



LEADERSHIP

KMU, the maker of Guidance for hepatitis C treatment.



HUMANISM

KMU, the value guardian of medical humanities.



MULTITALENT

KMU, the best interdisciplinary medical academy in the Asia Pacific.

KMU and Canada Medical Domain Expertise with AI Approach on Fighting Against Colorectal Cancer

Colorectal cancer is the third most commonly diagnosed cancer and the fourth leading cause of cancer-related deaths in the world and has been linked to the changing environmental factors brought on by industrialization, changes in diet, improved sanitation, and the increased use of antibiotics. It is expected to increase by 60% to more than 2.2 million new cases by 2030.

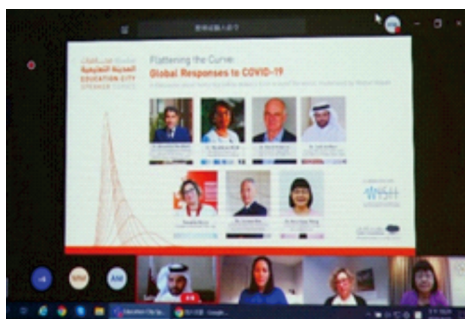
Through the Canadian Trade Office in Taipei (CTOT) introduction, GenerationsE partnered with Kaohsiung Medical University (KMU) on DeepScene™ clinical study in April 2019. Professor. Jaw-Yuan Wang is a renowned gastrointestinal (GI) surgeon and also the present Chairman of the Society of Colon and Rectal Surgeons in Taiwan. He led a team of GI Surgeons and Pathologists from KMU to visit BC Cancer and Saint Paul's Hospital regarding DeepScene™

clinical study progress sharing and colorectal cancer research collaboration potentials between Taiwan and Canada. Doctor Aly Karsan, the distinguished scientist at BC Cancer, Doctor Carl Brown, the Head of the Division of General Surgery at Saint Paul's Hospital and Chair of the Section of Colorectal Surgery at the University of British Columbia, and Doctor Blair Walker, the senior pathologist at Saint Paul's Hospital joined the meeting and discussed what they could do together on fighting against colorectal cancer with the latest artificial intelligence (AI) technologies through AI-assisted colonoscopy and AI-assisted digital pathology.



▲ Professor Wang (second from the left) and Doctor Aly Karsan (third from the left) the distinguished scientist at BC Cancer, which is the first cancer treatment centre opened in Vancouver in 1938.

KMU Professor Wang, Hsiu-Hung was invited by ICN and QF/WISH to shares the world with Taiwan Experience in Combating COVID-19



▲ QF/WISH Webinar: April 15, 2020

Professor Hsiu-Hung Wang, also the President of Taiwan Nurses Association was invited to speak at the International Council of Nurses' (ICN) first COVID19 webinar to share "Key strategies to combat COVID-19 in Taiwan" on March 27, 2020. She mentioned that the Taiwan government took proactive preparedness and deployment to provide timely evidence-based judgments and decision making, rapid response, transparent information, and effective measures. She also emphasized the pivotal roles of frontline nurses in combating COVID-19, which was highly appreciated by the international audience. Other global top leaders invited to speak were ICN President Annette Kennedy and three WHO officials including Chief Nursing Officer Elizabeth Iro, Health Workforce team Catherine Kane and Coordinator of Infection Prevention and Control Global Unit Benedetta Allegranza. This webinar was highly recognized and attended by at least 200 nurse leaders from more than 50 countries.

Strongly recommended by the ICN, Professor Wang was again invited to share Taiwan's experience at the webinar on April 15, 2020, hosted by Qatar Foundation and World Innovation Summit for Health with the theme of "Flattening the curve: Global responses to COVID-19" attended by more than 2,000 audiences around the world. Professor Wang highlighted the importance of the personal protective equipment, safe staffing, mental support, and appropriate rest for frontline health workers, and a resilient program for them in the long run. Professor Wang was the only nurse to be invited. Other six global leaders include David Nabarro, WHO Special Envoy for COVID-19; Ahmed Al-Mandhari, Regional Director, WHO Eastern Mediterranean Region; Matshidiso Moeti, Regional Director, WHO African Region; Jerome Kim, Director General of the International Vaccine Institute; Salih Al Marri, Assistant Minister for Health Affairs at the Ministry of Public Health, Qatar; and Rossella Miccio, President, Emergency NGO.

Professor Wang's global speeches have successfully enhanced the nursing profile and Taiwan's visibility.

Detect COVID-19, KMU can help

COVID-19 (coronavirus disease 2019) is caused by a novel coronavirus, which has formally been named SARS-CoV-2. This disease was initially reported in China and gradually disseminated to Asia, Europe, and America. COVID-19 is currently considered a pandemic, according to WHO. Unfortunately, there is still a lack of antiviral drugs and vaccines for the treatment and prevention of COVID-19. Therefore, the development of a fast and accurate diagnostic assay is essential to control the COVID-19 epidemics. Current diagnostic testing for COVID-19 has relied on labor-intensive molecular techniques (real-time RT-PCR) to detect viral RNA. Antibody testing for SARS-CoV-2 (including IgM and IgG responses), will enable us to understand the prevalence and incidence of SARS-CoV-2 infections as well as being a reference for future COVID-19 vaccination. To achieve this goal, Kaohsiung Medical University (KMU) has signed a memorandum of understanding (MoU) with the General Biologicals Corporation (GBC) to establish a collaboration to fight against COVID-19. Based on this MoU, Dr. Sheng-Fan Wang from the Department of Medical Laboratory Sciences and Biotechnology and his colleagues Dr. Yeou-Lih Huang, Dr. Yen-Hsu Chen, Dr. Po-Liang Lu, Dr. Shu-Chi Wang, etc. are under the leadership by the vice president Dr. Ming-Lung Yu to collaborate with GBC to develop an Automatic ELISA fast diagnostic platform for the detection of specific antibody against SARS-CoV-2 viruses. This automatic COVID-19 ELISA platform can widely and quickly screen a large number of blood samples from suspected cases. The daily screening numbers of this platform is around 1440. Currently, KMU has joined forces together with the National Team to combat COVID-19.



▲ KMU and GBC jointly develop and produce ELISA which can screen around 1440 samples from suspected cases daily.

