kirin Holdings Co., Ltd. Capital: 82 million Euro Number of employee Kirin Group position fermentation and biotechnology as the core techn world with expertise not just in the alcoholic and non-alcoholic beverage
AgroDesign	AgroDesign StudiosCapital: 870,000 EuroAgroDesign Studios is a start-up company that conducts research and and medicinal properties through a unique pesticide creation process



16,000

s in Japan, and its main products are Prostate Cancer othelial Cancer Treatment.

С

rtant areas where patients' true needs remain unmet and very activities in these two areas.

f employees: 2,300 nes that can contribute to cancer. Meanwhile, it have also Is in the allergy, immunology, and urology fields.

oyees: 1,900 duce the highest quality materials and contributes to

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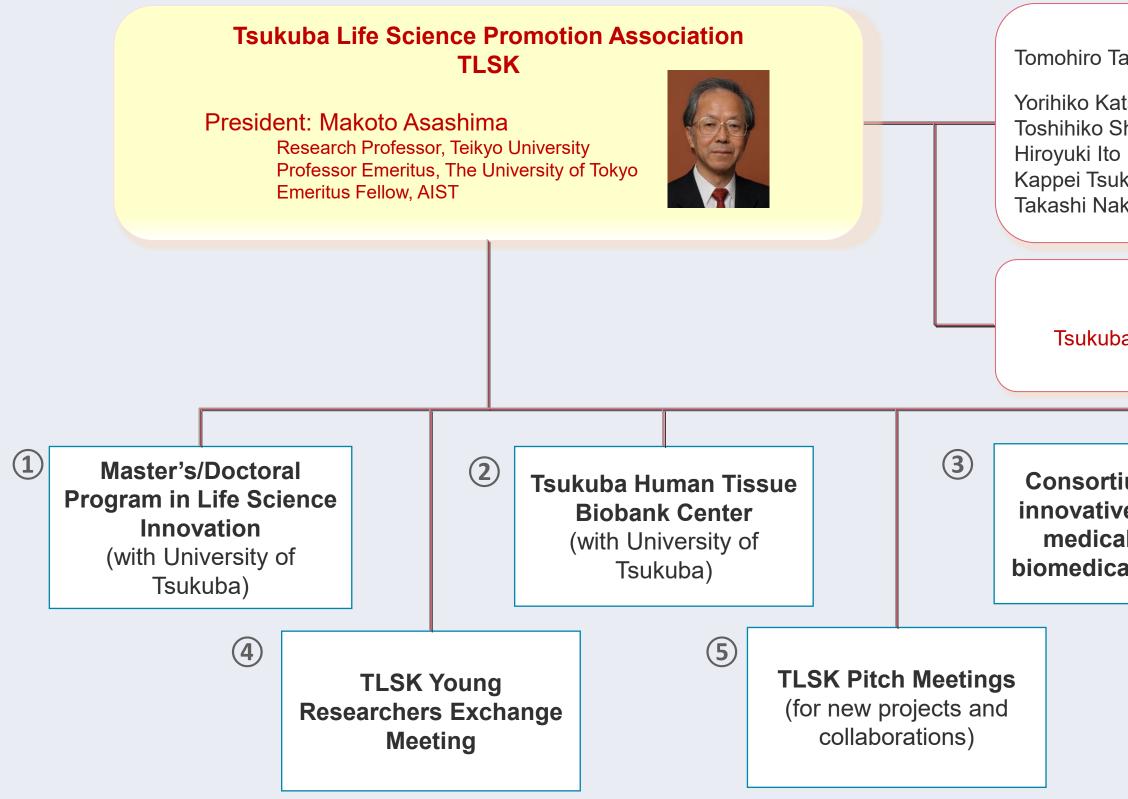
and covers a wide variety of ingredients and products ucts, and health foods.

ees: 31,000

nologies and are corporate group unlike any other in the age business but also in the pharmaceutical business.

nd development of pesticides that achieve both safety s based on bioscience technology.

Activities of TLSK for Ecosystem





Board of Directors

Tamura	Director, Department of Life Science and Biotechnology, AIST
atsuno	Vise President, University of Tsukuba
Shiroishi	Director, Bioresource Research Center, Riken
0	Director, Astellas Pharma Inc.
ukahara	Vice President, Eisai Co., Ltd.
akazima	Director, National Agriculture and Food Research Organization

Executive Office

Tsukuba Global Innovation Promotion Agency (TGI) Takashi Inutsuka, Director, TGI

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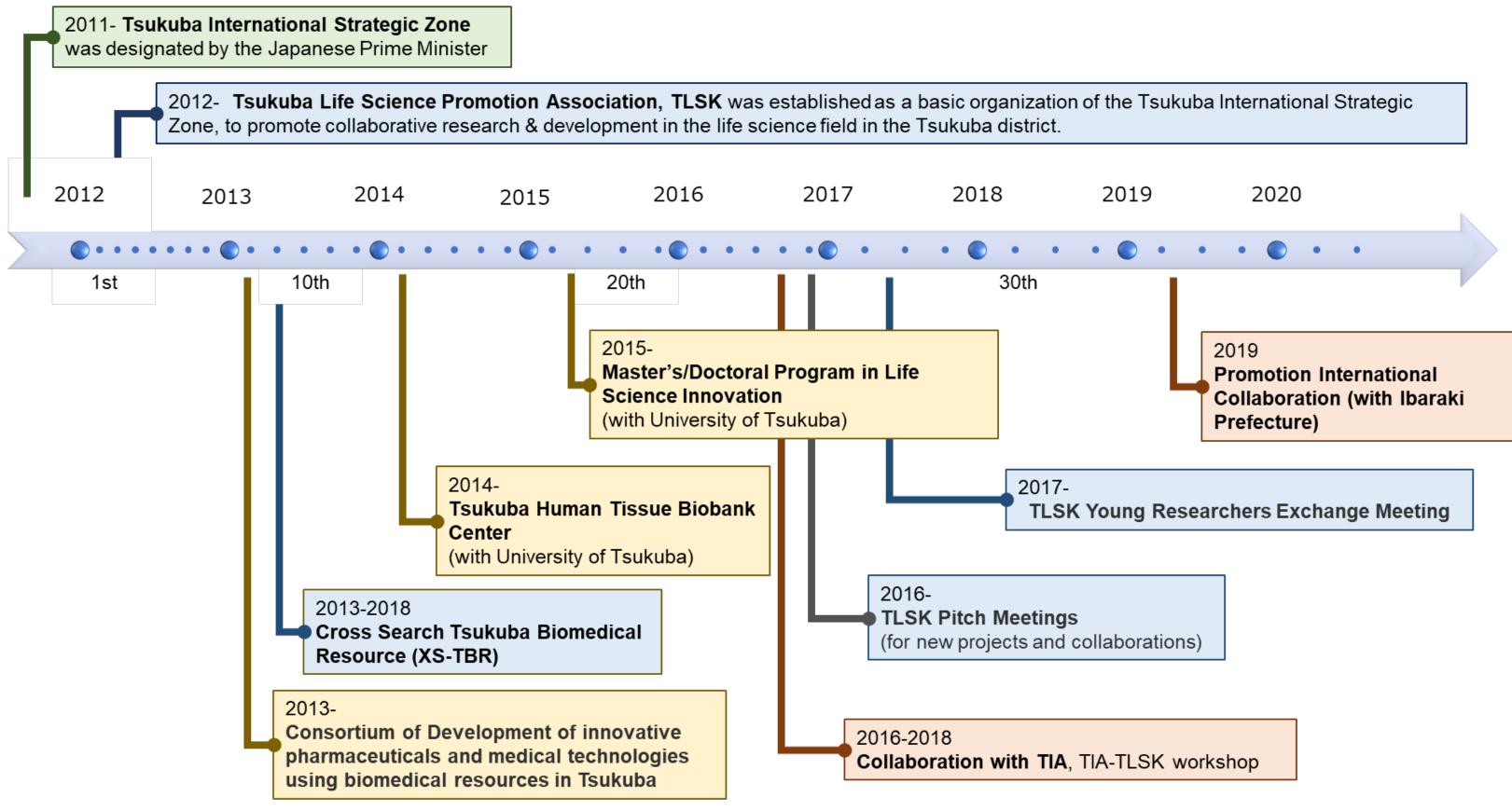
Consortium of Development of innovative pharmaceuticals and medical technologies using biomedical resources in Tsukuba

Others

-BioResource Research

- Center, Riken
- Cooperation with TIA
- -Technical Concierge

History of development and activity of TLSK







Examples of Projects and Collaborations created by TLSK

Tsukuba Human Tissue Biobank Center

Tsukuba Human Tissue Biobank Center distributes tissues and blood to various research and educational institutions for research aimed at drug development and finding causes of diseases, and for medical education.



Master's/Doctoral Program in Life Science Innovation

The Master's/Doctoral Program in Life Science Innovation is a new degree program jointly established by University of Tsukuba and TLSK. The program offers talented students from Japan and around the world unique education and research experiences that become a catalyst for creative innovation, encouraging students' interaction with leading world experts in its four specific fields of specialization – disease mechanisms, drug discovery, food innovation, and environmental management.

Creation of new national research projects, Useful Material Production System utilizing genome-edited plants

This Project aim to develop and commercialize a system thant produces useful materials beneficial in preventing disease and promoting human health using easy-to-grow plants, such as tomatoes. In this way, we hope to contribute to the effective prevention of illness, including lifestyle-related diseases such as diabetes and hypertensive diseases.

International Collaboration

In 2019, a pharmaceutical company belonging to TLSK and Inoviem Scientific of France signed a joint research agreement.









Thank you