



中國醫藥大學

China Medical University



About CMU

China Medical University located in Taichung, Taiwan, was established in 1958 and now has developed into a world-class university with 7 colleges: College of Medicine, College of Chinese Medicine, College of Pharmacy, College of Public Health, College of Health Care, College of Biopharmaceutical and Food Sciences, and College of Humanities and Technology. China Medical University owns several Joint Commission International (JCI)-accredited hospitals with a total of around 5000 beds and China Medical University Healthcare System is the second largest Healthcare System in the entire nation of Taiwan.

China Medical University aims to become the top global university by investing 1 billion US dollars to build a new branch of Taichung Campus at Taichung Gateway Park and by offering 100 million US dollars to recruit 100 prestigious international scholars in the next 3 years. China Medical University welcomes outstanding international scholars and students to join the CMU family.

The accomplishments of China Medical University are well recognized by the public and the world. China Medical University is ranked in the top 151~200 by 2016 Academic Ranking of World Universities (ARWU). China Medical University is also ranked 133 in the field of Clinical Medicine and Pharmacy by 2016 Academic Ranking of World Universities. Moreover, China Medical University is ranked 46 and in the top 401~500 by Times Higher Education Asia University Rankings and World University Rankings, respectively. China Medical University is ranked in the top 101~150 in Pharmacy and Pharmacology by 2016 QS World University Rankings by Subject. By collaborating with more prestigious universities worldwide, China Medical University will definitely become one of the best world-class universities.

Chairman Chang-Hai Tsai's Vision

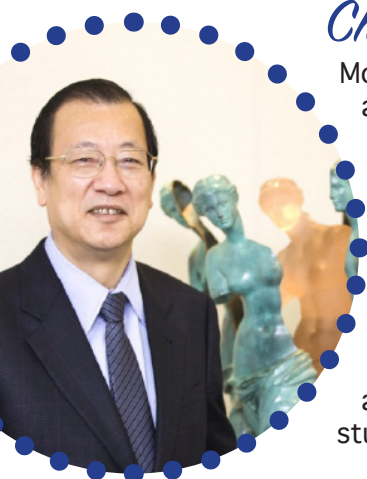
Moving on its way to become a global leader, in 2013, China Medical University set a goal to reach World Top 400 Universities in three years, and Top 300 in seven years. The words are still ringing in our ears; as a matter of fact, China Medical University achieved its goal to reach Top 400 Universities in two years, manifesting the incredible power, determination, and efficiency of the entire team.

CMU and CMUH are moving forward hand-in-hand. Our vision is to become the global powerhouse of Western and Chinese medicine and pharmacy in both basic research and medical services. With the enormous effort made by Chancellor Lee and the entire faculty and staff, CMU strives to achieve excellence in all aspects of research, to provide the highest quality of teaching, and to equip our students with competence, compassion, and a solid sense of social responsibility.

Chancellor Wen-Hwa Lee's Welcome Message

China Medical University is approaching its sixty-year birthday. I, as the current Chancellor carrying forward the leadership and endeavors by the Board of Trustee and the successive Chancellors, am pleased and proud to share this bliss with all of you today.

China Medical University has struck an incredible balance between what was once assumed to be mutually exclusive: it embraces medical traditions yet stimulates innovation; it subscribes to specialism yet prescribes an interdisciplinary education; it thrives upon biomedicine yet prospers through humanities. With unshakable solidarity of our dedicated faculty and staff, China Medical University is becoming the powerhouse of Western and Chinese medicine and pharmacy. I invite you to join us in the mission to triumph over the impossible and to envision the unimaginable.



Colleges and Centers

College of Medicine

- Medicine
- Medical Laboratory Science and Biotechnology
- Biomedical Imaging and Radiological Science
- Graduate Institute of Biomedical Sciences
- International Master's Program of Biomedical Sciences

College of Chinese Medicine

- Chinese Medicine
- Post-Baccalaureate Chinese Medicine
- Graduate Institute of Integrated Medicine
- Graduate Institute of Acupuncture Science
- Chinese Pharmaceutical Sciences and Chinese Medicine Resources
- International Master's Program of Acupuncture Science

College of Biopharmaceutical and Food Sciences

- Cosmeceutics
- Nutrition
- Biological Science and Technology

College of Public Health

- Interdisciplinary Freshmen Program of Public Health
- Public Health
- Occupational Safety and Health
- Health Services Administration
- International Master's Program of Public Health

College of Health Care

- Nursing
- Physical Therapy
- Graduate Institute of Rehabilitation Science
- Sports Medicine
- Respiratory Therapy (Two-Year Continuing Education Program)
- Master's Program of Biomedical Engineering

College of Pharmacy

- Pharmacy

College of Dentistry

- Dentistry

College of Humanities and Technology

- Technology and Law
- Technology and Management

Art Center

Center for General Education

Center for Continuing Education

Center for Faculty Development

Language Education Center

Information Technology Center

Major Affiliated Hospitals

- China Medical University Hospital, Taichung
- China Medical University Children's Hospital, Taichung
- China Medical University Hospital, Beikang
- Tainan Municipal An-Nan Hospital, Tainan

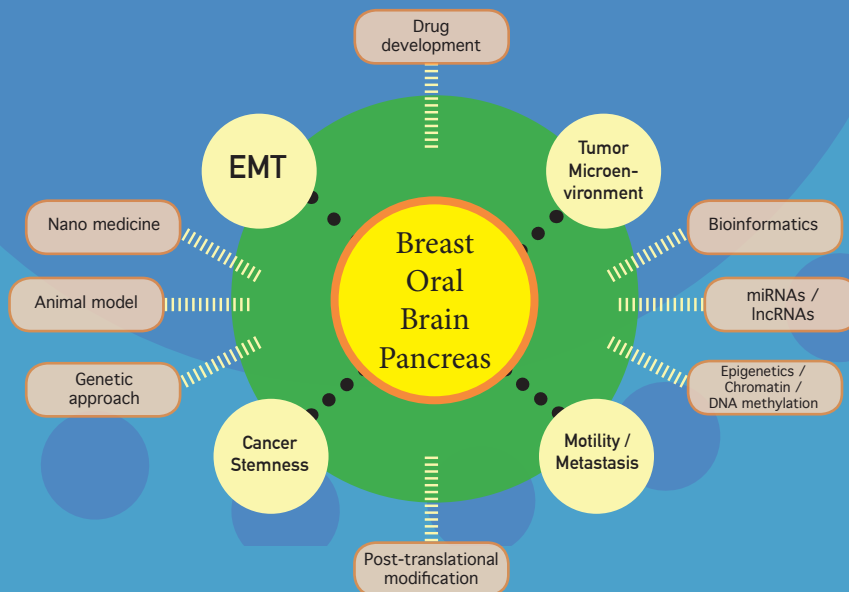


中國醫藥大學
附屬醫院

Centers of Excellence

- Center of Excellence for Tumor Medical Science
- Center of Excellence for Traditional Chinese Medicine and Acupuncture
- Center of Excellence for Integrative Stem Cell Research
- Center of Excellence for Brain Diseases
- Center of Excellence for Cancer Immunology
- Center of Excellence for Aging Research

Center of Excellence for Tumor Medical Science



Director/Chair Professor

Dr. Kou-Juey Wu



Deputy Director
Dr. Chang-Fang Chiu



Deputy Director
Dr. Yung-Luen Yu



Our Cancer Center works hand-in-hand with one of the best cancer centers in the world, MD Anderson Cancer Center.

Selected Publications:

- EGFR modulates DNA synthesis and repair through Tyr phosphorylation of histone H4. Chou RH, Wang YN, Hsieh YH, Li LY, Xia W, Chang WC, Chang LC, Cheng CC, Lai CC, Hsu JL, Chang WJ, Chiang SY, Lee HJ, Liao HW, Chuang PH, Chen HY, Wang HL, Kuo SC, Chen CH, Yu YL*, Hung MC*. Dev Cell. 2014 Jul 28; 30(2):224-37.
- Twist 1 induces endothelial differentiation of tumor cells through the Jagged1-KLF4 axis. Chen HF, Huang CH, Liu CJ, Hung JJ, Hsu CC, Teng SC, Wu KJ*. Nat Commun. 2014 Aug 22; 5:4697.
- Microenvironment-induced PTEN loss by exosomal microRNA primes brain metastasis outgrowth. Zhang L, Zhang S, Yao J, Lowery FJ, Zhang Q, Huang WC, Li P, Li M, Wang X, Zhang C, Wang H, Ellis K, Cheerathodi M, McCarty JH, Palmieri D, Saunus J, Lakhani S, Huang S, Sahin AA, Aldape KD, Steeg PS, Yu D*. Nature. 2015 Nov 5; 527(7576):100-4.
- Targeting IL-17B-IL-17RB signaling with an anti-IL-17RB antibody blocks pancreatic cancer metastasis by silencing multiple chemokines. Wu HH, Hwang-Verslues WW, Lee WH, Huang CK, Wei PC, Chen CL, Shew JY, Lee EY, Jeng YM, Tien YW, Ma C, Lee WH*. J Exp Med. 2015 Mar 9; 212(3):333-49.
- Blocking c-Met-mediated PAPR1 phosphorylation enhances anti-tumor effects of PARP inhibitors. Du, Y., and Hung, M-C, Nat Med 22(2):194-201, 2016.
- Glycosylation and stabilization of programmed death ligand-1 suppresses T cell activity. Li, C-W*, Lim, S-O*, and Hung M-C. Nature Commun, 7:12632, 2016.

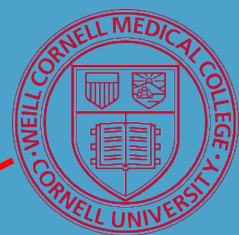
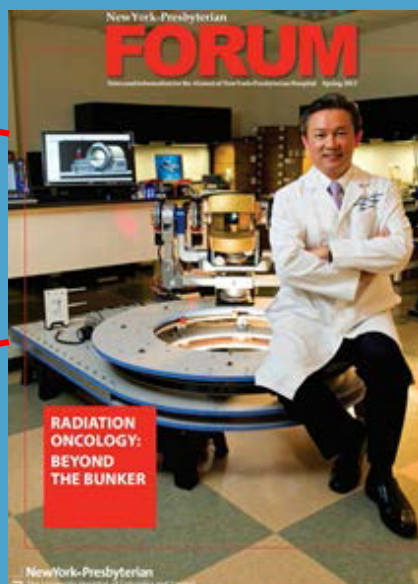
- Deubiquitination and stabilization of PD-L1 by CSN5. Lim, S-O*, Li, C-W*, and Hung, M-C. Cancer Cell 30, 925-939, 2016.
- Powering Tumor Metastasis with Recycled Fuel. Hung, M-C.*, Yang, R. and Sun, Y. Cancer Cell 30(3):374-375, 2016.
- The LINK-A lncRNA activates normoxic HIF1a signaling in triple-negative breast cancer. Lin, A*, Li, C*, Xing, Z*..., Hung, M-C, Lin, C.* and Yang, L.* Nat Cell Biol 18(2):213-224, 2016.
- Nuclear AURKA acquires kinase-independent transactivating function to enhance breast cancer stem cell phenotype. Zheng, F*, Yue, C*, Li, G*..., Hung, M-C and Liu, Q. Nat Commun, 7:10180, 2016.
- K63-polyubiquitinated HAUSP deubiquitinates HIF-1a and dictates H3K56 acetylation to promote hypoxia-induced tumor progression. Wu, H.T..., and Wu, K.J. Nat Commun, 7, 13644, 2016.
- Adipocytes promote malignant growth of breast tumours with monocarboxylate transporter 2 expression via β -hydroxybutyrate. Huang CK..., and Wen-Hwa Lee. Nat Commun, 2017 (DOI: 10.1038/ncomms14706).

The Cancer Center

Our Cancer Center, which opened in the November of 2007, provides a friendly, state-of-the-art home for students and clinicians.

Our superintendent, K.S. Clifford Chao, of the Cancer Center is a passionate and distinguished physician who has been selected as one of the "Best Doctors in America" for 10 consecutive years. He has worked at world-class universities such as Columbia University, Weill Cornell Medical College, and MD Anderson Cancer Center of the University of Texas.

We invite you to explore the many opportunities that we offer in graduate education, cancer biological research, and clinical care.



Superintendent K.S. Clifford Chao of the Cancer Center
One of the best cancer doctors in USA



Dean and Director
Dr. Hen-Hong Chang

Director
Dr. Hung-Rong Yen

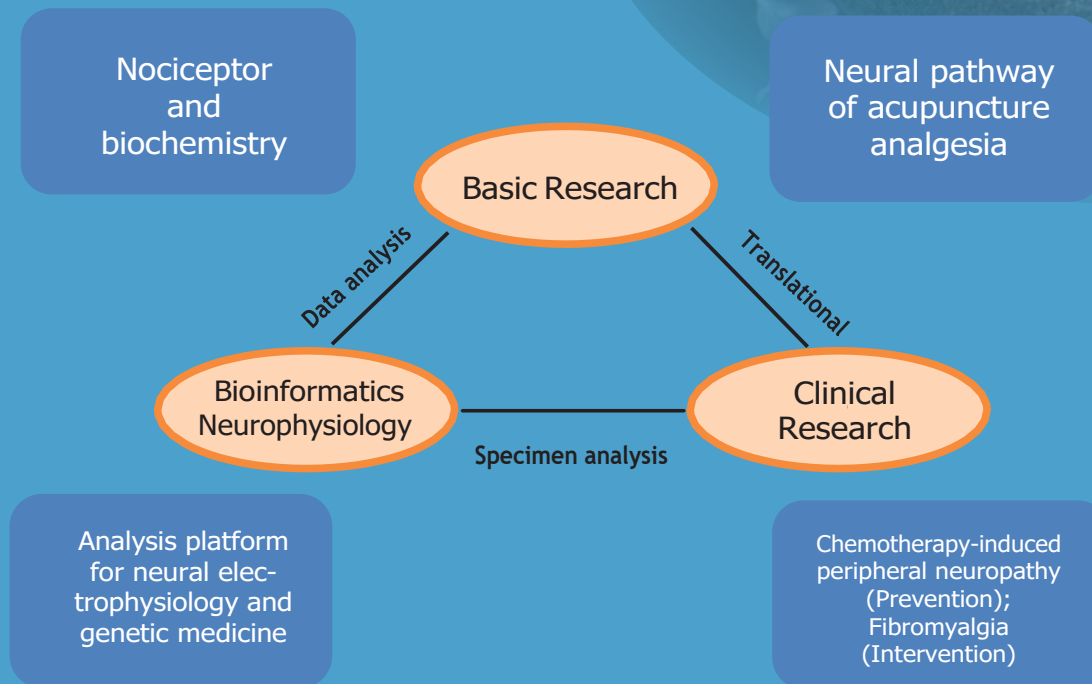
Director
Dr. Tin-Yun Ho

Center of Excellence for Traditional Chinese Medicine and Acupuncture

CMU is recognized as one of the most esteemed universities in the world in the field of Chinese Medicine. We currently have two research centers:

- Research Center for Chinese Medicine & Acupuncture
- Research Center for Chinese Herbal Medicine

By joining forces between Chinese and Western medicine, we aim to provide our patients with the best treatments possible.



We have the best integration of Chinese and Western Medicine services at China Medical University Hospital.



Research Topic	stage
Preclinical Study of Novel Diabetic Peptide Drugs Derived from Tian-Hwa-Fen.	IND
Development and Applications in New Drugs of Antrodia Cinnamomea on Rheumatoid Arthritis, Osteoarthritis and Osteoporosis.	IND
Development of Taiwanese Fern-Derived Compounds as GSTO Inhibitor for Cancer.	IND
Targeted New Drug Development for GBM —2nd Generation Drug of Interstitial Chemotherapy.	Phase I
New Drug Development of Indigo Naturalis Ointment .	Phase I
Development of Camptothecin Derivatives as New Anticancer Drugs	Phase II

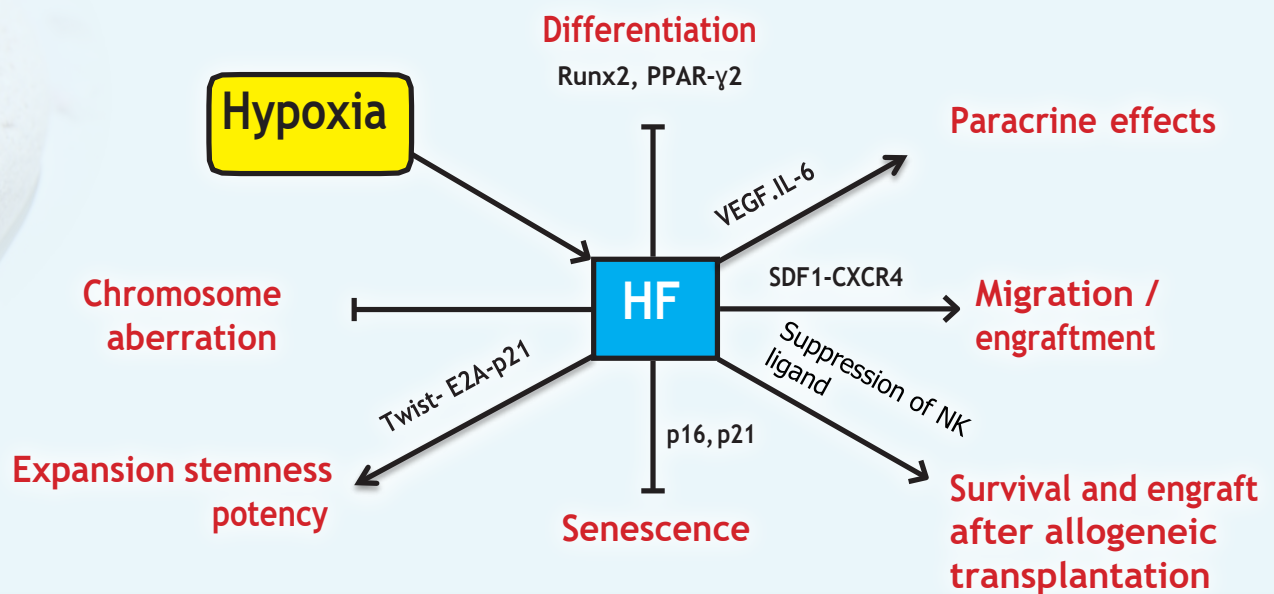
Center of Excellence for Integrative Stem Cell Research



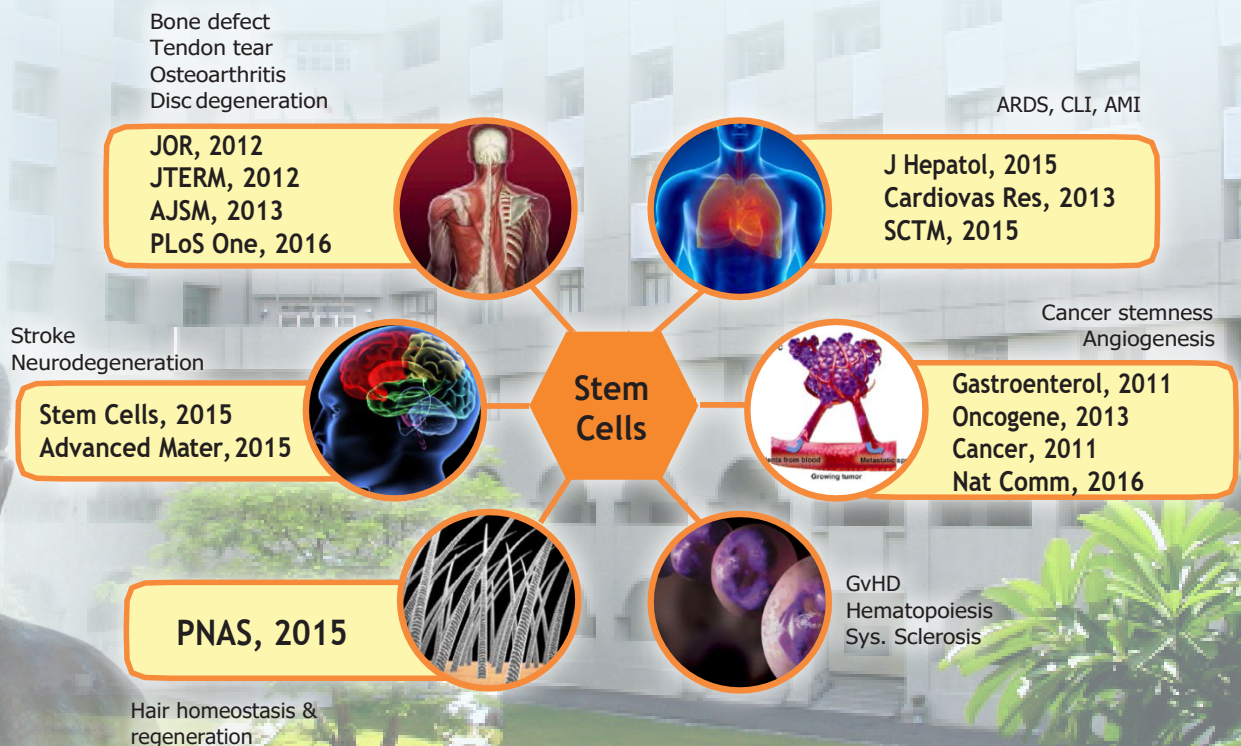
Benefits of Hypoxic MSCs

(Molecular Cell, Blood, Stem Cells, Aging Cell, Cell Transplant, PLoS ONE*3, JTERM*2, JOR, AJSM)

In 2015, our stroke research team received the National Innovators Award for its research "Olfactory Stem Cells Improve the Functional Recovery of Stroke Animals."



Stem Cell Research Publications



CMU's Research Breakthroughs

Jaung-Geng Lin, MD— National Treasure on Acupuncture

- **Basic Research on Acupuncture Pain Relief**
- **Clinical Research on Acupuncture Pain Relief**
- **Research on Safe Needling Depth**
- **Dictionary on Chinese and Western Disease Name Matching**
- **World recognitions of his contribution to Research on Traditional Medicine**

Invited to Join the WHO Meetings

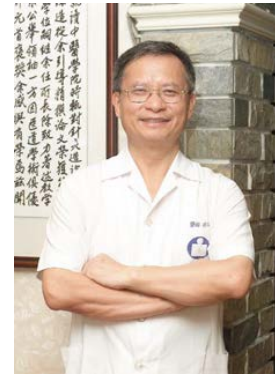
- 2009 Traditional Medicine Precision Conference in Milan.
- Speaking at the 2012 Workshop on Implementation of the Regional Strategy for Traditional Medicine in the Western Pacific 2011-2020.
- Attending the 2015 WHO Regional Committee for the Western Pacific at Guam.

Hired by the UNESCO as World Experts and Consultant (2013-present)

- Invited to attend 3 sessions of Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage and offer to publish in 2014 at the Paris Headquarter ICHNGO FORUM.

The Invited Speaker of WHO (2017)

- Invited to present a talk entitled "The Use of Acupuncture in Emergency Medical Services" at the 140th Session of the Executive Board of WHO.



Hung-Chi Chen, MD—Reconstructive Surgery

Features:

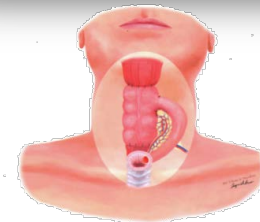
- Severe Case of Lymphedema or Abnormal Lymphatic System.
- Reconstruction of Phonatory Organ using intestinal tissues (World Renown).

Research Focus:

- The Physiology Research on Jejunum and Ileum as well as the plasticity of the enteric nervous system.
- Drafting and Publishing of the 4th Book.

Highlights:

2016 Discovery Channel "Taiwan Revealed: Medical Elite"
 2014 National Biotechnology & Medical Care Quality Gold Award Awardee
 2013 National Biotechnology & Medical Care Quality Silver Award Awardee
 2012 Executive Yuan Award for Outstanding Science and Technology Contribution



Through Accurate Emerging of Multiple Division to Reach the New Frontier of Surgical Reconstruction

Der-Yang Cho, MD— Immune Cell Therapy

Research :

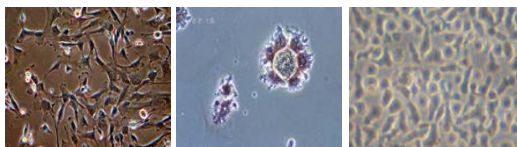
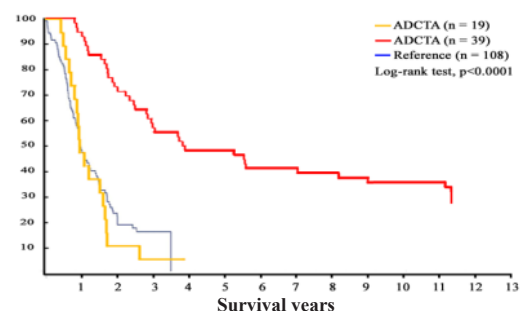
The Research Team on Immune Cell Therapy focus research on dendritic cell vaccine treatments on clinical uses as well as understanding the interactional between immune cells and tumor microenvironment. This research is designed to structure the platform on multiple immune cell therapy on malignant brain tumors and strengthen the clinical treatments.

Highlights :

- In Taiwan, CMUH is the only medical center to perform the dendritic cell-based immunotherapy trial. So far, the phase-II trial had been finished.
- The completed trial-II study has shown the increasing survival of patients with malignant brain tumors.
- Results from translational studies had been published in two journals and have brought good responses and discussion from international scientific community (World Neurosurgery 2012).



Kaplan-Meier curves in the trial study



Long-Bin Jeng, MD — Liver Transplantation

Feature :

- 2002.09.10~2016.08.31 Over 766 success cases of living donor liver transplantation.
- 5 year survival rate reaches 73.12%.
(Liver Cancer : 61.44% / Not Liver Cancer : 83.99%).

Research :

- Use of Everolimus in Liver Transplant.
- The Immune Cell Treatment for Liver Cancer.

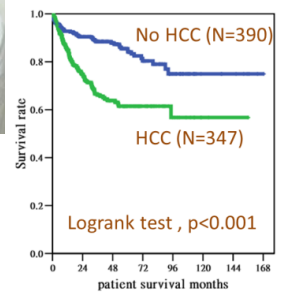
Highlights :

- World First Case of Living Donor Liver and Kidney Transplantation from **Multiple Donors**.
- Successful liver transplantation using Hepatitis B patient as a donor.
- World leading surgical Techniques: Hepatic Artery Matching without Microscope, Heavy Use of Artificial Blood Vessel during Liver Transplantation.
- Most experience using **Everolimus in the world**.

First Case of Living Donor Liver and Kidney Transplant



Survival Rate of Living Donor Liver Transplantation Cases



Wen-Hwa Lee, PhD — Pancreatic Cancer Research

Team:

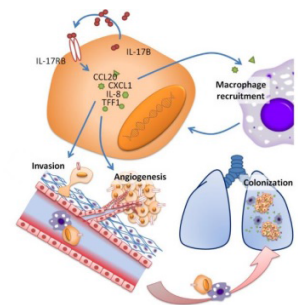
- **CMU:** Academician Wen-Hwa Lee 、 Dr. Heng-Hsiung Wu
- **SINICA:** Dr. Chia-Ning Shen 、 Dr. Chun-Mei Hu
- **NTU :** Dr. Yun-Wen Tien (Surgery) 、 Dr. Yu-Ting Chang (Internal Medicine) 、 Dr. Ming-Chu Chang (Internal Medicine) 、 Dr. Yung-Ming Jeng (Pathology)

Research:

- Building the molecular basis on the occurring of pancreatic cancer through researching on the mutations of KRAS.
- Recognizing the diagnosis marker for the new early stage pancreatic cancer using the extracellular vesicles.
- The role of metabolic reprogramming process evoked by glucose played in pancreatic cancer metastasis.
- Defining the role of microenvironment on the pancreatic cancer metastasis.

Highlights:

- Develop new humanized IL-17RB vaccine and small molecular inhibitor through interpreting the transmission of molecular mechanism of IL-17B /IL-17RB as the new strategy for treating pancreatic cancer.
- Develop new platform for circling cancer cells for the use of diagnosis of pancreatic cancer and metastasis.



Companies established by CMU faculty

Medical Ed Consultant Ltd.
Establishment : 2009

- Mini-CEX

Pilot Biotechnology Ltd.
Establishment : 2010

- Lactobacillus Plantarum CMU995

Bai-E Medical Equipment
Establishment : 2012

- Pressure Sensitivity Construct 、 Falling Warning System 、 Sensitivity Pad

Yian-Lin Biotech Ltd.
Establishment : 2014

- Functional Food Development of Polysaccharides from Rice Hull for Immunomodulation

Shan Zi Biotech Ltd.
Establishment : 2014

- Health product produced from herbal composition for atherosclerosis prevention and its extract.

Hen-Mei Biomedical Tech
Establishment : 2015

- Hen-Mei Mushroom Enzyme Food Product

Ever Health Bio Medical
Establishment : 2015

- The Usage of IGF1R in stem cell and stem cell therapy (Including Magnetic Nanoseaurchin usage)

Caring & Health Ltd.
Establishment : 2015

- Training Courses for Care Takers

Tsai-Guai Ltd.
Establishment : 2015

- Health Industry Management Knowledge and Techniques.

Partner Institutions

China Medical University (CMU) has more than 140 partner universities all over the world. A few of CMU's partner universities are shown below.



Nanyang Technological University



National Tsing Hua University



National University of Singapore



University of Newcastle



Partner Institutions



THE UNIVERSITY OF TEXAS
MD Anderson
~~Cancer Center~~
 Making Cancer History®



Partner Institutions

University of Southampton



University of South Carolina



Partner Institutions



CMU Hospital Offers Comprehensive Healthcare Services



Dr. Chang-Hai Tsai
Chairman of the Board of Trustees



Dr. Der-Yang Cho
Superintendent of China Medical University Hospital



Innovating Clinical Services

Artificial Heart Implant



Endothelial Keratoplasty



Full HD 3D video system



**Joint Arthroplasty
by Robotic Arm**



**Reconstructive
Surgery**



**Robotic surgery
(Davin chi system)**



Hybrid OR





New CMU Campus



World University Rankings

Since its establishment in 1958, China Medical University (CMU) has become the best private university in Taiwan. As of this year, CMU now ranks within the top 200 universities in the world, and ranks 2nd in Taiwan, according to the 2017 Academic Ranking of World Universities.



2017 Academic Ranking of World Universities No. 197
 2016 Academic Ranking of World Universities No. 133
 in Clinical Medicine and Pharmacy
 2017 Shanghai Ranking's Global Rankings of Academic Subjects
 Pharmacy & Pharmaceutical Sciences No. 76-100



2017 QS World University Rankings by Subject
 Pharmacy & Pharmacology No. 102
 Medicine No. 151-200



2015-2016 THE World University Rankings No. 401-500
 2016 THE Asia University Rankings No. 46
 2016 THE BRICS & Emerging Economies Rankings No. 35

Campus



Taichung Main Campus

Tel: + 886-4-2205-3366
 Fax: + 886-2-2206-1923
 E-mail: cmucia@mail.cmu.edu.tw
 Address: No. 91 Hsueh-Shih Road
 Taichung, 40402, Taiwan, R.O.C.



Future Shueinan Campus Profile

Location: Southern Part of Taichung Gateway Park

Project Design:

- Teaching and Continuing Education
- Research Development and Industry Cooperation
- Center for Gerontology and Geriatrics
- International Medical Center for Teaching and Research
- Cultural and Creative Industry



Beikang Satellite Campus

Tel: + 886-5-7833039
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 E-mail: cmucia@mail.cmu.edu.tw
 Address: No. 123-1, Sinda Road, Beikang Township
 Yunlin County, 65152, Taiwan, R.O.C.

Visit www.cmu.edu.tw for more information.