

Interview with TMDU President Yasuyuki Yoshizawa

# Review of Six-year Tenure as TMDU President

Since assuming office as TMDU president, Dr. Yasuyuki Yoshizawa has devoted himself to organizational and mindset reform. Reviewing his six-year tenure, he discusses TMDU's transformation and prospects for the future.

**What did you most want to achieve when you took office as TMDU president?**

**Yoshizawa:** Two mottos—"If you know yourself, you cannot be wicked," and "Do your best to be a positive thinker," which I mentioned in my policy statement upon taking office as president in 2014, have inspired me to do my utmost over the past six years.

The first task I undertook as TMDU president was reforming the mindset of faculty and staff. For this purpose, I emphasized cultivation of a sense of affiliation with and an "alma-mater-like" affection for TMDU. I wanted all faculty and staff to share the same vision and work together to ensure that TMDU evolved in ways that contributed to the realization of that vision. It has been gratifying to recognize significant, albeit gradual, change in the mindset of faculty and staff over the past six years.

In parallel with mindset reform, I promoted reorganization within the university, an issue whose importance I was aware of before taking office as president. Whereas the Faculty of Medicine and the Faculty of Dentistry had previously operated separately without coordination, I revised personnel assignment and started by establishing

a structure that ensures that the entire university operates in accordance with a consistent administrative policy.

**Soon after taking the helm, you established organizations directly reporting to the president, didn't you?**

**Yoshizawa:** As TMDU is a small university, I thought it would be preferable to put in place an organizational structure enabling implementation of a university-wide policy unconstrained by the distinctions of faculties and hospital departments. Therefore, I first established the Policy Planning Office (currently President's Strategic Policy Section) that directly reports to the president and then the President's Advisory Board. I also introduced the institutional research (IR) system for integrated management of university information and data analysis in order to review and organize educational and research organizations.

Despite the expression of some reservations about the top-down approach at the outset, I remained true to my motto "If you know yourself, you cannot be wicked," and implemented initiatives for the benefit of TMDU and society at large.

**You conducted an overall review of education, including reforms of liberal arts education and entrance exams.**

**Yoshizawa:** Among various organizational reforms, I first tackled educational reform. In 2015, during my second year as president, I established the Institute of Education and pursued reform of liberal arts education, reform of entrance exams, and reorganization of the graduate schools. The aim was to achieve TMDU's educational policy of fostering independent, creative, pioneering, and internationally minded leaders who have a broad range of knowledge, deep humanity, and a strong sense of ethics.

For liberal arts education, we established a working group, including educational specialists from outside TMDU, to pursue reform. Proposals included introduction of student-led classes, small-group education, and teaching of liberal arts and sciences in English. These proposals have been implemented since 2017.

Regarding reform of entrance exams, we introduced a new track involving special selection for admission based on recommendation, in addition to general entrance examinations. The purpose was to increase opportunities to study at TMDU for students from areas outside Tokyo and those who have lived overseas. We were concerned by the fact that most of the students TM-

DU accepted in recent years came from high schools in the Tokyo Metropolitan area.

In a collaborative endeavor, TMDU and the Tokyo University of Foreign Studies developed a selection method for evaluating applicants' multifaceted and comprehensive capabilities, including preparation of exam questions integrating arts and sciences and joint dispatch of interviewers.

**What did reorganization of the graduate schools entail?**

**Yoshizawa:** In our reorganization of graduate schools, we were quick to put a focus on information-related programs, such as those concerning IoT, data science, and AI. Launched in fiscal

2017 under a five-year plan, the Doctoral program for Data-Related Innovation Expert is fostering consummate professionals equally at home in the worlds of data science and medicine, and moreover has led to the establishment of the Consortium for Data Sciences in Medical Care and Drug Discovery.

In 2018, TMDU established the new Graduate School of Medical and Dental Sciences. The Track of Biomedical Laboratory Sciences of the Graduate School of Health Care Sciences was transferred to this graduate school. New programs include a master's program on Health Sciences and Biomedical Engineering (Medical Sciences Pro-

gram for Preemptive Medicine, Master of Public Health in Global Health (MPH) Course, etc.) and the Integrative Biomedical Sciences Programs for Preemptive Medicine (Clinical Statistics and Bioinformatics Graduate Program, Medical Devices and the Internet of Things (IoT) Graduate Program, Biomedical Sciences and Chemical Biology Graduate Program). It took several years from the initial conception to the implementation of this reorganization of the graduate schools, but we eventually accomplished it.

**The Institute of Research is spearheading TMDU's efforts to enhance its research capabilities.**

**Yoshizawa:** Reform of research orga-

Yasuyuki Yoshizawa  
President  
TMDU



nizations started with expansion of the academic field-based system. Although TMDU originally introduced this system to strengthen the university's overall research and educational capabilities, it became apparent that there was an urgent need to remedy the insufficient integration of medicine and dentistry. For example, there were separate biochemistry departments for medicine and dentistry.

Therefore, focusing on closely related basic research fields, we established 15 new academic fields in the Graduate School of Medical and Dental Sciences in April 2016. For example, the pathology field comprises pathology-related departments both in medicine and dentistry, such as human pathology, comprehensive pathology, surgical pathology, oral pathology, diagnostic oral pathology, and molecular pathology. Subsequently, we established 13 academic fields in clinical research. We currently have 31 academic fields for basic and clinical research.

Expansion of the academic field-based system has led to promotion of TMDU's priority research fields and to the establishment of the Division of Advanced Multidisciplinary Research. Subsequently, TMDU established the Organ and Tissue Neogenesis Consortium and the Medical Innovation Con-

sortium, and we will shortly be launching the Intractable Disease Research Consortium. Involving cooperation between researchers in Japan and around the world, as well as with companies, these consortia are bases for cutting-edge international research spanning from the fundamental research to practical applications.

In 2017, we established the Institute of Research to spearhead research activities throughout TMDU and industry-academia-government collaboration from a broad perspective. By promoting integration of research facilities, which were previously scattered within TMDU, and networking with other universities to share facilities, we have established a framework and mechanisms for enhancing TMDU's research capabilities.

**Fostering young researchers and inviting excellent researchers are keys to success.**

**Yoshizawa:** The launch of the Presidential Young Investigators Award and the establishment of the Young Innovative Medical Scientist Unit are among the initiatives we have undertaken to strengthen research capabilities with a view to the next generation.

Meanwhile, TMDU has invited specialists in various fields, including distinguished athlete and sports scien-

tist Professor Koji Murofushi, regenerative medicine authority Professor Takanori Takebe, and cryo-electron microscope developer Distinguished Professor Yoshinori Fujiyoshi. We were able to pursue this human resources strategy thanks to the cross-appointment system introduced in 2014 and the HR Committee established in 2017.

**Facilitating industry-academia collaboration at the organizational level through the Institute of Open Innovation and other mechanisms**

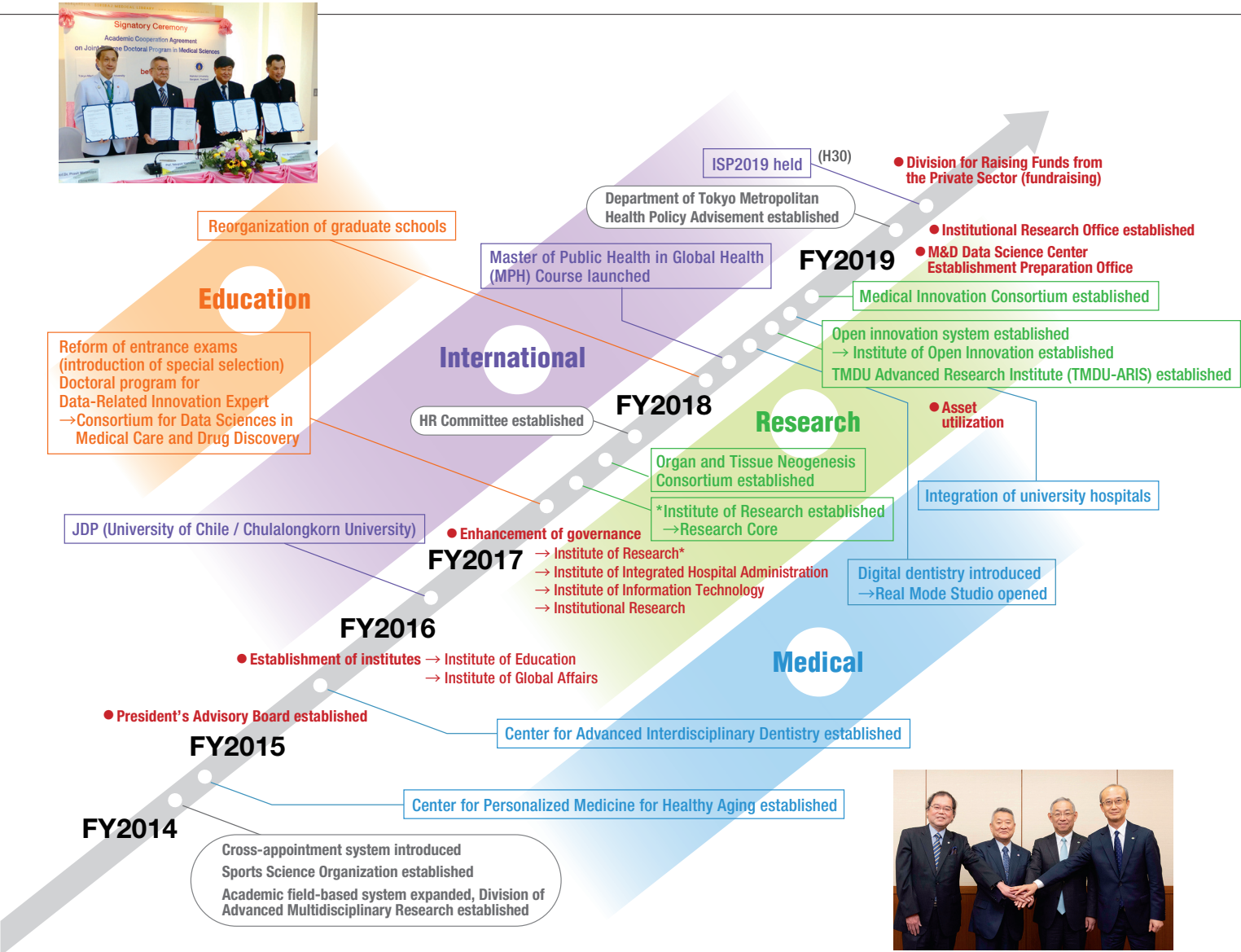
**Yoshizawa:** The Institute of Research not only promotes basic research but also emphasizes industry-academia collaboration, enabling it to swiftly implement TMDU's research outcomes in society.

The Research Core, consisting of the Administration Division and seven Research Support Units, was established in 2017 within the Institute of Research to accelerate practical application of research outcomes.

However, what TMDU is promoting goes way beyond the joint research between individual researchers and company departments typical of conventional industry-academia collaboration. It is vital to have a framework facilitating collaboration between universities and companies at the organizational level based on comprehensive collaboration agreements covering basic research, research on practical applications, and social implementation including patents.

Considering that national universities are now independent corporations, I think such collaboration is at the heart of our mission. Intellectual property created through industry-academia collaboration should be put to good use in society, and profit thus gained should be invested to strengthen basic research. National universities need to establish this virtuous cycle.

This was the basis for the comprehensive collaboration agreements TMDU concluded with Sony, Nikon, and



Yamaha. In 2018 we established TMDU Open Innovation System to further promote industry-academia collaboration and concluded industry-academia collaboration agreements with Hitachi, Mitsui & Co. and other leading Japanese companies. Against the backdrop of these highly regarded achievements, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) selected TMDU for its program supporting creation of a framework conducive to open innovation. Following TMDU's selection, we established the Institute of Open Innovation.

Reflecting our widely recognized achievements so far, TMDU was also selected for the Japanese government's program supporting national universities' initiatives to strengthen the environment for innovation.

**Reform of hospital administration is underway with a view to integrating university hospitals\*. How is that progressing?**

**Yoshizawa:** As I had been serving as the executive director responsible for hospital administration for six years before taking office as TMDU president, hospital administration reform was one of my priorities.

First of all, I thought full-scale collaboration should be established between the Medical Hospital and the Dental Hospital. Preoperative conferences and case discussions among oral surgery, otorhinolaryngology, head and neck surgery, and plastic and reconstructive surgery, as well as collaboration of the two hospitals pathology departments, were launched while I was the executive director responsible for hospital administration.

Since becoming president, I have endeavored to set up university-wide hospital administration systems step by step, including establishment of the Center for Personalized Medicine for Healthy Aging, which I long had in mind, and the Center for Advanced Interdisciplinary Dentistry and the Real Mode Studio to promote digital dentistry.

The Institute of Integrated Hospital Administration was established in 2017 and the Medical Hospital and the Dental Hospital were placed under this integrated organizational structure as university hospitals in 2018. Although the names of the hospitals remain unchanged, we made large strides toward integration of the university hospitals.

The space between the Medical Hospital and the Dental Hospital, will be



the site for a new building that will house operating rooms and emergency rooms available for use by both medical and dental departments.

**Mindful of the tremendous possibilities inherent in AI, TMDU has plans afoot for the coming era in which AI will prevail.**

**Yoshizawa:** In parallel with hospital administration reform, I have promoted initiatives related to AI, robotics, and data science, which are responsive to needs associated with medical information. The Center for Personalized Medicine for Healthy Aging established in 2014 is the base for preventive medicine utilizing genetic information gathered by the Bioresource Research Center. The increasing importance of medical big data leads sets the scene for realization of preemptive medicine.

The Institute of Information Technology established in 2017 played a key role in developing the information infrastructure system of the university that led to the launch of the Doctoral program for Data-Related Innovation Expert, which I mentioned in connection with educational reform, and the M&D Data Science Center that will start operation in April 2020. We intend to establish a Faculty of Medical Data Science in the future, and these initiatives are aligned with that prospect.

**TMDU’s high ranking among the world’s universities is raising its profile globally.**

**Yoshizawa:** TMDU’s high ranking among the world’s universities is in large measure attributable to the reforms we have promoted concerning education, research, and hospital administration. In the THE World University Rankings 2020 by subject, TMDU was ranked 74th in the world and 3rd in Japan for clinical, pre-clinical & health. In QS World University Rankings 2019 by subject announced in February 2019 by Quacquarelli Symonds, a British rating agency, TMDU was ranked 1st for dentistry in Japan and

10th for dentistry in the world, and 3rd for medicine in Japan and 51st -100th for medicine in the world.

For TMDU to be ranked so high in the world is indeed gratifying. It enhances recognition of TMDU worldwide and has a positive impact, making it much easier for us to engage in international cooperation.

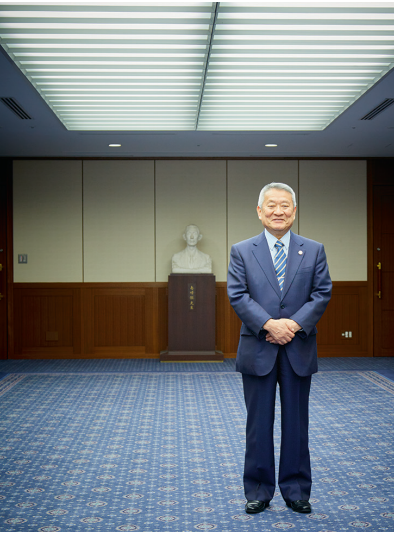
TMDU has long promoted international collaboration and cooperation with institutions in Southeast Asia, Chile, and Ghana. Going forward, however, it is indispensable to cooperate with institutions in the U.S. and Europe in order to secure a firm position as a world-class comprehensive medical university. We think the relationship with the U.S. is particularly important. During my tenure as president, TMDU has concluded partnership agreements with eight universities in the U.S. However, we are still in negotiations about establishing a TMDU presence within an American university. I regret this project was not fully accomplished during my tenure.

TMDU established the Institute of Global Affairs in order to ensure that international cooperation throughout the university is executed in accordance with the TMDU policy. In signing agreements as TMDU president, I assumed final responsibility.

In response to the strengthening of cooperation with American universities, TMDU’s International Summer Program (ISP) in 2019 broke new ground in that we invited students and faculty from partner universities in the U.S. to participate. ISP is an opportunity for participants to recognize TMDU’s quality and it is expected to lead to further cooperation.

**What are your expectations of TMDU going forward?**

**Yoshizawa:** Reviewing my six-year tenure, I think I have achieved almost everything I intended to do or laid the foundation for further progress. However, I feel progress in AI, data science,



and robotics, such as the intelligent hospital concept, has been somewhat slower than expected. The alliance among TMDU, Tokyo University of Foreign Studies, Tokyo Institute of Technology, and Hitotsubashi University has yet to fulfill its potential. Given that national universities need to be more independently managed to survive, it is all the more urgent for these four universities to promote this alliance and create new research fields where collaboration can flourish.

Regarding organizational reform, to which I accorded the top priority, I am gratified the university made so much progress during my administration, establishing new institutes for education, research, integrated hospital administration, information technology, and global affairs. We managed to accomplish such far-reaching organizational reform because of the reform of the mindset of faculty and staff based on a sense of affiliation with and affection for TMDU.

It is my earnest desire and expectation that Dr. Yujiro Tanaka, my successor as president, will successfully complete the innovative projects already in progress at the university and, in addition, embrace new challenges and exciting opportunities. I am confident that he will do his utmost to guide TMDU and provide leadership for society going forward.



## Message from New President Yujiro Tanaka

### Join forces to realize comprehensive healthcare for the Earth and humankind

**UNDER THE LEADERSHIP** of President Yoshizawa, TMDU filed an application to become a designated national university corporation with the aim of realizing comprehensive healthcare for people through out the world.

I wish to achieve this goal by joining forces with you from April 2020. For this purpose, I would like to transform TMDU into an organization characterized by autonomy and cooperation wherein all faculty and staff are able and eager to seize the initiative while working together to accomplish shared objectives.

Although it will not be easy to establish such an organization and cultivate the necessary culture, I am eager to take up the challenge.

Accordingly, I will focus on 1) delegation of authority and responsibility and 2) elimination of barriers. In this regard, not only structural reform but also mindset reform is important. Within the framework set by TMDU’s basic policy, you are

urged to demonstrate your sense of ownership while respecting one another. Whether your role is in education, research, clinical practice, or administration, let’s join forces to realize new comprehensive healthcare.

A notable example of organizational reform is integration of the Medical Hospital and the Dental Hospital\*. In addition, we will promote cooperation among departments and sections and exchanges with universities and other institutions in Japan, especially adjacent universities, hospitals, and clinics, and around the world.

In order to facilitate the full involvement of all the faculty and staff in these reforms, I intend to promote diverse workstyles so that people can continue working, and to support their career development.

Whatever your job description, academic background, gender, or age, I urge you to participate fully in TMDU’s initiatives so that we can offer new comprehensive healthcare to society.



\*The details regarding the integration of university hospitals are still under consideration. We will inform you in the near future.