

TMDU graduates are active at the forefront of their field in countries worldwide. Studying abroad helped them deepen their knowledge as healthcare professionals, benefiting both their field and patients in every corner of the globe.

Letters from TMDU Overseas Alumni

Letter 01

Water and salt link Japan and Taiwan



Sung-Sen Yang
National Defense Medical Center
from Taiwan



IN MARCH 2001, I was a tourist in Tokyo walking along the Kanda River when I had my first look at TMDU. Two weeks later, Prof. Sei Sasaki, a world-famous physician-scientist from TMDU, was invited to give a state-of-the-art lecture entitled Water and Salt Homeostasis at the National Defense Medical Center (NDMC) in Taipei, Taiwan, where I was a nephrology fellow at the Tri-Service General Hospital (TSGH). I was awe-struck by his research and scientific team. After the talk, I mustered up the courage to inquire about studying for a PhD at TMDU. From that moment on, my life has been tightly intertwined with TMDU and Prof. Sasaki.

After completing my nephrology fellowship, I was offered a scholarship to join the PhD program at TMDU with letters of strong recommendation from Profs. Sasaki and Shih-Hua Lin, my mentor at NDMC. I was assigned to work with Prof. Shinichi Uchida in the Department of Nephrology. In his lab, all members, including Drs. Rai, Yamachi, Suzuki, Shohara, and Ms. Goto, taught me not only bench techniques but also Japanese language and culture.

In my second year at TMDU, my wife and son joined me in Tokyo. To accommodate my whole family, I moved from Ichikawa City to the Tokyo International Exchange Center (TIEC) at Odaiba



Prof. Sei Sasaki's first visit to NDMC in 2001.

with the help of a Monbusho scholarship. Surrounded by the love and support of my colleagues and family, I was able to immerse myself totally in research, which began to yield interesting results.

In the third year of my graduate study, I successfully created the first WNK4 disease-mutant knock-in mouse model, which enabled me to decipher the underlying pathogenesis of pseudohypoaldosteronism type II (PHAII), an inherited familial hypertensive hyperkalemic disorder. The results were very encouraging and were successfully published in *Cell Metabolism* in 2007.

My hard work finally paid off, and not surprisingly, I passed the thesis defense and received my PhD degree from TMDU in 2007.

After successfully defending my thesis and receiving my PhD from TMDU in 2007, I returned to Taiwan to start the genetically-modulated (GM) mouse lab at NDMC, with the tremendous support of Profs. Sasaki, Uchida, Lin, Huey-Kang Sytwu, the current President of NDMC, and Shu-Wha Lin at National



Plenary lecture by Prof. Sei Sasaki at the Annual Meeting of the TSN, 2007.



Plenary lecture by Prof. Shinichi Uchida at the Annual Meeting of the TSN, 2012.

Taiwan University. Several strains of GM mice—including SPAK-null (*J Am Soc Nephrol* 2010), kidney-specific OSR1 knock-out (*PNAS USA*, 2011), and Na-Cl cotransporter (NCC) S707X (*Human Mutation* 2010) and T58M knock-in mice (*J Am Soc Nephrol* 2013), common causes Gitelman syndrome both in Japan and Taiwan—have been successfully created and analyzed in my lab over the past five years. Using these GM mice, we have also determined the individual roles of these proteins in the PHAII mouse model (*PLOS ONE* 2013). These findings clearly demonstrate a novel signaling cascade of WNK4-SPAK/OSR1-N(K)CC in the pathogenesis of PHAII and hypertension, giving scientists and pharmacists key insights into sodium homeostasis and hypertension. SPAK/OSR1 inhibitor(s) could be promising new anti-hypertensive agents.

On the recommendation of Prof. Uchida, I was invited to give a plenary lecture on WNK4-SPAK/OSR1-N(K)CC signaling in the kidney at Renal Week 2011, the annual meeting of the American Society of Nephrology (ASN). Since then, I have also received the Young Investigator Awards from the TienTe Lee biomedical foundation in 2012 and the National Science Council



of Taiwan in 2013.

The close relationship between TMDU and NDMC has been further cultivated by regular exchange between the institutions. In 2007 and 2013, Prof. Sasaki and in 2012, Prof. Uchida, were visiting scholars of NDMC and guest lecturers at the annual meetings of the Taiwan Society of Nephrology (TSN). These efforts have greatly bolstered the friendship between TMDU and NDMC and between Japan and Taiwan.

On December 2, 2013, TMDU and NDMC signed a memorandum of agreement to promote bilateral academic exchanges in Taipei. The key TMDU participants at that ceremony included President Takashi Ohyama, Vice President Profs. Ikuo Morita and Sei Sasaki, Dean Prof. Yasuhito Yuasa, Vice Dean Prof. Yoshinobu Eishi, and Director of

Signing ceremony for the agreement of academic exchange between Medical Faculties, TMDU and NDMC, 2013.

International Exchange Center, Prof. Takashi Yoshida. At the signing ceremony, President Ohyama challenged everyone to further the spirit of collaboration, so I was pleased to hear the Dental Faculties of TMDU and NDMC will be signing an agreement of cooperation in March of 2014.

For me, it has been a tremendous and fateful journey since that day along the Kanda River, one filled with professional and personal satisfaction in the company of incredible colleagues and mentors. The metaphor of “water and salt” aptly describes the closeness of TMDU and NDMC and I feel my story is that of a lucky sailor riding the current of “shiomizu,” carrying the spirit of eternal friendship between Taiwan and Japan.

Letter 02

Memories are timeless treasures of the heart



Pichayanoot Rotkrua
Thammasat University
from Thailand



AT THE BEGINNING of spring 2006, a direct JAL flight from Bangkok, Thailand brought me to the whole new world of Japan. This was my first journey abroad. Sakura cherry blooming around the town welcomed me warmly even though the weather was so cold. Even now, every time I see the cherry blossom, it always recalls me to my first day in Japan, where my life was changed forever.

I came to TMDU on a Japanese Government (Monbukagakusho: MEXT) scholarship. I elected to study here because my professor, who graduated from a Japanese university himself, advised me that TMDU was the top-ranked medical school in Japan. I would be able to conduct cancer research as I wished. Professor Yasuhito Yuasa kindly accepted as a graduate student in the Department of Molecular Oncology at



Working as a lecturer in the Division of Biochemistry of the Department of Preclinical Science in the Faculty of Medicine at Thammasat University, Thailand.

the Graduate School of Medical and Dental Sciences.

Everyone in the laboratory was so nice and friendly. They always helped me, not only with educational issues, but also in my everyday life. Although I could not understand the Japanese documents many times, they never refused

to lend a hand.

One time, I felt severely homesick and depressed. At that time, going back to see my family in Thailand was the only thing on my brain, but something good happened. Everyone in my laboratory tried to cheer me up in several ways. I suddenly realized that my family, which I had thought was only in Thailand, was actually in Japan as well. If you are reading this story, please accept my appreciation and thanks.

For scientific experience, my own research involved carcinogenesis and diagnosis of gastric cancer, which gave me a strong background in biomedical research. I improved my communication skills by writing a scientific article in the International Journal and having opportunities to present my works in many international conferences. I also had an extracurricular experience as a Research Assistant (RA) and Teaching Assistant (TA) in my department. My responsibilities were to perform experiments related to research projects, including planning, testing and data analysis, and preparing teaching materials for laboratory classes. There is no doubt



Feeling happy with my medical students on their graduation day.

in my mind that my entire experience at TMDU prepared me rather well to be a good scientist in the future.

Time has gone so fast. The six years spent completing Master's and Doctor's degrees in Japan matured me; now I am ready to follow my next dream. After coming back to Thailand, I am working as a lecturer in the Division of Biochemistry of the Department of Preclinical Science in the Faculty of Medicine at Thammasat University. I love teaching and feel very happy every time I participate in class with my students. I always keep in mind how well I used to be taught by my teachers. Therefore, my promise to my students is the same.

I will train them the best way I can.



Teaching a graduate student to perform cell culture.

Learning to be a professional with happiness is the goal. The serious shortage of medical practitioners in Thailand is an urgent issue, so producing qualified staff is necessary. Being a teacher has changed my attitude. Once I used to think that the feeling on my graduation day was the greatest moment, but I was wrong. I have discovered that the pride I feel for my students' successes on their graduation day is more truly touching.

Finally, let me say that Japan is my second home. I never felt any regret to be there. If life is a work of art, living and studying in Japan is my masterpiece. Memories are timeless treasures of the heart. You will be in my heart forever, TMDU.

Letter 03

A most memorable experience



Chinthika Gunasekara
University of Sri Jayawardenepura
From Sri Lanka



I ENTERED TMDU as a Mombukagakusho scholar from Sri Lanka in April 2007. It was my first visit to the beautiful country of Japan. I vividly remember the breathtaking view on the way to the TMDU dormitory near Sato-mi Park, Ichikawa. The cherry blossoms were in full bloom, strewing their soft petals on my path as I walked along. It looked as if thousands of butterflies were fluttering joyfully in the wind. It was a lasting impression of my visit to Japan.

My first task was to meet my supervisor Professor Takeshi Tsubata, Head of

the Department of Immunology in the Laboratory of Immunology at the School of Biomedical Sciences. The journey into research at TMDU, which began with the first meeting with my supervisor, was a milestone in my life. Under Professor Tsubata's guidance and the friendly cooperation of the staff and students of the laboratory, I was able to achieve my goal.

I consider it a privilege to have read for my PhD in biomedical science (Immunology) at TMDU under Professor Tsubata's supervision in his laboratory. I found the environment at TMDU very



Working as a senior lecturer in the Department of Microbiology of the Faculty of Medical Sciences at the University of Sri Jayawardenepura, Sri Lanka.

different from the university life in Sri Lanka that I was used to.

The exposure to international conferences, summer schools and seminars were very helpful and motivating. The study environment, discussions, progress meetings and journal clubs concentrating intensely on research were impressive. It was an exciting period as I learned many skills related to immunology and research methods which now help me immensely in my career.

Why was I interested in TMDU? Tokyo Medical and Dental University is a prestigious university specializing in medical, biomedical and dental subjects. I was interested in entering the School of Biomedical Sciences, and TMDU was the ideal place for me. Considering its location, academic excellence, and the presence of other Sri Lankan students there, I was very happy to be accepted at TMDU. The International Students' Center was always very helpful in all matters, which helped me to adjust to the life in Japan and overcome the language barrier.

Currently I am working as a senior lecturer at the department of Microbiology in the Faculty of Medical Sciences at the University of Sri Jayawardenepura, Sri Lanka. My work involves

teaching immunology and microbiology to undergraduate and post graduate students, and supervising their research projects.

Currently the academic staff of Sri Lankan universities have better access to opportunities for research, in terms of technology and funds. Therefore the experience I gained studying at TMDU has helped me to start work on the area of infectious diseases of relevance to Sri Lanka, and to investigate aspects of host immune response.

It is with great pleasure that I remember the time I spent as a student in Japan, mingled with moments of joy and sorrow. Having experienced first-hand the earthquake leading to the Fukushima disaster near the date of my graduation in 2011, I was sad to leave Japan in



With members of the immunology laboratory at the farewell in 2011.

such a state. Yet the bravery and the patient consideration of the Japanese people in the face of the crisis impressed me, and I value the dedication and calm with which they faced this situation as a lesson never to forget. I thank the Government of Japan and TMDU for the opportunity they provided me to study there. It has been a very memorable experience and helped me in many ways.

Letter 04

Why I decided to go and study in Japan



Viritpon Srimeepong
Chulalongkorn University
From Thailand



SINCE I WAS asked to write about myself for TMDU Annual News, I have been thinking a lot about what I want to tell first. Why? I had so many things I wanted to share and so many happy memories. I am Viritpon Srimeepong from Thailand. I'm not the only Thai student to have graduated from TMDU. There are many Thai students studying there even now. I graduated from TMDU in 2006 and have been back in my home country since then. Now I work in the Department of Prosthodontics of the Faculty of Dentistry at Chulalong-

korn University in Thailand. When I got back, the most common questions that I was always asked were "Why did you decide to go to Japan to study?" and "Don't you find the Japanese language difficult?" My answer is, "Yes, the Japanese language is difficult but that's one of the reasons I wanted to go to Japan." At that time, I received a Japanese Government Scholarship to study in Japan, but the most important motivation for me was the research. I wanted to conduct research and I believe that Japan is one of the most advanced countries for dental research. Moreover, before I went to Japan I studied in Australia, so I thought that if I went to a Western country, I would experience similar language and culture. Therefore, I decided to accept the scholarship and went to study for my PhD in Japan. Some people ask me why I choose TMDU instead of another university. I think there is no need to explain how famous TM-



Work in the Department of Prosthodontics, Faculty of Dentistry, at Chulalongkorn University, Thailand.

DU is. Apart from its excellent world reputation, my school, Chulalongkorn University and TMDU have been sister universities for more than two decades. I studied in the Department of Metallurgy in the Institute of Biomaterials and Bioengineering at TMDU under the supervision of Prof. Hanawa and Prof. Yoneyama. I conducted research on Ti-6Al-7Nb alloy for dental applications. Both of my professors are very good mentors, as are the other sensei (Japanese for "instructors") in my laboratory. That was my academic experience at TMDU, but my other memories there were happy too. During my study there, I had very helpful and pleasant classmates. They were very kind to me and always helped me when I had difficulties, especially with language and daily life. This was very important as it



My family visit and trip to Kyoto together

helped me to be able to live and enjoy life in Japan. Moreover, I made a lot of



Museum of the human body at Chulalongkorn University donated by TMDU

good friends and we still keep in touch. While I studied for my PhD in Japan, I was able to experience many aspects of Japanese culture such as the tea ceremony, *ikebana* (Japanese flower arrangement) and also Chinese calligraphy. For me, these experiences are as important as what I learnt from TMDU. The four and a half years I spent in Japan were an invaluable part of my life. I wish I could turn the clock back, but I know that is impossible.

Then in April 2006, I came back to Thailand and started my work at the Department of Prosthodontics at Chulalongkorn University in Bangkok where I still work. Since I have been back, I

have still had opportunities to go back to my laboratory at TMDU to conduct my research with guidance from my sensei. Since then, I have been teaching and sharing my knowledge with students. I also have opportunities to treat Japanese patients who live in Bangkok. I sense that most Japanese patients feel more secure when they can communicate with a doctor who can speak Japanese, especially one who studied at a famous university in Japan. Until the last, I will strive to ensure that the excellent relationship and strong cooperation between my university and TMDU continues.

Thank you for taking the time to read my story.

instructor in a national university, I joined the academic staff of the Orthodontic Section in the Department of Preventive Dentistry of the Faculty of Dentistry at Naresuan University (NU) in June 1998. My responsibilities include the usual things involved in this sort of post, along with research and

administration. After the election in 2012, NU appointed me Dean. Apart from serving as an instructor for the dental students, an orthodontist for patients, and a researcher for new knowledge and its clinical applications, I play an administrative role directing the academic and non-academic staff in fulfill-

ing NU's policies on education, research, academic service to the community, and conservation of Thai cultures. Any successes in my present position are thanks to the support from my friends and the experience gained during my study in Japan, particularly at TMDU.

Letter 05

My successes are thanks to TMDU



HAVING GRADUATED FROM Chulalongkorn University Dental School in 1990, I worked as a general practitioner in a private dental clinic for two years. After the written and interview examinations, I was granted a Japanese Government Scholarship for 1992 (Thailand) to fulfill my dream of broadening and deepening my dental knowledge and practical clinical ability in Japan. I selected TMDU Dental School because of its reputation as the oldest government-operated dental school, as well as for its research and clinical activities. I started my student life in Japan at

Osaka University of Foreign Studies for six months, and subsequently enrolled in TMDU's First Department of Orthodontics in April 1993. In my first year at TMDU, I was bombarded with orthodontics-related lectures, seminars, laboratory work and clinical practice. In 1994, I was allowed to enroll in the doctorate program taught by Professor Kunimichi Soma, my respected teacher and the Department's Chairperson. After the subsequent four years of both clinical and research activities, I obtained a PhD in Dental Sciences for my research work,



Working as the Dean at the Faculty of Dentistry, Naresuan University.

an investigation into the importance of orthodontic treatment for malocclusion, together with a certificate of clinical training in orthodontics.

In those days, research in Japan was far in advance of Thailand. Technological differences and the number of researchers were the main factors. The former was related to the national research budget, and the latter to those who were interested in conducting research. After graduating from TMDU in 1998, I found that the situation still remained the same, despite the attempts of the National Research Council of Thailand (NRCT) to improve the level of research. However, the situation gradually improved over the following ten years. At present, various new technologies and numerous Thai researchers can be found in both academic and non-academic institutions.

As a consequence of Thailand's need for development in education and research and my intention of becoming an

Letter 06

TMDU was a great opportunity in my life



IN SEPTEMBER 2004, I arrived in Japan with my husband, as a Monbusho supported PhD student at the University of Tokyo. I graduated from a top dental school in my country, and spent two years of clinical practice at a good governmental health center.

Although, I was highly motivated to pursue my education at PhD level, the very beginning of my stay in Japan was spent on learning the language. In April 2005, I was fortunate to be accepted for a PhD course in the Department of Operative Dentistry at TMDU, thanks to the very precious support and welcome of Professor Junji Tagami, the head of the department.

For this, I am and will be very grateful to him, as that step was an extremely important milestone in my life.

I promptly started my studentship by reading research articles, and attending department meetings and assigned lectures. This provided me with a foundation which I later realized that was necessary to enable me to work as an independent researcher. I started developing an interest in preventive dentistry and methods of preventing dental caries.

Pursing further studies in that particular direction, I received great support from my supervisor, Dr. Nikaïdo, who is widely known for his work on the acid base resistance zone with application of adhesives. He encouraged me to fo-

cus on coating dental surfaces with a thin layer of dental adhesive material. We planned to propose this as a method of preventing root caries. These studies opened up a new opportunity for me to become familiar with synthetic oral environments.

Using this opportunity, I applied adhesive materials on root surfaces and conducted experiments in a more realistic way. At this point, I was working with Dr. Matin and his students who developed the oral biofilm reactor in the COE lab. I would like to thank Dr. Matin too for his support.

Thanks to all of this support and hospitality, I successfully produced several publications and finally graduated in 2009. Naturally, holding a PhD from a leading university filled me with confidence.

Living as a family member in TMDU, I had another great opportunity from a social point of view as well. I made many friends from various countries, and developed an international network beyond the borders of my home country.



The Japanese cherry blossoms were beautiful.



Working as a dentist and an adjunct lecturer teaching in the School of Dentistry at Shahid Beheshti University in Tehran.

We became close friends and learned about each other's culture and society through daily contact and communication. I really enjoyed this first experience in a multinational and multicultural environment.

Later on, I moved to Philadelphia in the U.S. with my family, and thanks to the credit I obtained from TMDU, I got another opportunity to work as a post-doc at the University of Pennsylvania. My supervisor was Prof. Markus Blatz who collaborates extensively with Japanese universities and researchers. I remember how he confidently accepted me into his department because of his familiarity with Prof. Tagami, whose recommendation was a definite plus for me.

In 2012, I came back to Iran to be closer to my parents and to apply my knowledge at universities in my homeland. Recently, I started working as an adjunct lecturer in the School of Dentistry at Shahid Beheshti University in Tehran. I teach the basics of dental materials and advise graduate students.

For the rest of my life, I will be very grateful to Japan for all the support I received and the things I learned there. I very much miss the hot springs, healthy noodles, and Japanese cherry blossoms. Thank you TMDU!



During a formal presentation of the institution's academic activities to Princess Maha Chakri Sirindhorn (center) in Bangkok 2013.



During Songkran (Thailand's New Year) Festival 2013 with dental assistant personnel at NU's Dental School.