

Honorary Publisher: Wen-Chang Chang Publisher: Chien-Huang Lin

Vice Publishers: Cheng-Yu Chen, Jan-Show Chu, Fei-Peng Lee, Chieh-Hsi Wu

Chief Editor: Pei-Shan Tsai Editor: Dawn Chen

Editorial Team: Lillian Li, Lotus Yang, Chun Yang, Yu-Hsi Yen

Reporting: Tom Robertson Graphic Design: Ming-Wen Hsu

Cover Photo © Taipei Medical University

Copyright © Taipei Medical University Office of Global Engagement All rights reserved, 2021.

Contents

02

TMU under Covid-19: Outreach and a New Normal on Campus 04

Taipei Medical University Hospital's "Taiwan We Go" Epidemic Prevention Medical Team Successfully Completes Mission to the Kingdom of Eswatini

08

TMU Chronic Obstructive Pulmonary
Disease (COPD) Team —
Prevention is better than cure

12

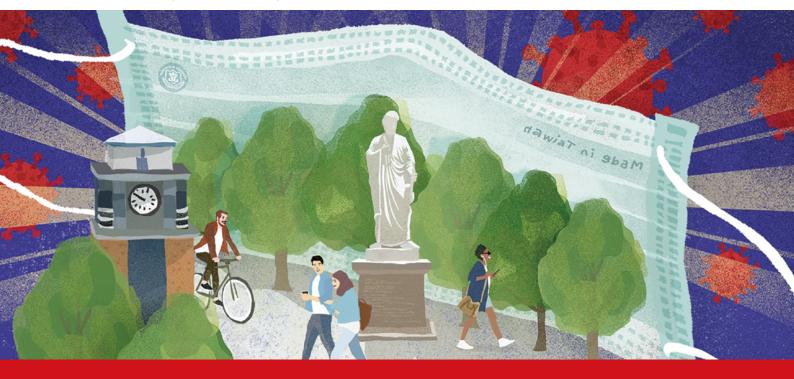
TMU's A-Team: Working Together to Unravel the Mystery of Asthma

16

Dual Degree Programs at Taipei Medical University: A Rewarding Road Less Travelled 18

Taipei Medical University Celebrates 60 Years of Excellence Over the COVID-19 outbreak, we've been faced with a constant barrage of COVID updates from around the world, and the local stories from Taiwan are oftentimes lost among the inflow of depressing reports. Yet Taiwan has been a shining example for its national coordination of pandemic response. With the efforts from the government and the people, Taiwan remains a relatively safe place to be, and we at TMU are blessed to be able to carry on with our core activities in learning and research. And, besides being one of Taiwan's best medical education providers, Taipei Medical University (TMU) is interwoven with the country's many successes in fighting the pandemic.

To help us better understand the effectiveness of TMU's response to the pandemic on campus, TMU Office of Global Engagement invited our international students to provide their feedback and suggestions on the COVID-19 mitigation initiatives introduced on campus. Here is what they've told us.



TMU under Covid-19: Outreach and a New Normal on Campus

I hope this pandemic will be finished soon. Hopefully we will be in healthy condition. (TMU campus survey)

Taiwan's COVID-19 response and low case numbers are recognized around the world. In addition to creating a safe environment for quality education, TMU has played a pivotal role that's been realized through the university's leading alumni, developments in medical technology, healthcare professionals, and international service providers.

With the abundant support, fortunately, TMU helped 98% enrolled international students successfully travel to Taiwan and join the TMU community under such a vicious pandemic in 2020. Many of our new international students listed Taiwan's image of safety as a major pull for them to continue their overseas study at a time when friends were cancelling plans to study at places like Japan, Korea, and the US.

TMU manifested its capacity in maintaining a relatively normal campus life. On campus, TMU was busy ensuring students had access to the expected high standard of education, while at the same time prioritizing safety through epidemic prevention. Faculty were quick to embrace distance learning through online courses and videos, and came up with flexible approaches to off-campus internships and service requirements.

I can engage with the online teaching, which doesn't affect my further study. (TMU campus survey)

After settling to the relative safety of campus life, students might be proud to learn that leading TMU alumni have played no small part in Taiwan's pandemic response. From the commander of Central Epidemic Command Center (CECC) taking immediate actions and activating Taiwan's epidemic prevention mechanism to front-line healthcare workers curing the confirmed cases, hundreds of thousands of TMU alumni have unwearyingly fought together in this unprecedented epidemic prevention battle.

I'm very impressed with the COVID-19 response of TMU in particular and Taiwan in general. (TMU campus survey)

Likewise, TMU has helped Taiwan lead the way with breakthroughs in medical technology. TMU Hospital, in alliance with forefront tech companies, announced the "Contact-Free Connected Healthcare Platform" which was developed under the umbrella of the Industrial Technology Research Institute's Service System Technology Center. This groundbreaking system utilizes thermal imaging and infra-red cameras to automatically collect patients' vital signs which were later analyzed by AI algorithms with testing and imaging results. Medical alerts can be issued automatically, and patients can track their information with an app. The platform's integrated video allows doctors, nurses, and patients to communicate remotely, creating an essentially touchless system that minimizes physical contact and reduces the risk of infection.

Taiwan did a very good job in maintaining a sense of normality without compromising the prevention of COVID-19. (TMU campu<mark>s survey</mark>)

TMU students have also been actively involved in the government's pandemic response. Hundreds of interns

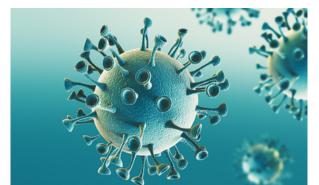
from the School of Pharmacy helped shoulder the burden of surgical mask rationing. Working at pharmacies across capital Taipei, these students acted as a bridge between the community and the medical establishment, providing accurate and timely information that helped minimize the public's panic.

Moreover, TMU's contributions to public health were beyond territory. After receiving a call for assistance from the Kingdom of Eswatini (formerly Swaziland) in April 2020, it took just two weeks for TMU Hospital to assemble the "Taiwan We Go" disease prevention and medical care team. After an intensive two-month consultation and training seminars with local health agencies, the country had increased its epidemic prevention capacity at the national level with more than 500 healthcare providers empowered to treat severe respiratory failure.

According to the "TMU campus survey," most international students in 2020 acknowledged the pandemic's impact on their studies, graduation, finances, and freedom of movement. They experienced the growing stress in many different shapes and forms, and like the society in general, have accumulated increasing level of pandemic-related anxiety. But students also saw TMU's actions to help mitigate the pandemic's negative impact on their studies and health, including the compliance of mask wearing and social distancing requirements, online course delivery to maintain their learning progression, as well as the genuine care about students' safety from faculty and staff members.

I would like to thank TMU, Taiwan as I am able to focus on my studies in this pandemic period. And TMU is providing us a great learning platform, Thank you! (TMU campus survey)

Having settled into a new normal after a challenging year in 2020, 88% of our student respondents agreed that on the whole they felt safe and secured on campus. Together with TMU's contributions to pandemic response at the campus, national, as well as international levels, our commitment to making a positive impact on the life of our students, partners, and families of those who we hold dear remains stronger than ever.



TMUH's "Taiwan We Go" epidemic prevention medical team successfully completes mission to the Kingdom of Eswatini

The COVID-19 pandemic continues to assault the world. Among the countries, the Kingdom of Eswatini, with which Taiwan has diplomatic relations, has had more than a hundred confirmed cases as of the end of April 2020, including frontline medical care providers. The need to prevent hospital infections from turning into social spread is high. Taipei Medical University Hospital (TMUH), which has a permanent presence in Eswatini, received a call for support from the Eswatini Ministry of Health. Within 2 weeks, TMUH had put together the "Taiwan We Go" disease prevention and medical care team. May 1st, 2020, the team headed to Eswatini to begin the two-month disease prevention mission.



▲ TMUH's "Taiwan We Go" disease prevention team arrives in Eswatini



▲ Respiratory therapy department head Lee Hsin-yu shows local medical care providers how to use a respirator



▲ Exterior of Lubombo Referral Hospital, a dedicated pandemic hospital in Eswatini



▲ Beds donated by TMUH and Taiwan's Ministry of Health and Welfare

^{1.} The team comprising Dr. Li-Yuan Chen(陳立遠), Department of Infectious Disease; Dr. Kevin Shu-Leung Lai(黎書亮), Critical Care Medicine and Pulmonary Medicine; Lee Hsin-yu(李芯妤), Respiratory Therapy Department head; and Yu-Hsuan Lin(林侑暗), RN, Intensive Care

Taiwan We Go" Disease Prevention Medical Team in Eswatini

The team leader Dr. Li-Yuan Chen (陳立遠) stated that Eswatini is not large in area, and has a population of only around 1 million, but there is unequal distribution of medical care resources between rural and urban areas. The country also is less experienced in responding to epidemics. For example, hand disinfectant and other sterilizing supplies were in insufficient supply and could become a threat in disease prevention.



▲ Disease prevention specialists in protective coverall to enter a patient room

Most confirmed cases in Eswatini were young or asymptomatic. However, some medical care providers were also numbered among the infections. Prior experience has shown that, if ground is lost in the hospitals, large-scale social spread may follow. The top priority for the "Taiwan We Go" team was to stop healthcare-associated infection.

Achievement

After two months, the TMUH's "Taiwan We Go" team to the Kingdom of Eswatini has completed the epidemic prevention and counseling mission².



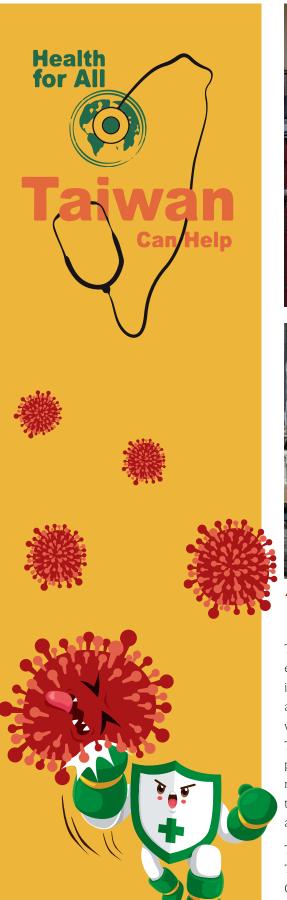


▲ Dr. Li-Yuan Chen from the Department of Infectious Diseases giving a lecture



▲ His Excellency Ambrose Mandvulo Dlamini, the late Prime Minister of Eswatini (front row, second from left) personally welcomes the TMUH disease prevention team

^{2.} An achievement presentation was held on July 22, 2020 to share the team's medical assistance to Eswatini. Counselor Ms. Lindiwe Cynthia T. Kunene from the Embassy of the Kingdom of Eswatini and Deputy Director-General Ms. Abby Lee of the Ministry of Foreign Affairs Department of West Asian and African Affairs were invited to the event.







▲ The "Taiwan We Go" Team teaching local medical staff the use of protective equipment, and conducting a national seminar.

The team planned pathways for local hospitals responsible for epidemic care and established intensive and respiratory care to reduce the risk of local nosocomial infection. Pathways were established for 75% of the hospitals nationwide³. In addition, multiple discussions and exchanges with international health agencies were held, including all levels of Eswatini health agencies and experts from the U.S. The team also designed more than 10 types of teaching materials on improving personnel awareness of the disease, use of self-protection equipment and adjusting respirator settings, totaling 43 lectures. Additionally, seminars were arranged to teach more than 500 participants across Eswatini, helping the spread of knowledge and expertise at the national level.

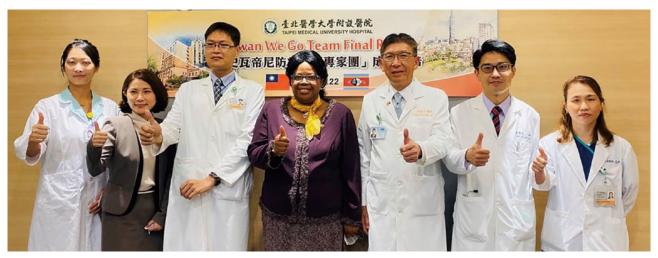
The "Taiwan We Go" Team also taught front line clinical practice for critical care. They assisted with the assessment and treatment of severe respiratory failure in COVID-19 patients, performed endotracheal intubation and other related invasive treatments.

^{3.} Mbabane Government Hospital, Hlatikulu Government Hospital, Mankayane Government Hospital, Piggs Peak Government Hospital, Raleigh Fitkin Memorial Hospital and Psychiatric Referral Government Hospital, and 100% of designated epidemic hospitals (Lubombo Referral Hospital, and Mavuso Exhibition and Trade Centre).

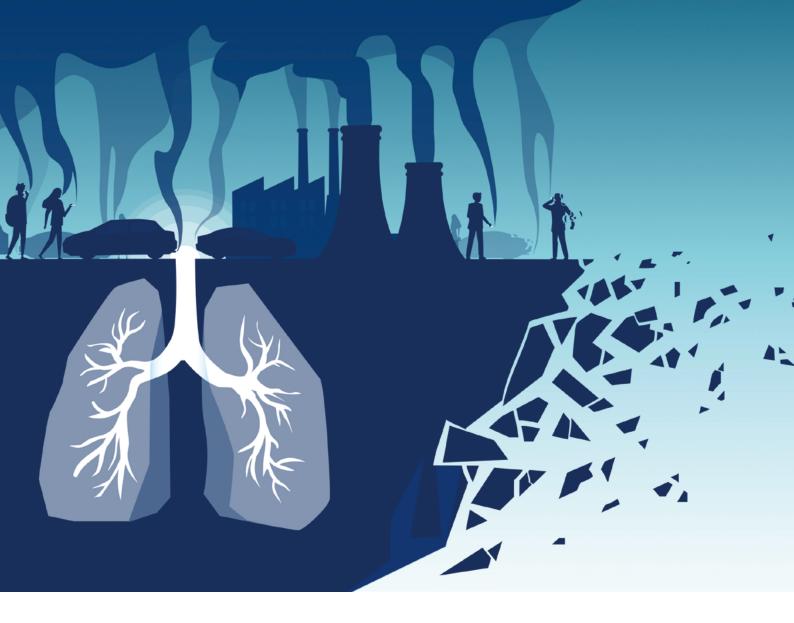


▲ (From the left) Respiratory therapy division leader Hsin-Yu Lee, critical care nurse Yu-Hsuan Lin, and critical care physician Dr. Kevin Shu-Leung Lai teaching endotracheal intubation and invasive treatment.

Although the local medical equipment is relatively inadequate, the "Taiwan We Go" Team managed to use the limited resources for teaching and training. As nurse Yu-Hsuan Lin said, "To rapidly improve the foundation of the personnel within two months is a challenge not only to the teaching plan but also to local medical care." Therefore, the team members constantly encouraged each other to build the confidence of the local medical staff, fight the epidemic together, establish local critical care, and strengthen the safety and effectiveness of epidemic prevention work, successfully passing on Taiwan's epidemic prevention experience to Eswatini to help the country fight the epidemic.



▲ The "Taiwan We Go" Team from TMUH held an achievement presentation on July 22, 2020. From the left are nurse Ms. Yu-Hsuan Lin, Ms. Abby Lee, Dr. Li-Yuan Chen, Ms. Lindiwe Cynthia T. Kunene, Superintendent Dr. Ray-Jade Chen, Dr. Kevin Shu-Leung Lai, and Ms. Hsin-Yu Lee.



TMU Chronic Obstructive Pulmonary Disease (COPD) Team— Prevention is better than cure

Open your window in just about any busy city in the world and take a deep breath. That is, if you dare risking the coughing, congestion, and inflammation that comes from a lungful of urban pollution. While these symptoms are a nuisance for healthy people, for patients suffering from chronic or serious lung disease, the matter could be one of life and death. But at least you can retreat to your home to enjoy the clean air, right? According to work done by Dr. Pai-Chien Chou, Taipei Medical University Hospital's Director of Thoracic Medicine and his team, your home might not have less air pollution than the bustling streets outside. Dr. Chou's cutting edge work combining advances in medication, rehabilitation, and technology should help provide a solution.

Dr. Chou came to TMU Hospital in May of 2018 after almost two decades in thoracic medicine at Chang Gung Hospital. In part he wanted to join his classmate from the Imperial College of London, now Dean of Medicine at TMU - Dr. Han-Pin Kuo. Dr. Chou also wanted to break away from the status quo in pulmonary medicine. "I tried to join him to do something different compared to the other pulmonary medical specialists," he said.

After studying thoracic medicine in the UK, Dean Kuo was the first doctor to introduce positive drainage techniques and the use of antibiotics rather than steroids for the treatment of bronchiectasis (a widening of the airways with a buildup of mucus) to Taiwan in the late 90s. Lungs

of patients with bronchiectasis lack the changing airway diameter that create the pressure difference needed to force mucus out of the lungs when coughing. The sputum that remains in the lungs becomes a breeding ground for microbiota that can lead to deadly pneumonia. And even if the patient is treated using antibiotics, mucus without bacteria is still inflammatory in nature and can damage the lungs' mucosal lining. To get rid of the dangerous excess mucus, patients are connected to a positive pressure machine that detects inhalation, adding pressure to help keep the airways clear.

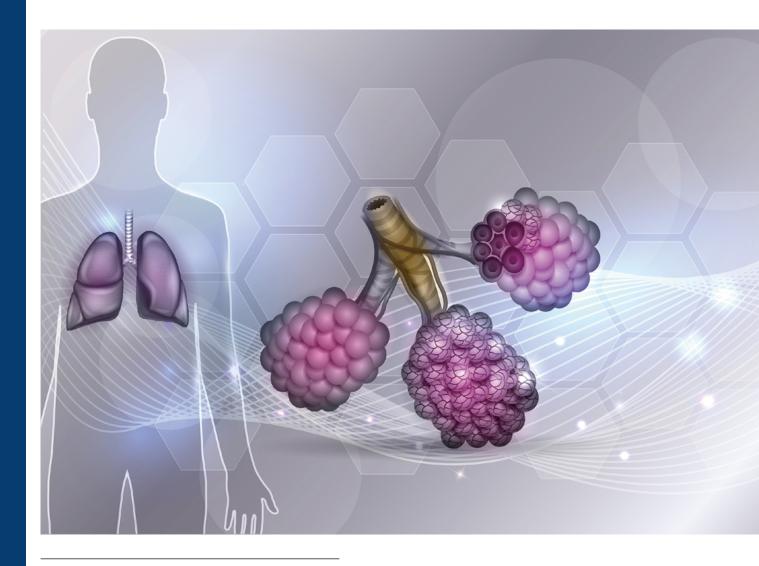
This positive drainage technique combined with antibiotic-steroid treatment is now a mainstay in the treatment of bronchiectasis. Treatments are now being paired with non-pharmacological techniques that use gravity, posture, specially placed pillows, and education in producing good coughs to facilitate the drainage of sputum. This kind of pulmonary rehabilitation can be effective, "We change the fate of some patients, patients willing to follow the steps we teach in pulmonary rehab," said Dr. Chou.

Starting treatment as soon as possible is important. "If you want to have better life quality, you must start as soon as possible. If you can reduce the bacterial burden, your airway can recover a bit more easily."

But the drainage process can be taxing, and unfortunately not all patients are able to keep up the regimen of coughing up sputum three times a day for thirty minutes each session. Drinking lots of water can help reduce sputum viscosity, but that itself presents difficulties for people who risk dizziness and falls when they get up quickly at night to visit the bathroom.

Dizziness and weakness caused by hypoxia is a new area of inquiry. "Previously we only noticed that the patient has some airway obstruction or not. But we now found a trend that if a patient has dyspnea (meaning they can't breathe well) related to airway obstruction due to hypoxia." This is an important finding related to prognosis, as in a hypoxic environment airway inflammation will become worse regardless of what bronchodilator is used.





High Tech Solutions

Hypoxic situations can be made worse by exertion. Patients hooked up to a pulse oximeter can easily see if they are hypoxic –and need to be hooked up to oxygen- but they might not notice when doing exercise. "The difficulty is that some patients have dyspnea during exercise, [but] they are not aware of the problem. So we use some IoT (the Internet of Things) to detect the hypoxemia conditions during exercise, and then try to reeducate the patients on how to do exercise reprogramming."

The IoT tracker, which resembles a smartwatch, continuously measures pulse-oximetry and heart rate and uploads the data to a server, and the resulting data can be crunched in servers at the lab in real time. If oxygen or heart rate become too high or too low, patients receive a message on their cellphone or wearable device with advice; for example, instructions to 'slow down your tempo', or 'get to the emergency room immediately!' if an arrhythmia is detected. "With the oxygen and heart rate we are able to

find those patients who are at risk for developing further cardiopulmonary deterioration."

Patients using this technology can begin with 6 to 10 minutes of endurance training with the heart at a constant workload. As cardio-pulmonary reserve improves day by day, the medical team can monitor progress up remotely using the internet, and help him or her make adjustments in order to make incremental gains. This way, the patient can be more comfortable in daily life.

In the future, more sophisticated machine algorithms will be able to integrate a wide variety of information, including bronchoscopy, CT scans, biopsies, blood samples, and real time physiology tracking, making it easier to provide timely and effective intervention. But the technology is already in the early stages of use. "Regarding the topic of inflammation, we need molecular biology. But regarding the heart rate issue, we just need to ask the patient to wear a watch to make sure that every move is under an adequate oxygen tension."

Indoor Air Pollution - An Ounce of Prevention

While treatments for lung disease are becoming more effective, Dr. Chou is also putting new technology to use stopping lung disease before it becomes serious. While outdoor air is measured by the EPA (Environmental Protection Administration), with windows in Taiwan seldom opened in the warm summer months, the air quality indoors may be even worse than it is outside. "Even though we think it's clean, at night you may have a cough or sore throat. This is due to dust or other particle matter that is caught in bedding. It's not easy to detect. If you live in an area with crowed traffic, chemicals can enter your living area on your body."

These chemicals are persistent; they may persist for up to five years or more before naturally degrading. More dangerous than regular allergens that may lead to similar symptoms, these chemicals can damage the lungs' cilia, directly entering the sub-mucosal area and causing inflammation. What's worse, some people with this kind of nasal obstruction end up breathing through their mouths during sleep, allowing even more pollutants to enter their large airways and eventually the alveoli; according to Dr. Chou it is one possible explanation why some non-smokers are diagnosed with lung cancer. Diesel compounds are a major threat, as are VOCs (volatile organic compounds), but this can be hard to prove without biopsy data.

Dr. Chou and his team have now started a program to collect indoor air samples and analyze them using mass-spectrometry. They have found that chemical signatures are different in different cities, in different neighborhoods, and Dr. Chou even suspects that, "There may be different conditions [in buildings] sharing the same door. The first floor, second floor, third floor maybe are different."

To address this issue, Dr. Chou is developing an inexpensive air purifier that uses special materials targeted to filter out pollutants found in samples from each specific indoor environment. The targeted filtration can then reduce irritation in the mouth and airways, leading to better sleep and hopefully lower rates of lung disease.

This air quality data could also be linked with Dr. Chou's artificial intelligence algorithm in a service that should be up and running soon. Indoor air samples from the homes of patients with lung disease will be sent to the hospital server where the AI algorithm can come up with the most effective combination of bronchodilators and anticholinergics that can be used before an emergency. "We try to solve the problem from the air, not just from detection [in the body]."

A Bright Future

Dr. Chou and his team are working on a host of promising technological innovations, drug treatment improvements, and pulmonary rehabilitation strategies. In the fight against lung disease, hopes are high for using the growing number of weapons in novel combinations – something made possible by advances in computing power and modern health tracking technology similar to what you might wear on a jog. According to Dr. Chou, the future of pulmonary medicine looks bright. It's a good time to become a pulmonologist.



Dr. Pai-Chien Chou

Director, Division of Thoracic Medicine, Department of Internal Medicine, Taipei Medical University Hospital

Assistant Professor, Department of Internal Medicine, School of Medicine, College of Medicine, Taipei Medical University



TMU's A-Team: Working Together to Unravel the Mystery of Asthma

Supported by a budget of over 22 million TWD, the team has already begun making research and developmental progress since its inception two years ago. Dr. Bing-Chang Chen is looking to build the asthma research team even further over the next 5-10 years in conjunction with President Lin's plans for thoracic medicine at TMU.



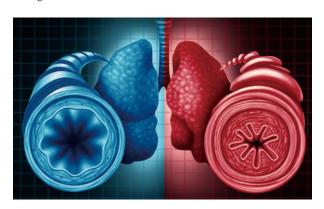
Asthma Team (from left to right) Dr. Yu-Chih Wu, Dr. Chia-Ling Chen, Dr. Bing-Chang Chen, Dr. Chun-Chun Hsu and Dr. Chih-Ming Weng

Asthma, a Complex Problem

Asthma is a chronic, long-term inflammatory disease that affects around 400 million people worldwide. When an asthma attack strikes, sufferers experience wheezing, coughing, and shortness of breath as their airways become constricted and inflamed. The causes of the disease are complex; over a hundred genes have been implicated so far, and these interact with exposure to environmental triggers like traffic pollution, volatile organic compounds (VOCs), and indoor dust.

Almost everyone is familiar with the inhalers used by asthma patients, a puffer that delivers a dose of bronchodilator or corticosteroids that can (hopefully) stop an asthma attack in its tracks. Oral treatments can also provide symptom reduction in the longer term. While rescue medications used in conjunction with daily medications can help reduce asthma related symptoms and mortality, they can also come with unpleasant side effects that include headache, nausea, infection, weight gain, and depression. Even then, severe or chronic obstructive asthma become resistant to treatment as lung function is reduced and airways are obstructed over time.

The interactions between genetics and the environment that lead to asthma are not completely understood, and neither are asthma's underlying molecular mechanisms. Higher rates of the disease have been reported each year since the 1960s, putting an ever increasing burden on health care. Treatment options for asthma patients do exist - daily medications can reduce the frequency of attacks and rescue treatments are relatively effective at reducing asthma mortality - but disease severity can increase over time, some forms are treatment resistant, and at the present a cure remains elusive. This is something that Dr. Bing-Chang Chen and the TMU asthma team are looking to change.

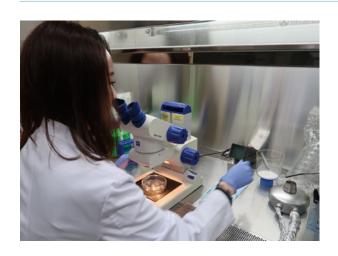


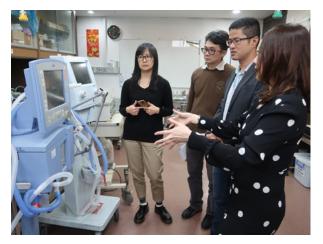
Attacking Asthma from Different Angles

Asthma is a complicated problem requiring a complicated solution, and Dr. Chen's research team has two main mission goals: developing a better understanding of the mechanisms underlying the disease, and finding new drugs and treatments to fight it.

As part of President Lin's direction for Taipei Medical University's development of cutting-edge research in the field of thoracic medicine, College of Medicine Dean Han-Pin Kuo (himself an asthma researcher) approached Dr. Chen two years ago to create a plan of attack against one of thoracic medicine's major target. Dr. Chen set about putting together a multi-disciplinary team of experts at TMU's Center of Thoracic Medicine to come at the complex disease from a multidisciplinary perspective. The team's major focus is on investigating the molecular mechanisms underlying the disease and developing antifibrotic agents of airway remodeling, and translating the basic research into better, more effective drugs.

TMU's Asthma Research Team





Leader: Dr. Bing-Chang Chen, the tactician



Area of expertise: Pharmacology

Focus on asthma: molecular mechanisms that underlie lung inflammation and airway fibrosis

With a natural affinity for memorization and an inclination to communicate drug related information, pharmacology came easily to Dr. Chen. He received his Bachelor of Science from Chia-Nan Junior College before completing his PhD in Pharmacology at NTU. After two decades working at TMU, Dr. Chen now directs the School of Respiratory Therapy and leads the asthma team in the direction of developing new drugs that can better control, or even cure, severe and corticosteroid insensitive asthma.

Besides heading the team, Dr. Chen's work now focuses on the molecular mechanisms underlying fibrocytes. These include immuno-modulation in severe asthma, and using knockout mice to study how ADAM17 related downstream proteins affect airway fibrosis.



Dr. Chun-Chun Hsu, the clinician

Dr. Hsu's knowledge of asthma goes beyond 12 years studying respiratory therapy. Both she and her mother are asthma patients themselves, which was a strong motivating factor for entering medical school and pursuing graduate studies in respiratory therapy. Personal experience with medications and their side effects left her dissatisfied with current treatments. As a star student at TMU she received a government sponsored doctoral fellowship to go to the University of Kentucky where she later worked as both a preand post-doctoral researcher studying the neuroscience of asthma. Dr. Hsu is now a researcher, clinician and assistant professor at TMU's School of Respiratory Therapy.

Dr. Hsu's research target is the neuronal control of asthma. She uses animal models to study the role of neuronal TRPV1 (the same receptor activated by spicy chili pepper) in airway fibrosis. A better understanding of the TRPV1 signaling pathway and its role in inflammation and immunemodulation could lead to novel asthma treatments.

Dr. Yu-Chih Wu. the strongman

Area of expertise: Stem cell therapy,

Dr. Wu's approach to asthma research focuses on the practical application of stem cells. Much of Dr. Wu's previous studies at TMU's Center for Cell Therapy and Regeneration Medicine involved using stem cells in the treatment of cancer, but his placental mesenchymal stem cells did not always have a great candidate for interventions. For treating diseases with inflammation or auto-immune response, like asthma, his stem cells' immune modulating and tissue regeneration effects do show promise, and Dr. Wu is now working on preclinical animal studies of severe asthma and acute lung injury.

Dr. Chia-Ling Chen, the new member

Area of expertise: Microbiology, Immunology

A Bachelor's degree in food science introduced Dr. Chia-Ling Chen to what would become her favorite subject: microbiology. To purse that interest, Dr. Chen went on to study microbiology and immunology at National Cheng-Kung University in the southern Taiwan, where much of her research involved immune responses to local infectious diseases. She came to TMU in 2014 to continue this research, but after making contact with Dr. Bing-Chang Chen began to see the urgency of pulmonary disease research. With asthma's autoimmune implications, it made sense to bring her immunology perspective to the team to help develop more efficient and effective treatments.



the protégé

Area of expertise: Epithelium

The youngest member of the team, Dr. Wu has a close connection with the beginnings of the asthma team: he was supervised by Dr. Bing-Chang Chen as a graduate student. He works closely with Dr. Chen, and now focuses on the role of e-cahedrin and epithelium damage and the release of damage-cytokines in severe asthma.





Al in Pulmonary Medicine at Taipei Medical University

Supported by a team of artificial intelligence experts, TMU's innovative detection system helps patients with respiratory disease monitor the air quality of their ambient environment. Real time data is collected through the patients' wearable device and sent to the cloud clinic where the most effective preventive treatment can be applied before an emergency happens.

Be part of TMU's research creativity



Taipei Medical University International



oge.tmu.edu.tw/pulmonary-medicine

Dual Degree Programs at Taipei Medical University: A Rewarding Road Less Travelled

A University education is a challenging time for personal development, self-discovery, and character building in preparation for productive and successful careers. But how does a graduate get noticed in today's saturated job market? For outstanding TMU students willing to adapt to the challenges of education abroad, dual degrees can be an attractive and stimulating option to stand out from the crowd.

Among TMU faculty, Professor Liang-Tzung Lin has been building international partnerships, overseeing dual degree programs, and mentoring dual degree students for the better part of the past eight years since he started his faculty position at TMU. Offered at Bachelor's, Master's, and PhD levels, dual degree programs can differ significantly in their implementation, but at the core consist of courses and/or research split between TMU and a partner institution abroad. Although the demanding study schedule should be completed within a single-degree timespan, the reward can be huge—a unique experience, two degree parchments, and tremendous personal growth.

For students ready for a challenge, international study means preparing for a new environment and a new learning style. Dual degree students can expect to share logical opinions in discussions and in writing, and to confront non-standardized tests. Meanwhile, with essentially two tailored course loads, time management and organizational skills will be essential. Keeping in mind that in the totally new environment, as Professor Lin asserts, students need to be focused and prepared and proactively reach out to supervisors on both sides to stay on top of problems that may come up.

The mentor is a bridge that helps make that possible. Supervisors and PIs can be a huge positive influence by supporting students to take a road less travelled in what becomes a triple-win situation. Students are exposed to double the educational opportunities, faculty members expand their research and collaboration repertoire, and then ultimately, the institutions benefit from the increased diversity on campus.

"University is the best time for you to explore yourself and acquire useful training," says Prof. Lin when advising students. Dare to try something different. Rise to the challenge of a dual degree and "you'll have the undeniable competitive advantage of a very special CV" to start off your career.





TWO DEGREES IN A SHORTER TIME. TWO EDUCATIONAL ENVIRONMENTS. DOUBLE YOUR PROFESSIONAL NETWORK.



Kevin Chen

Dual Master Degree in School of Respiratory Therapy with Georgia State University

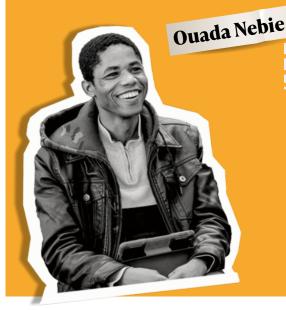
I feel like, for me, going abroad is stepping out of my comfort zone. It's really valuable experiencing how big the world is and how small I am. There are so many things to learn, so we should keep exploring and trying things. It's also a chance to sharpen your soft skills, and in many ways, be a much more independent person. Your confidence grows, too. You get to think through how to resolve the issues you encounter. You get to learn how to cope with stress, appreciate other cultures, and so on.



Shu Hui Wong

Dual Master Degree in International Master/Ph.D. Program in Medicine with University of Montreal

Because Montreal is really very French-speaking but in terms of my work in school my learning I don't think there's any major problems in language. I have five other people in this program with me. Three of them are local Quebecois Canadiens so they have no problem with French and then three of us are international students. Most of the time, they will pay attention to having non-French-speaking people and they will switch to English for you.



Dual Ph.D. Degree in Graduate Institute of Biomedical Material& Tissue Engineering with University of Lille

Living in two different countries you experience two different social, cultural environments. It's amazing! If you are working in the lab you will have the support from two teams from two universities. This will help you to perform some of your experiments some of your work, easily. Doing a dual degree for example, in what I've done in these two years, I've completed two degrees at the same time. It is really time efficient. It means that in a short perio of time, you will have a dual diploma.

Taipei Medical University Celebrates 60 Years of Excellence

Taipei Medical University (TMU) celebrated the 60th anniversary of founding on October 30, 2020, with more than 450 dignitaries, professors, students and alumni joining the diamond jubilee.



▲ TMU's 60th Anniversary Celebration. Distinguished guests from various fields attended the ceremony to mark the beginning of the next 60 years. From left, President Fu-Min Chang (張富閔) of the TMU Student Association, Deputy Minister Jui-Yuan Hsueh (薛瑞元) of the Ministry of Health and Welfare, TMU President Chien-Huang Lin(林建煌), Vice President Ching-Te Lai(賴清德) of Taiwan, Chairman Wen-Chang Chang(張文昌) of TMU Board of Trustees, Academician Yuan-Tseh Lee(李逵哲) of the Academia Sinica, Political Deputy Minister Mon-Chi Lio(劉孟奇) of the Ministry of Education, and President Yuan-Kun Du(杜元坤) of the TMU Alumni Association.





▲ Attendants applauding for the performance by TMU Music Union performing.

Commending TMU's expertise in medical and biotechnology industries, Board of Trustees Chairman Wen-Chang Chang (張文昌) noted TMU's apt application of artificial intelligence (AI) and big data in medicine, as well as its execution of the Digital Transformation project to provide precision medical care in prevention, diagnosis, treatment and care services, thereby supporting the government's comprehensive health policies. In terms of teaching, research and medical services, TMU will continue rising to the challenge to inject innovation in our discoveries in science and technology and contribute to the needs of future medical fields for the well-being of people in Taiwan.

TMU President Chien-Huang Lin (林建煌) envisoned TMU's future endeavor as it marches on for the next 60 years, including solving practical problems in health sciences through its education and research, making an impact on the society with medical innovation, and driving the socioeconomic development in its role as a world-leading university.



Taiwan's Vice President Ching-Te Lai (賴清德) highly praised TMU for its contribution to Taiwan's international medical diplomacy over the past years. The University's involvement includes operating several medical missions, training incountry health professionals and stationing medical staff in Taiwan's allies, such as the Kingdom of Eswatini and the Republic of the Marshall Islands. These actions fully reflected a borderless humanitarian spirit that is deeply rooted in the education ethos of the University.

Deputy Minister Jui-Yuan Hsueh (薛瑞元) of the Ministry of Health and Welfare, a graduate of TMU in 1979, recalled of his college years when the Taipei Medical University Hospital was still under construction. Four decades later, TMU now has 6 affiliated hospitals under different operating models, including independent operation, OT and BOT. He also appreciated the collective efforts of many TMU alumni, who have been working relentlessly to fight against the COVID-19 epidemic with the government.

Academician Yuan-Tseh Lee (李遠哲) of the Academia Sinica praised that TMU has become a pivotal university both at home and abroad. When he attended TMU's 50th Anniversary Celebration 10 years ago, Academician Lee was focusing on the issue of global warming: today the world is facing a declared state of climate emergency. He expects that TMU will be able to heal people worldwide and the earth as well.

Many of TMU's international partners and friends also sent their regards through videos, such as the University of California, San Diego, Case Western Reserve University, Georgia State University, Hokkaido University, Kyushu University, Tokyo Medical and Dental University, Western Sydney University in Australia, University of Medicine and Pharmacy at Ho Chi Minh City, as well as Nobel laureate Professor Tasuku Honjo of Kyoto University. These message demonstrates TMU's extensive global network and the long-standing partnerships as a result of solid collaboration.

Satellite Events of TMU's 60th Anniversary Celebration

Founding schools' 60th anniversary exhibition—School Medicine, of Dentistry and of Pharmacy witness TMU's history

The School of Medicine, School of Dentistry and School of Pharmacy have developed alongside TMU over the last 60 years. The founding schools' 60th anniversary exhibition showcases the academic achievements of the three schools over the past 60 years which has led the trio to the excellent in the world.



▲ Reminiscing of their old days at TMU, alumni gathered for the founding schools' 60th anniversary exhibition

One-thousand-people Alumni Banquet

TMU, in its 60 years of history, has nurtured more than 46,000 alumni worldwide. The alumni have demonstrated extraordinary achievements in industries, governments, academia and research. On October 31, 2020, TMU successfully hosted a One-thousand-people Alumni Banquet where more than 1,300 alumni gathered together to celebrate their alma mater's 60th birthday.

▼ One-thousand-people Alumni Banquet



Second TMU-CWRU Joint Symposium Showcases a Wealth of International Collaborative Research

Part of TMU's celebration of its 60th anniversary, the 2020 TMU-CWRU Joint Symposium showcased the years of international collaborative research under the academic alliance between TMU and Case Western Reserve University (CWRU) through insightful speeches and a poster exhibition.

For the complete version, please visit

https://oge.tmu.edu.tw/the-2020-tmu-cwru-joint-symposium/



60-year Fantasia Concert

Taipei Medical University invited the TMU Orchestra to perform in the 60-year Fantasia Concert on October 19, 2020. The orchestra played the TMU anthem and other pieces including Tchaikovsky's Serenade for Strings, enchanting the audience with an extraordinary charm through their unique interpretation.

In recent years, under the leadership of Conductor Professor Chia-Hong Drapal Liao (廖 嘉弘), the TMU Orchestra has not only performed on the stage of the National Concert Hall but also the hallways in many hospitals to bring the beauty of music into the life of patients. ⑥



▲ Conductor Professor Chia-Hong Drapal Liao (廖嘉弘) (middle front row) and TMU Orchestra performing together.





and the University's commitment to making a positive social impact. TMU Spotlight showcases impressive outcomes from our partnership collaboration, research excellence, talent development,