Research: Wisdom for Living

One can argue that humanity's development since ancient times is due to continuous research.

Our hunter-gatherer ancestors "researched" how to generate surpluses from the bounty of nature.

During the agricultural revolution, people discovered how to apply new irrigation technology to settle in one area, while harnessing the power of livestock with the invention of the plow. Agricultural innovation brought surpluses that created new social structures.

Research has driven the course of human history through continuous technological innovation. Chariots enabled tribes to dominate neighbors. The development of weapons made of iron allowed for the subjugation of Bronze Age peoples further afield.

Research has enabled humans to live longer through the production of endless lifestyle-enhancing products and materials.

The accumulated fruits of research over the centuries are now making an unprecedented contribution to the wealth of human happiness.

We can characterize three distinct roles within today's world of medicine: those engaged in basic medical research; the physician scientist doing basic research while also continuing clinical practice; and the academic physician focusing on clinical research.

The traditional path into medical research involved dedicating one's life to basic research upon the completion of an undergraduate medical degree. In recent years, though, we have found the interest of many students shifting to the clinical side in their undergraduate years, even if they originally wanted to go into medical research. This trend has intensified with the advent of the new clinical training system in Japan.

The greater clinical focus among students is partly due to academic courses that do not adequately communicate the fascination of conducting research, and partly in the difficulty of incorporating the latest research results into teaching within the constraints of the curriculum and national examinations.

At TMDU, we have created original courses, such as the Project Semester, the Research Training Program, the Physician Scientist Program, the DDS-PhD Program, and the MD-PhD Program, to address these issues. The last-mentioned two programs are still far from being fully Implemented.

The conditions need to be right, in terms of research environment and livelihood, to cultivate the next generation of basic researchers. For one thing, we must help students feel the exhileration of conducting research and getting desired results. That is one experience that we want every medical student to gain while at TMDU.

In addition to basic medical researchers, we at TMDU strive to foster two other types of university faculty, the physician scientist and the academic physician. The first refers to faculty members in fields where it is possible to balance clinical practice and basic research, and who therefore have an obligation to publish papers on basic research while engaging in clinical practice. The second refers to faculty members in fields that do not allow sufficient time for basic research due to busy clinical work, who are nevertheless expected at a minimum to publish papers in clinical research. In pursuing this path, we do our utmost to train professionals who possess a scientific mindset that enables them to avoid inattentive errors in the course of clinical practice while practicing at the highest level of medicine.

I am confident that everyone who graduates from TMDU has been thoroughly trained to be a clinical problem-solver and a superior health professional.

Yasuyuki Yoshizawa

Yasuyuki Yoshizawa, President

NATIONAL UNIVERSITY CORPORATION
TMDU ANNUAL NEWS
Tokyo Medical and Dental University
Vol. 8, March 2016

CONTENTS