

CMU GLOBAL CONNECTION

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China Medical University, Taiwan
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Outstanding Awards

Internationally Accredited Medical Quality and Healthcare Services: China Medical University Hospital and Beigang Hospital were Selected as the World's Best Hospitals 2023, by Newsweek

The Newsweek and global data firm Statista introduced the fifth annual listing of the World's Best Hospitals 2023. The evaluation criteria include peer recommendations (54%), medical quality indicators (29%), and patient experience (17%). For the first time, Taiwan's hospitals were included, with 35 hospitals on the list. China Medical University Hospital ranked 5th nationwide, and Beigang Hospital ranked 22nd. This demonstrated the outstanding medical quality and the services provided by China Medical University Hospital has receiving international recognition.

China Medical University Hospital and Beigang Hospital will continue to optimize the environment and medical equipment, recruit outstanding talents, and enhance medical quality. We are dedicated to prioritizing the needs of patients as the primary mission, benefiting local residents and all the people who come to the hospitals.

World's Best Hospitals 2023
賀 本院入選Newsweek 2023台灣35家認證醫院

22	China Medical University Beigang Hospital	13.75%	Beigang Hospital
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醫療品質受國際肯定

《新聞週刊》(Newsweek)與全球數據公司 Statista連續第五次公布全球最佳醫院，今年首次納入台灣醫院，國內共35家醫院上榜，本院排名第22。

醫療主觀地位(新聞週刊)Newsweek公佈評比指標，54%是醫療團隊評比，另有醫療品質指標佔29%，及病人感受佔17%。主權單位(新聞週刊)Newsweek表示，公佈這項調查，將經由各國醫院競爭並比較，幫助民眾尋求最佳醫療服務與家庭的醫院。

Newsweek 新聞週刊 本院查詢 共研報導

Dr. Ooi Hean, alumnus of CMU, received the 2023 Global Outstanding Overseas Chinese Alumni Award

"I try my best to do my best, even I am not the best!" This is the motto of Dr. Ooi Hean, a Malaysian alumnus of China Medical University who won the 2023 Global Outstanding Overseas Chinese Alumni Award-Social Welfare category from the Overseas Community Affairs Councils, Taiwan.



Dr. Ooi Hean is currently the deputy director of the International Medical Center of China Medical University Hospital (CMUH). He is an alumnus of CMU and National Taiwan Normal University (NTNU) Academy of Preparatory Programs for Overseas Chinese Students. After graduating from CMU School of Medicine, he entered CMUH as an intern and soon became an intensive care physician. In 2012 Dr. Ooi Hean was honored the 12th Outstanding Alumni Award of NTNU, because of his passionate attitude and his devotion to caring for patients and their family. Moreover, in 2023 Dr. Ooi Hean received the Global Outstanding Overseas Chinese Alumni Award. Dr. Ooi Hean is not only a model for our faculty members and students, but also a pride of CMU.

CMU Professor Wen-Chun Liao was Honored the 2023 Taiwan Outstanding Nurses Award

Professor Wen-Chun Liao, Professor and Chairman of CMU School of Nursing, has been dedicating in the nursing teaching and research for over 30 years. With her contribution, Professor Wen-Chun Liao was honored the Taiwan Outstanding Nurses Award. On the celebration of the 2023 International Nurses Day, she was presented the award by President Ing-Wen Tsai of Taiwan.

Professor Wen-Chun Liao received Nursing PhD from University of Washington. Afterwards, she returned to Taiwan and devote herself to nursing education, research, and professional services. She established a smart learning and teaching environment, promoted evidence-based nursing teaching and practice, improved the professional ability of nursing staffs, and cultivated many talents.



In the field of research, Professor Liao's research focuses on sleep and elderly care from the perspective of circadian rhythm and healthy behavior, and develops non-drug nursing treatment. She has conducted many academic exchanges and gave lectures on this topic, and deepened the influence of nursing on treatments. At the same time, Professor Liao actively participated in the affairs of professional organizations such as the Taiwan Nursing Association, to make contribution to the development of the nursing profession in Taiwan.

CMU Professor Dr. Kuan-Pin Su Received the 21st Y. Z. Hsu Science Award

The "Y. Z. Hsu Science Award" was offered by the Far Eastern Y. Z. Hsu Foundation, to honor Taiwanese scientists for their outstanding achievements and contributions to technology and innovation.

Dr. Kuan-Pin Su is a psychiatrist, the Vice-Superintendent of An-Nan Hospital, and the Director of Mind-Body Interface Research Center (MBI-Lab), China Medical University Hospital. He believes that "clinical service" is the belief of being both a "physician" and a "scientist", and is committed to translational medical research. He found an "effective and safe new treatment" to treat depression with natural nutrients, and combined molecular biology and genetics to explore the causes of depression. He has been devoting a lot of efforts in the research of depression and its treatments.

Based on the concept of patient-centered treatment, Dr. Su established Taiwan's first integrated treatment center for depression. The treatment center introduced the integrated medical model of depression from Massachusetts General Hospital of Harvard University, and combined empirical medicine and technological development to provide patients with physical and mental disease prevention, early screening, health promotion, and brain health care.

Moreover, Dr. Su is the most cited scientist in the field of depression research in Taiwan. In the past 20 years, he has continued to publish research on the biological mechanism of serial depression in many international renowned journals, not only providing forward-looking and advanced views on innovative treatment and etiology, but also helping Taiwan's psychiatric research to be seen internationally. For his great contribution, Dr. Kuan-Pin Su is well deserved the 21st Y. Z. Hsu Science Award.



International Collaborations

CMU Received Fulbright International Education Administrators

To strengthen the cooperation of higher education between Taiwan and the US, CMU and Fulbright Taiwan have signed a MOU in November 2020, and furthermore in March 2023 a MOU was signed between CMU Graduate Institute of Chinese Medicine and Fulbright Taiwan in order to recruit outstanding students from the US to come study at CMU.



In March this year, a delegation of Fulbright International Education Administrators visited Taiwan. During their visit to CMU, Vice President John Kuo introduced the current situation and the highlights of international cooperation of CMU, Vice President Lu-Hai Wang introduced the Chinese Medicine Research Center, and Associate Dean Shao-Chun Wang introduced the Research Center for Cancer Biology. The delegations were impressed by the global connection and the research achievements of CMU, and looked forward to establishing more cooperation with CMU in the future.

Visit of Dr. Sonia Feigenbaum, Senior Vice Provost for Global Engagement and Chief International Officer of UT Austin

University of Texas at Austin (UT Austin) is a strong partner of CMU. CMU has many faculty members that are alumni of UT Austin. Besides, College of Life Science and College of Public Health of CMU has been co-organizing research forums and seminars with UT Austin.

Dr. Sonia Feigenbaum, Senior Vice Provost for Global Engagement and Chief International Officer of UT Austin, visited CMU on March 24, 2023. Dr. Feigenbaum shared a speech with the faculty members of CMU entitled: Leading Comprehensive Internationalization at UT Austin: A Vision for the Future. She shared about the current status of UT Austin's internationalization, implementation of strategies, lessons they learned, and their influences, etc. The participating CMU faculty members all benefited a lot from the valuable practical experiences that Dr. Feigenbaum shared.



Dr. Bernd Huber and Delegates of Ludwig Maximilian University of Munich Visited CMU and Discussed about Potential Collaboration

On June 1 2023, Dr. Bernd Huber and Dr. Hans van Ess, the President and the Vice President of Ludwig Maximilian University of Munich, visited China Medical University. CMU President Mien-Chie Hung, Vice President Fuu-Jen Tsai,



Vice President Lu-Hai Wang and Vice President John Kuo welcomed them cordially. The CMU representatives introduced the current situation of CMU, the Chinese Medicine Research Center, the Research Center for Cancer Biology, and the current situation of China Medical University Hospital to the guests from Germany. Afterwards, the two universities had a discussion on potential future collaboration, and agreed to establish exchanges for scholars and researchers from both universities, and to establish cooperation in the field of acupuncture for pain relief.

CMU Signed MOU with Fujita Health University, Japan

Fujita Health University is one of the best private universities in Japan. It was founded in 1968, with two undergraduate schools (School of Health Sciences, School of Medicine) and two graduate schools (School of Medical Research, School of Health Research). On March 22, 2023, President Yukio Yuzawa, Dr. Hideyuki Saya (Director of Fujita Cancer Center), and Dr. Kazuo Takahashi (Director of Center for International Relations) visited CMU. The representatives from FJU signed an MOU with CMU, and the two universities will establish research cooperation and hold regular joint symposiums in the future.



Visit of Dr. Teo Ho Pin, Chairman of Singapore Traditional Chinese Medicine Practitioners Board (TCMPB)



With the arrangement of Taipei Representative Office in the Republic of Singapore, the Chairman of Traditional Chinese Medicine Practitioners Board (TCMPB) of Singapore, Dr. Teo Ho Pin, visited China Medical University in July 3, 2023. Dr. Teo Ho Pin was very impressed by the recent achievements of CMU and the research results of College of Chinese Medicine introduced by the CMU representatives. In addition, Dr. Teo Ho Pin expressed that he hopes that CMU and Singapore can

cooperate in the following three aspects: 1) The integration of Chinese and Western medicine to strengthen the efficacy of disease treatment. 2) The efficacy of Chinese medicine in disease prevention and treatment. 3) Chinese medicine in the treatment of hypertension, hyperlipidemia and hyperglycemia prevention and promotion of healthy aging.

After the discussion, Dean Liang-Yo Yang (CMU Office of Global Affairs) accompanied the guests to visit the Chinese Hospital and Chinese Pharmacy of China Medical University Hospital. Dean Hung-Rong Yen (CMU College of Chinese Medicine) introduced the current situation of the Chinese Hospital to the guests, and the physicians from the Department of Acupuncture introduced the types of diseases treated by the hospital, showed their various medical equipment, and shared how they integrate acupuncture and rehabilitation to co-diagnose and treat patients.

During the visit to the Chinese Pharmacy, the pharmacists enthusiastically introduced the features of the Pharmacy and shared that there are more than 500 kind of GMP Chinese patent medicine, more than 400 kinds of Chinese herbal medicine, and the operation procedure of the pharmacists. The guests from Singapore were all astonished by the large amount of the medicine and materials at the Chinese Pharmacy.

Latest World University Rankings of China Medical University



2023 THE World University Rankings: No. 265 (2nd in Taiwan)

2023 THE Asia University Rankings: No. 33 (2nd in Taiwan)



2023 QS World University Rankings by Subject:

Anatomy and Physiology: No. 101-150

Pharmacy and Pharmacology: No. 151-200

Medicine: No. 201-250



Global Views Monthly

2023 Taiwan's Best University Ranking:

No. 1 Medical University and Private University

Research Breakthroughs

Long Exposure to Chemicals, Higher Risk of Pancreatic Cancer! CMU Associate Professor Ro-Ting Lin Published Research Findings in *Occupational Medicine*

Dr. Ro-Ting Lin, Associate Professor of CMU Department of Occupational Safety and Health, and her research team has been engaged in the research on environmental and occupational health issues. In the past two years, the research team conducted a comprehensive analysis of 12 chemicals on the relationship between occupational exposure to chemicals and the risk of pancreatic cancer, and found that five chemicals (ethylene oxide, polycyclic aromatic hydrocarbons (PAHs), dust and fumes from rubber, styrene, metalworking fluids) significantly increased the risk of pancreatic cancer among workers. Their study “Duration–response association between occupational exposure and pancreatic cancer risk: meta-analysis” received high attention and was published in the international journal *Occupational Medicine*.



This study also pointed out that for every additional year of chemical exposure, the risk of developing pancreatic cancer increased by 1%. Long-term exposure to chemicals, either at high or low level, will increase the risk of cancer, especially for workers in the chemical and petroleum industries and for workers exposed to Group 1 carcinogens. The research team recommends that companies and manufacturers should shorten the working hours of workers exposed to chemicals, improve the ventilation of the working environment, and provide protective equipment to reduce the exposure risks. However, the safest approach to reduce the risk is to gradually cut down the use of high-risk chemicals.

It is worth mentioning that this research was carried out by Dr. Ro-Ting Lin and two international PhD Students, Ms. Hathaichon Boonhat from Thailand and Mr. Adikara Pagan Pratama from Indonesia. Ms. Hathaichon Boonhat, the first author of the research, said that studying in Taiwan has broadened her horizons. She not only improved her research and data analysis skills, but also developed self-disciplined and positive attitude. Mr. Adikara Pagan Pratama, expressed his admiration for Dr. Lin’s enthusiasm in advising students and is grateful to have her guidance.

Tainan Municipal An-Nan Hospital Completed the World’s First Situs Inversus Bariatric Surgery

The Body science & Metabolic disorder International (BMI) Medical Center of An-Nan Hospital has completed more than 7,000 cases of bariatric and metabolic surgery, with outstanding and highly acclaimed results. In 2022, the Center completed the world’s first situs inversus bariatric surgery and the surgery was being shared in the international journal *Obesity Surgery*.

According to statistics, more than half of Taiwan’s population is overweight, and moreover, more than 200,000 people are morbidly obese. For morbidly obese patients, the only way to return to healthy weight and relieve the metabolic symptoms caused by obesity is to change the gastrointestinal hormones through bariatric and metabolic surgery, and to follow a healthy routine including balanced diet and establishing exercise habit.

In Taiwan, more than 3,000 obese patients undergo bariatric and metabolic surgery every year. Since the incidence of situs inversus is very rare and there were only less than 40 international cases, being the first hospital that completed



the situs inversus bariatric surgery has made An-Nan Hospital attract worldwide attention. This case is a 37-year-old woman who has been overweight for many years and was diagnosed with gestational diabetes during pregnancy that later turned into type-2 diabetes. Through the surgery, in addition to losing about 80% to 85% of her excess body weight and relieve her diabetes symptoms, it also improved her quality of life and prevented her from nutritional deficiencies in the future.

Significant Discovery for the Anti-cancer Drug 35d! CMU Research Team Published Research Findings in the *Journal of Biological Chemistry*



Lung cancer is the most common cancer that cause the highest number of cancer death. However, after targeted drug therapy, patients often relapse due to drug resistance. Finding the right drug, using it on the right patient at the right time, has always been the goal of the research team of Academician Mien-Chie Hung, President of CMU. The team's latest research used EGFR-resistant lung adenocarcinoma cells to screen a series of novel curcumin derivatives, and found that the derivative 35d has low drug toxicity and high safety, and its anti-cancer efficacy is 10 times higher than that of curcumin. This study "Diarylheptanoid 35d overcomes EGFR TKI resistance by inducing hsp70-mediated lysosomal degradation of EGFR in EGFR-mutant lung adenocarcinoma" was published in the *Journal of Biological Chemistry*.

The research team further discovered that 35d can activate the hsp70-bag3-p62 pathway in cancer cells to promote the degradation of EGFR protein, thus leading to the death of the drug-resistant lung adenocarcinoma cells. When used alone, 35d is even more effective in inhibiting the growth of drug-resistant tumor cells than the latest clinical 3rd generation EGFR inhibitors. As for the combined use of 35d and EGFR inhibitors, it can significantly slow down the recurrence of lung adenocarcinoma with EGFR mutation and prolong the life of experimental mice.

It is expected that 35d can be used in patients with relapsed drug-resistant lung adenocarcinoma, or in combination with clinical EGFR inhibitors in patients with EGFR-mutated lung adenocarcinoma to delay tumor recurrence and prolong the use of EGFR inhibitors.

Research Team of CMU MBI-Lab Published Latest Finding in *Brain, Behavior, and Immunity* on the Study of Acupuncture Treatment and Inflammatory Biomarkers for Pain and Depression Comorbidities

The research team of the Mind-Body Interface Laboratory (MBI-Lab) led by Academician Lu-Hai Wang, Vice-President of CMU, has been engaged in the clinical trials of acupuncture. Their latest research "Clinical efficacy and immune effects of acupuncture in patients with comorbid chronic pain and major depression disorder: A double-blinded, randomized controlled crossover study" published in the journal *Brain, Behavior and Immunity*, has discovered that patients suffering from "comorbidity of chronic pain and depression" can be improved through acupuncture treatment, and found the pathogenic mechanism of inflammatory response in depression and chronic pain.



Although acupuncture is often used to treat pain or depression, very few studies have investigated the efficacy of acupuncture in treating patients with both chronic pain and depression. The team of MBI-Lab focused on the study of "pain- or depression-specific acupoints improves chronic pain and depression, respectively". They take acupuncture as treatment and use pain scales, depression scales, and proinflammatory cytokines to assess how much the patients' symptoms had improved.

For the treatment of chronic pain in different body parts, this study selected 14 pain-specific acupoints. The patients participating in the study were randomly assigned to two groups: (1) the depression-pain group (23 patients who were treated with depression-specific acupoints and then the pain-specific acupoints after the washout) and (2) pain-depression group (24 patients with the reverse order). The results show that acupuncture at these two specific acupoint significantly reduced symptoms of pain and depression, and reduced the blood inflammatory hormones (IL-1, IL-6, and TNF- α). Although the results rejected the hypothesis that the pain-specific acupoints might produce superior analgesic effects than the depression-specific acupoints and vice versa, the cytokine results might imply that pain and depression share common biological mechanisms, and also proved the importance of inflammation in the treatment of depression and chronic pain.