



中药全球化联盟

CONSORTIUM FOR GLOBALIZATION OF CHINESE MEDICINE

CGCM 19th Annual Meeting

Regional Report

Taiwan Chapter

Local Chapter Coordinator: Prof. Hen-Hong Chang (張恒鴻)

Secretary General: Prof. Yuan-Shiun Chang (張永勳)

Chengdu, China

2023/08/22-25



中药全球化联盟

CONSORTIUM FOR GLOBALIZATION OF CHINESE MEDICINE

CGCM in Taiwan

Select the city where you live:



中國醫藥大學
China Medical University



懷特生技新藥(股)公司
PhytoHealth Corporation



臺灣大學
National Taiwan University



順天堂



臺北醫學大學
TAIPEI MEDICAL UNIVERSITY



長庚紀念醫院中醫部
Chang Gung Memorial Hospital
Traditional Chinese Medicine



中山醫學大學
Chung Shan Medical University



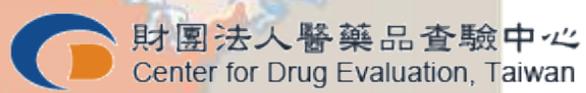
TTY BIOPHARM
NORTH AMERICA



慈濟大學
Tzu Chi University



行政院農業委員會
農業藥物毒物試驗所



財團法人醫藥品查驗中心
Center for Drug Evaluation, Taiwan



高雄醫學大學
Kaohsiung Medical University



中央研究院
ACADEMIA SINICA



Sinphar® 杏輝醫藥集團
SINPHAR GROUP



3i Smart Plant Factory
三愛智能型植物工廠



南臺科技大學
Southern Taiwan University of Science and Technology



義大醫院
E-DA HOSPITAL / I-SHOU UNIVERSITY





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CONSORTIUM FOR GLOBALIZATION OF CHINESE MEDICINE

Board of Directors



Chairman

Prof. Yung-chi Cheng
Henry Bronson Professor of
Pharmacology,
Yale University School of Medicine



Vice Chairman

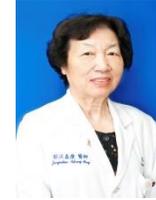
Chairman, CGCM Taiwan Chapter

Prof. Hen-Hong Chang
China Medical University

Advisory Board



Prof. Yun Yen
Taipei Medical University



Prof. Jacqueline Whang-Peng
Superintendent
Taipei Cancer Center,
Taipei Medical University

Council Members



Prof. Ning-Sun Yang
Distinguished Research Fellow and Professor
Agricultural Biotechnology Research Center,
Academia Sinica, Taiwan

Secretary General



Prof. Yuan-Shiun Chang
China Medical University

Local Chapter Coordinators (23)

1. Institutional Members (18)

2. Industrial Affiliate Members (5)



Department of Chinese Medicine and Pharmacy (MOHW, Taiwan)



- The combined treatment model between western medicine (WM) and traditional Chinese medicine (TCM)-chronic wounds, stroke, cancer, infertility, etc.
- Standardization of terminologies for TCM symptoms
- Construction of tongue diagnosis database



ADR site

- Creation of Drug Herb Interaction Database
- TCM Adverse Drug Reactions Reporting System



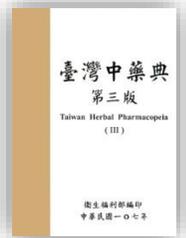
Strengthening of TCM professional competency and continuous medical education

Improving TCM product quality & safety management

Integration of TCM-WM in both healthcare and evidence-based research.

TCM global interactions & promotion of industry innovation and research

- Established THP (Taiwan Herbal Pharmacopoeia) 3rd Editing Committee in 2015
- Publication of 3rd Edition THP in 2018
 - New adapted 55 single herb monographs and 2 concentrated preparations
- regulatory limitation of abnormal substances in TCM raw materials and products



- Continuously publishing JTCM
- 2017 Global Health Forum in Taiwan
- Global exchanges with New Southbound Policy countries



2017中藥藥品交流合作國際論壇
International Symposium on Cooperation in Chinese Medicine





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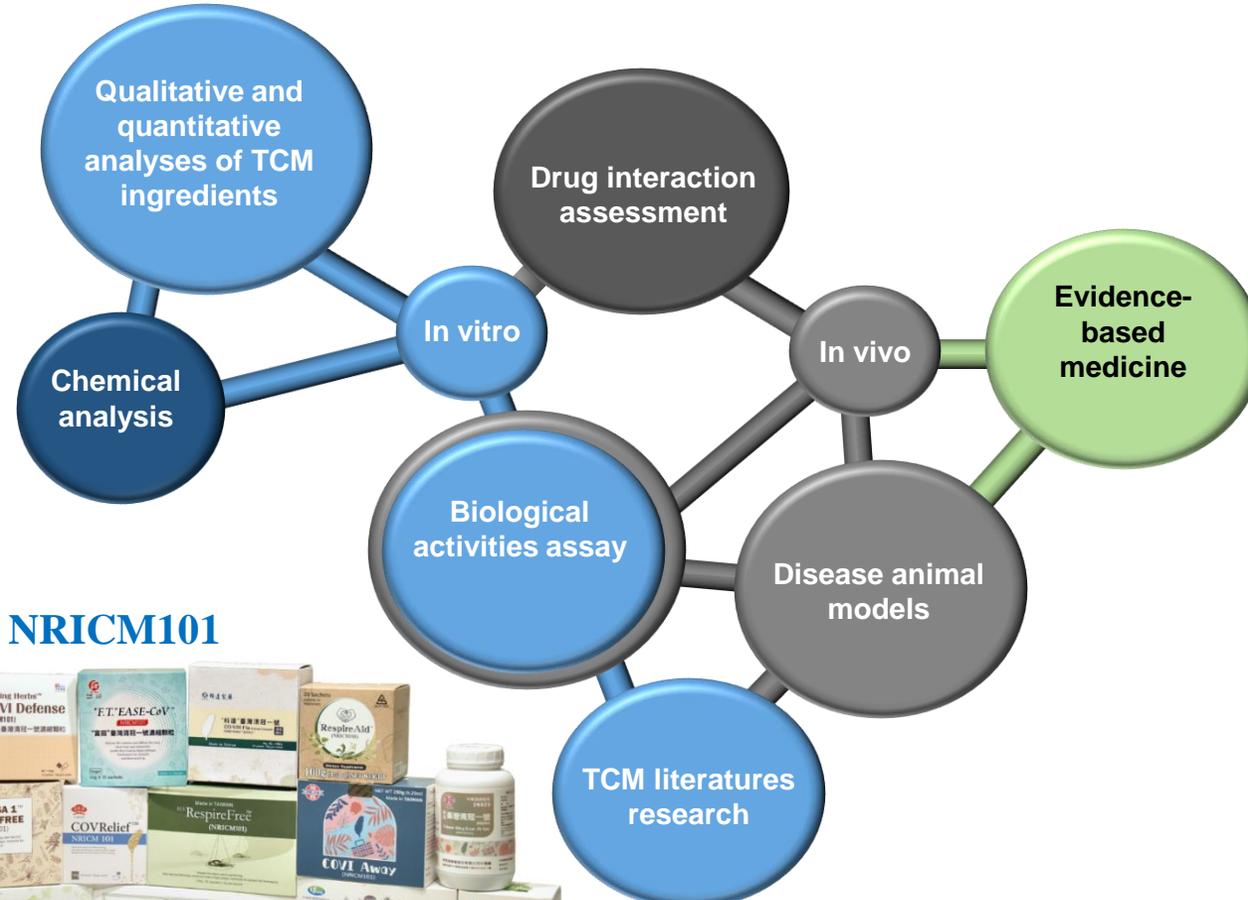
Division of Basic Chinese Medicine

Division of Chinese Materia Medica Development

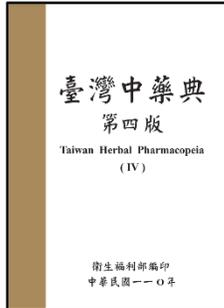
Division of Clinical Chinese Medicine

Division of Chinese Medicinal Chemistry

Division of Chinese Medicine Literature and Informatics



qaTCM database: 中藥品質分析資料庫
(<http://qatcm.nricm.edu.tw/index.php>)



- ◆ More than 200 TCM items were studied. (2014 – 2022)
- ◆ Most of results were accepted and recorded in the Taiwan herbal pharmacopoeia (IV).
- ◆ A database (qaTCM) was established for public inquiry.

- ◆ successfully developed the traditional Chinese medicine product “NRICM101 for the testament of Taiwan’s efforts in the global fight against the COVID-19 pandemic.
- ◆ has been sold in more than 60 countries to help combat the pandemic



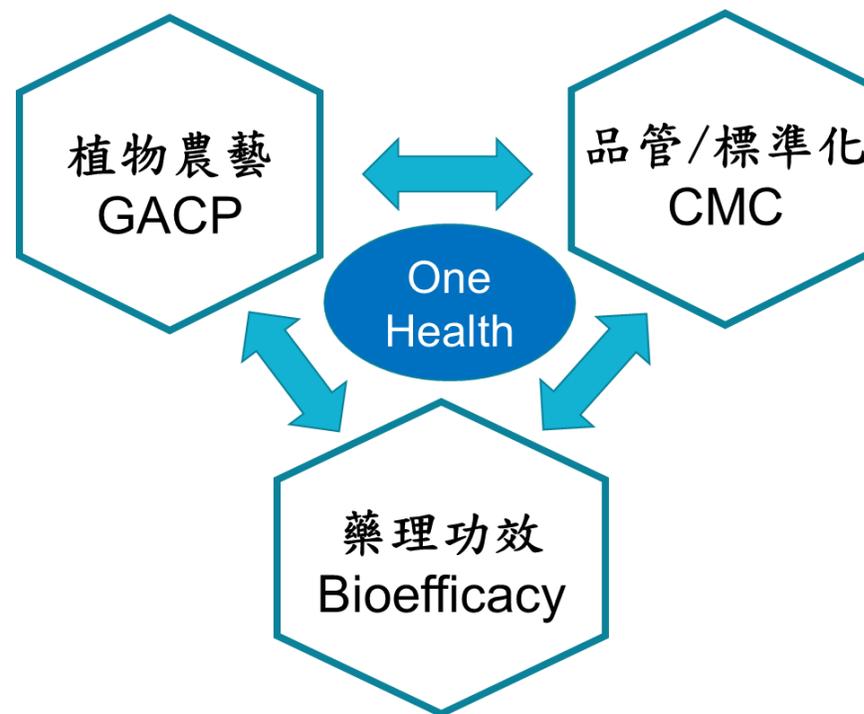
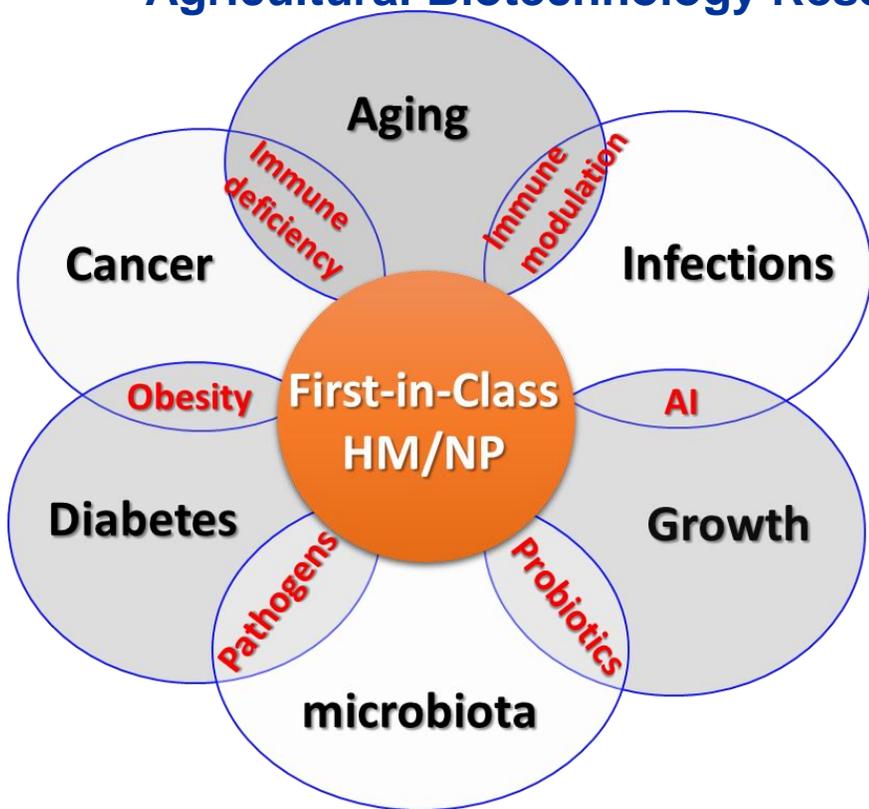
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R&D of phytomedicines for human and animal healthcare

Agricultural Biotechnology Research Center, Academia Sinica, Taipei



Lie-Fen Shyur



Wen-Chin Yang



Pei-Wen Hsiao



Yu-Liang Yang



Yu-Ling Lin



Hui-Ming Chen



Tai-Na Wu

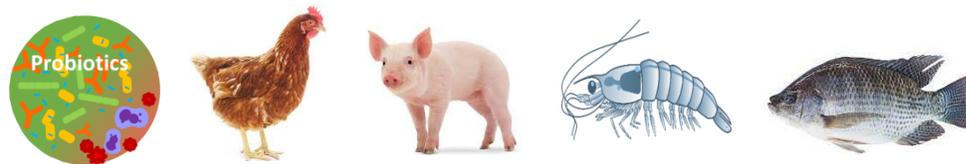


Yu-Chuan Liang

Herbal medicine (HM)/Natural product (NP)



Good agriculture collection practice (GACP, WHO)
Chemistry, manufacturing and control (CMC)





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Graduate Institute of Pharmacognosy



College of Pharmacy



Ph.D. program for the Clinical Drug Development of Herbal Medicine



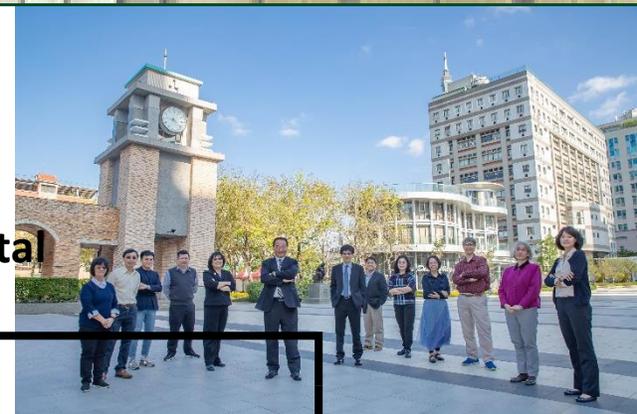
臺北醫學大學
TAIPEI MEDICAL UNIVERSITY



臺北醫學大學附設醫院
TAIPEI MEDICAL UNIVERSITY HOSPITAL

Hospital

Department of Traditional Chinese Medicine



Traditional Herbal Medicine Research Center

Clinical herbal medicine translational research and development

Research areas

Basic research

Translational research

Clinical research

Natural products

Organic synthesis

Pharmacology and toxicology

Molecular biology

Chinese herbal medicine resource

Biotechnology

Clinical research and trial

Pharmacokinetic

Faculty

Lee, Ching-Kuo
Lai, Kuei-Hung
Wu, Ho-Cheng

Huang, Wei-Jan
Hsieh, Yves

Wu, Chieh-Hsi
Liang, Wen-Li

Chen, Mei-Chuan

Wang, Ching-Chiung
Lee, Mei-Hsien
Hou, Wen-Chi

Chuang, Kuo-Hsiang
Lin, Ruo-Kai

Dai, Cheng-Jie

Lee, Chia-Jung

➤ Education objectives

- To cultivate biotech professionals with humanistic qualities and reflective practices.
- To cultivate health-oriented, interdisciplinary and multi-innovation talents in the biomedical industry.
- To cultivate pharmacognosy biotech professionals with global vision and leadership.
- To cultivate professionals with biotech related legal literacy.

➤ Publication: 01/01/2022~08/11/2023

Institution	0<=IF<5	5<=IF<10	IF>=10	number of articles	Average of IF
 Graduate Institute of Pharmacognosy	22	55	4	81	5.945
 Ph.D. program for the Clinical Drug Development of Herbal Medicine	18	45	3	66	5.822



Taiwan University

臺灣大學食品科技研究所



Distinguished Prof. Lee-Yan Sheen

Prof. Ya-Ching Shen,
School of Pharmacy



Prof. Shen's research subjects :

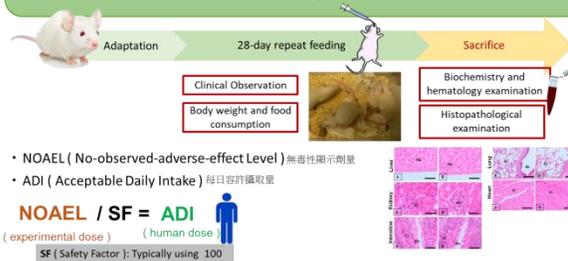
In addition to eighteen known compounds, three new compounds have been isolated from the stems of *Schisandra arisanensis* Hayata, an endemic species in Taiwan. Compound **1** is a dibenzocyclo-octadiene lignan with C18 skeleton. Compound **2** is a sesquiterpene. Compound **3** is a dihydrobenzofuran 8,3'-lignan. The structures of these new compounds were established on the basis of spectroscopic methods, especially 2D NMR (COSY, HMQC, HMBC, ROESY) and HRESIMS. Anti-tumor cytotoxic and anti-oxidative activities of the isolated compounds were evaluated.

Recent findings of Distinguished Professor Lee-Yan Sheen's lab
Institute of Food Science and Technology, Taiwan University, Taipei, Taiwan

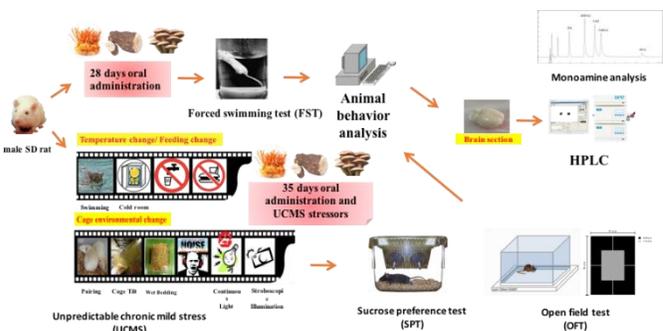
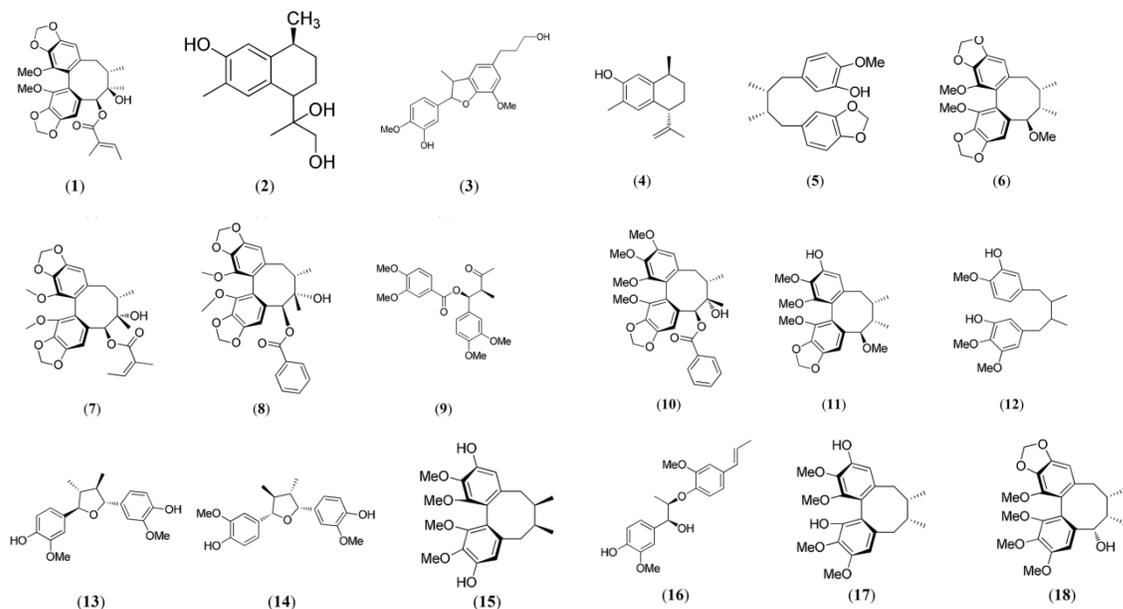
- Antidepressant-like effects of mushrooms (菇類) in forced swimming test- and unpredictable chronic mild stress-induced rat models
- Safety evaluation of water extract of *Gastrodia elata* Blume (天麻)

Forced swimming test (FST) 強迫游泳試驗 and unpredictable chronic mild stress test (UCMS) 非預期性慢性溫和壓力試驗

28-day subacute oral toxicity assessment 28天亞急毒性試驗



Genotoxicity assays 基因毒性試驗





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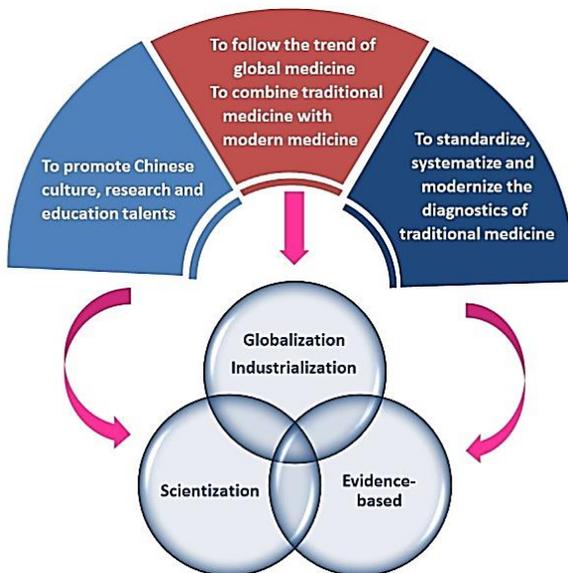
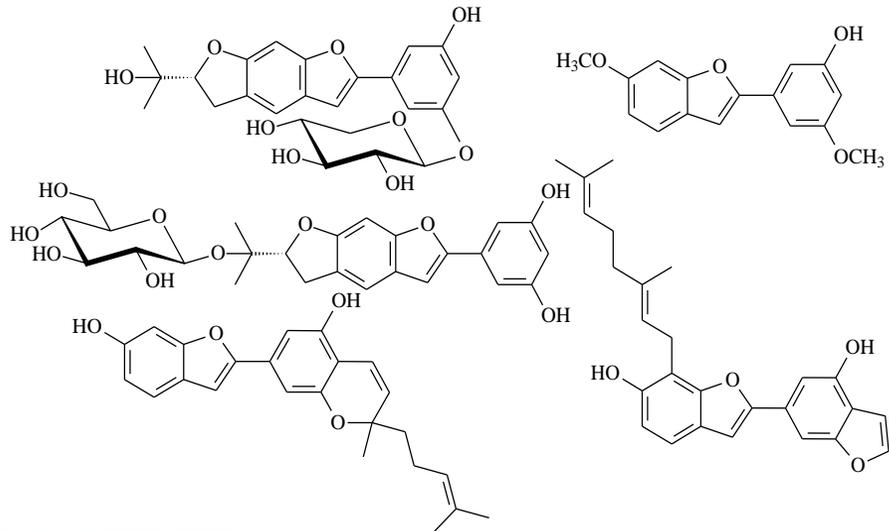


Department of Pharmacy (藥學系)
College of Pharmaceutical Sciences (藥科院)

Yang Ming Chiao Tung University,
Taiwan

Institute of Traditional Medicine
Faculty and research direction

傳統醫藥研究所



Fang-Pey Chen, Professor & Director
Acupuncture clinical effect,
Analysis of database of national health insurance,
Comparison of Eastern & Western Natural Philosophy



Shu-Ling Fu, Professor
Anticancer natural products and herbs,
Anti-aging natural products and herbs



Chung-Hua Hsu, Professor
TCM clinical trials in cancer and addiction,
TCM theory, Herbal Medicine



Tung-Hu Tsai, Professor
Pharmacology, Pharmacokinetics,
Pharmaceutical Analysis



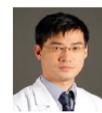
Keng-Li Lan, Professor
Drug Formulation, Targeted Cancer Therapy,
Cancer Immunotherapy



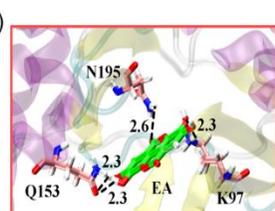
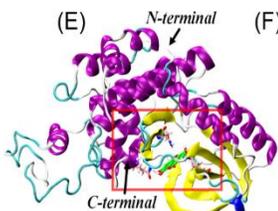
Tung-Yi Lin, Associate Professor
Herbal Medicine, Cancer Biology,
Protein Degradation, Signal Transduction



Yen-Ying Kung, Associate Professor
TCM clinical research on allergy and autoimmune disease,
Integration of TCM and artificial intelligence



Ching-Mao Chang, Assistant Professor
Using objective measurement signals such as TCM constitution,
tongue diagnosis, pulse diagnosis, heart rate variation to apply
the association research on Sjögren syndrome and Dry eye syndrome



Binding affinity: -8.7 kcal/mol



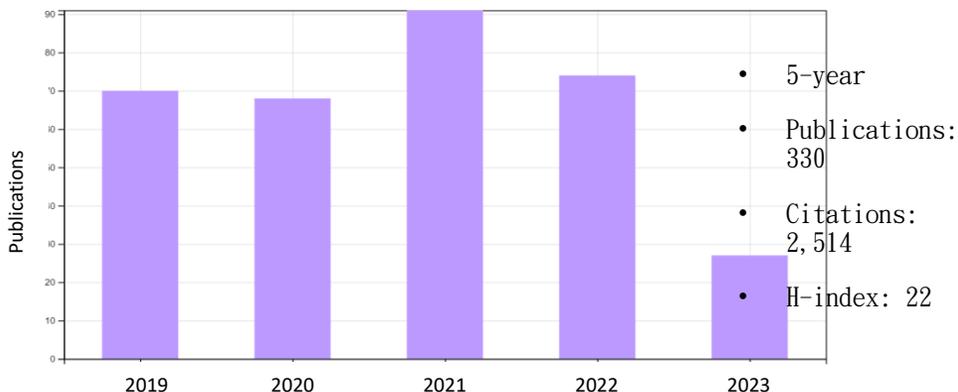
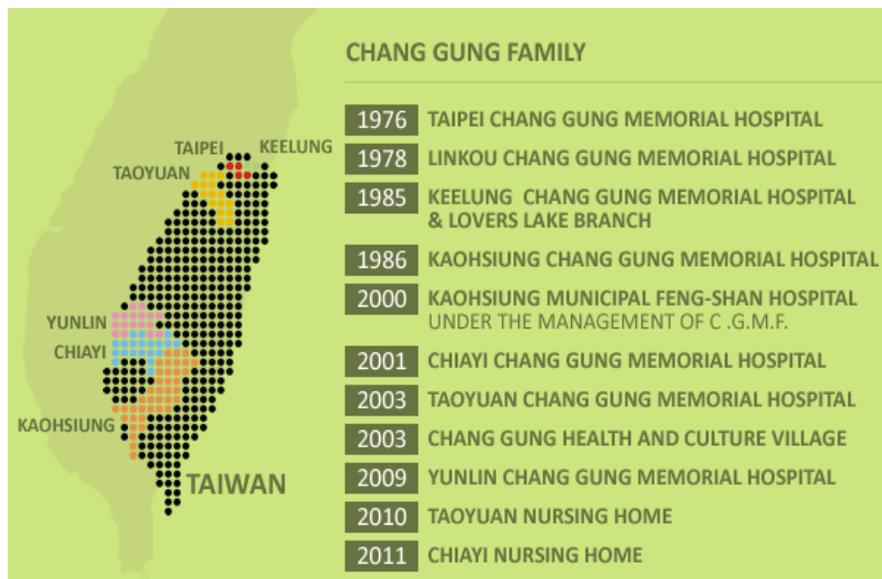
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長庚醫療財團法人
Chang Gung Medical Foundation

Center for Traditional Chinese Medicine, Chang Gung Memorial Hospital, Taiwan



No	Year	Author	Authorship	Journal	IF (2021)
1	2023	Huang TH	1st	EXPERT OPINION ON DRUG DELIVERY	6.6
2	2022	Chen HY	Corresponding	HEPATOLOGY INTERNATIONAL	9.029
3	2021	Gao DY	1st	BRITISH JOURNAL OF PHARMACOLOGY	8.740
4	2021	Chen HY	1st	CLINICAL NUTRITION	7.325
5	2021	Yang CC	1st	JOURNAL OF INFLAMMATION RESEARCH	6.922
6	2021	Zheng SZ	Corresponding	CELLS	6.6
7	2021	Huang TH	1st	JOURNAL OF GINSENG RESEARCH	6.3
8	2021	Huang TH	Corresponding	PHYTOMEDICINE	7.9
9	2021	Huang TH	1st	CELLS	6.6
10	2020	Chen JL	1st	JOURNAL OF NEUROINFLAMMATION	8.322
11	2020	Yang CC	1st	JOURNAL OF INFLAMMATION RESEARCH	6.922
12	2020	Yang CC	1st	JOURNAL OF INFLAMMATION RESEARCH	6.922
13	2020	Chen YS	Corresponding	JOURNAL OF MEDICAL INTERNET RESEARCH	5.428
		Yeh BY	1st		
14	2019	Zheng WZ	1st	FRONTIERS IN IMMUNOLOGY	7.561
15	2019	Chen YS	1st	CELLS	6.6



Chung Hsing University



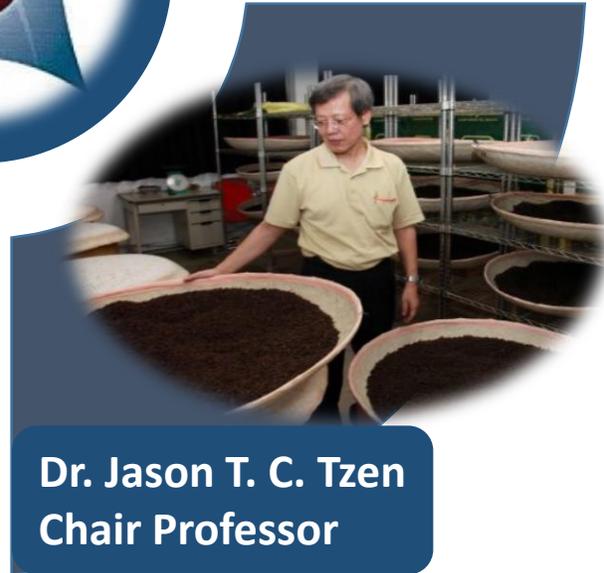
Dr. Sheng Yang Wang
Distinguished Professor



Dr. Nai Wen Tsao
Assistant Professor



Dr. Gow Chin Yen
Chair Professor



Dr. Jason T. C. Tzen
Chair Professor

College of Agriculture and Natural Resources Academy of Circular Economy



- Deciphering the composition of phytoncides and exploring their potential therapeutic activities.
- Investigation of the heartwood formation mechanism and biosynthesis of extractives in *Taiwania cryptomerioides*.
- Deciphering the regulation activity on SARS-CoV-2 spike protein-mediated metabolic alteration in THP-1 cells explored by the ¹H-NMR-based metabolomics approach.

- Developing functional foods to regulate colitis through gut bacteria.
- Studying the inhibition and mechanisms of functional foods on pancreatic cancer.
- Researching the effects of the teaghrelin on the human body.
- Investigating the activity analysis of traditional Chinese herbal medicines.



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China Medical University, Taiwan



The Symbol of Quality Award

2019

Integrating Chinese medicine and western medicine to manage pediatric growth and development" Program

2022

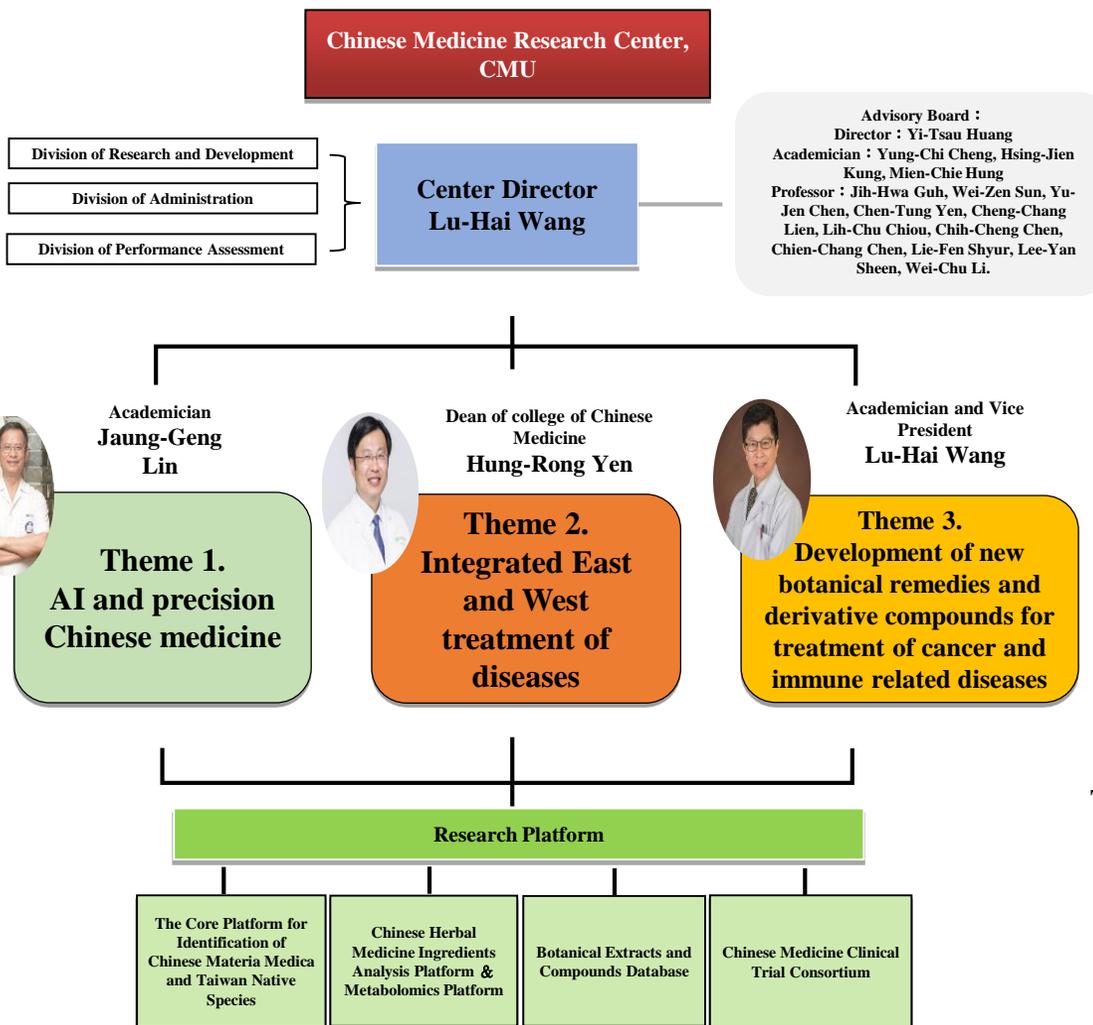
Integrating Chinese medicine and western medicine to manage pediatric allergic disorders" Program

The Innovation Award



2022

- Improvement the quality of Taiwan's indigenous Chinese herbal medicine Qing-dai for autoimmunity modulation
- Translational Application of the Humanized anti-CD24 Monoclonal Antibody as a targeted cancer therapy
- Clinical Innovation Award : Optical Acupuncture automatic counting and collection box

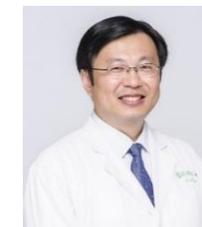


Development of **New Curcuminoids** as Anti-Cancer Drug Candidates



Prof. Sheng-Chu Kuo

New Drug Development from **Indigo Naturalis** for targeting IL-17 in psoriasis



Prof. Hung-Rong Yen

The **orexin-endocannabinoid** pathway in the periaqueductal grey mediates electroacupuncture analgesia



Prof. Yi-Hung Chen



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高雄醫學大學 Kaohsiung Medical University

1. Establish unique plant extract libraries and high-throughput high-content bioimage platforms screening.
2. Discovery of novel agents on topics of (1) neuroprotection, (2) anticancer; (3) immunomodulation, (4) antiplatelet, (5) metabolic disorders, and (6) new emerging pathogens from natural occurring substances .
3. Investigation of TCM formulas prescription in Taiwan.





Prof. I-Hsin Lin
Director,
School of Post-Baccalaureate
Chinese Medicine,
Tzu Chi University



2022

Lower risk of ischemic stroke among patients with chronic kidney disease using chinese herbal medicine as add-on therapy: A real-world nationwide cohort study.

Jing Si Herbal Drink as a prospective adjunctive therapy for COVID-19 treatment: Molecular evidence and mechanisms.

Efficacy of Acupoint Stimulation as a Treatment for Uremic Pruritus: A Systematic Review and Meta-analysis.

Clinical Efficacy and Safety of Chinese Herbal Medicine in the Treatment of Uremic Pruritus: A Meta-Analysis of Randomized Controlled Trials.

2021

Tanshinone IIA shows higher antiproliferative activities than sinapic acid in 4 cancer cell lines and simultaneously induces apoptosis and necroptosis in human lung cancer A549 cell.

Western and Complementary Alternative Medicine Treatment of Uremic Pruritus: A Literature Review.

Movement-based mind-body interventions for cardiac rehabilitation: An updated systematic review of randomized controlled trials.

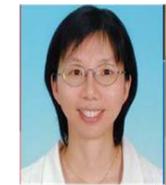
Taipei consensus on integrative traditional Chinese and Western Medicine

2020

Prescription Patterns of Wu Lin San Concentrated Extract Product for Cystitis in Taiwan: A Population-Based Study

2018

Asatone Prevents Acute Lung Injury by Reducing Expressions of NF- κ B, MAPK and Inflammatory Cytokines



Shan-Hui Hsu
Distinguished Professor, Institute of Polymer Science and Engineering, National Taiwan University



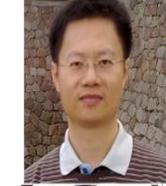
Shang-Chih Lai
Adjunct Assistant Professor, Tzu Chi University School of Post-Baccalaureate Chinese Medicine



Yin-Jeh Tzeng
Associate Professor, Department of Molecular Biology and Human Genetics, Tzu Chi University



Tsung-kai Wen
Adjunct Assistant Professor, Tzu Chi University School of Post-Baccalaureate Chinese Medicine



Yen, Shi-Jim
Department of Computer Science and Information Engineering, National Dong Hwa University,



Cheng-Chan Yang
Department of Chinese Medicine, Taipei Tzu Chi Hospital



Paul Wang
Epidemiology and Biostatistics Consulting Center, Hualien Tzu Chi Hospital



Chueh-Yu Lin
Adjunct Assistant Professor, Tzu Chi University School of Post-Baccalaureate Chinese Medicine



Tung-Wu Chang
Division of Crop Improvement, Hualien District Agricultural Research and Extension Station, Council of



Ping-Hsun Lu
Department of Chinese Medicine, Taipei Tzu Chi Hospital



Tai-Chu Peng
Department of Nursing, Tzu-Chi University

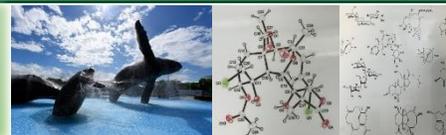


Hsuan-Shu Shen
Department of Chinese Medicine, Taipei Tzu Chi Hospital



Museum of Marine Biology & Aquarium

Planning & Research Division



Marine Natural Products



Research Expertise

Research Subject

Ping-Jyun Sung



- 1. Marine Natural Products Chemistry
- 2. Structural Elucidation of Organic Compounds
- 3. Chromatography

- 1. Studies on the bioactive natural products from marine invertebrates

Mei-Chin Lu



- 1. Development of Anticancer Drug Candidate from Marine Natural Products
- 2. Molecular Biology
- 3. Tumor Biology

- 1. Anticancer and Immunomodulatory Mechanisms of *Antrodia camphorata* on Chemotherapy and Immunotherapy
- 2. Anticancer mechanism of the marine natural products in *in vitro* celluler and *in vivo* xenograft animal model

Jui-Hsin Su



- 1. Natural products chemistry
- 2. Structural elucidation of organic compounds

- 1. Study on the bioactive natural products from the sponges and octocorals and investigation on the synthesis and bioactivities of related analogues

Jimmy Kuo



- 1. Marine Microbiology
- 2. Bioinformatics
- 3. Biochemical Engineering

- 1. Isolation and Screening Marine Microorganisms for Novel Natural Products
- 2. The Bacterial Community Composition and Structure of Water from an Aquaculture System
- 3. Analysis of Codon Usage Pattern of Bacterial Genomes



Memoregain® TLCT Plus

(*Cistanche tubulosa* extracts)

- ✓ **39 patents granted in 17 countries:** prevent and treatment dementia, enhance memory in healthy people, promote neurite outgrowth, regulate blood glucose, protect muscle damage etc.
- ✓ **6 SCI publication**

Prodemax™

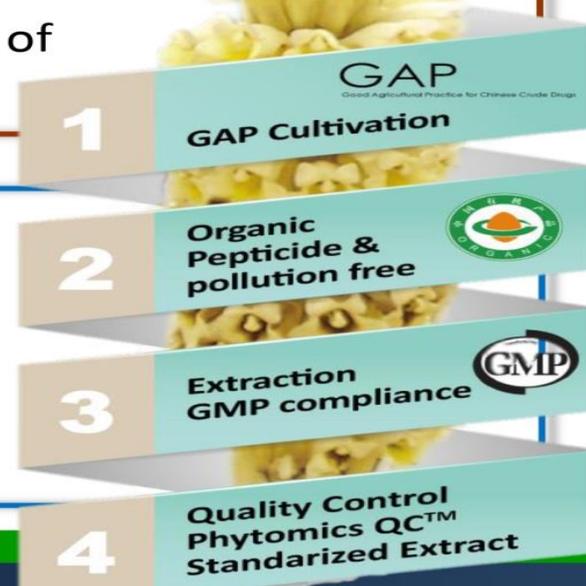
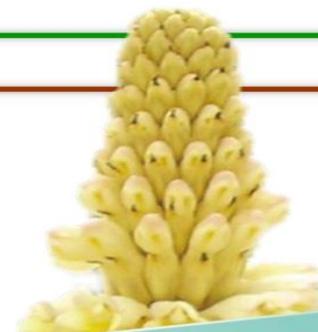
(Walnut oligopeptide)

- ✓ **8 patents pending:** manufacture process, anti-PM2.5, anti-fatigue
- ✓ **1 SCI publication :** A simple and convenient method for the preparation of antioxidant peptides from walnut (*Juglans regia* L.) protein hydrolysates.

Lipucan®

(*Poria cocos* triterpene)

- ✓ **59 patents granted in 17 countries:** enhance nutrients absorption, enhance immunity, anti-asthma, anti-cachexia, anti-lung cancer, and anti-diabetes etc.
- ✓ **2 SCI publication**





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CONSORTIUM FOR GLOBALIZATION OF CHINESE MEDICINE

SUN TEN PHA MACEU ICAL CO., LTD.

About Sun Ten

- Philosophy** : All nature-made, authentically preserved, efficacious and safe herbal extracts to safeguard your health.
- Founder** : Dr. Hong-Yen Hsu, Father of Scientific Chinese Herbal Extracts in Taiwan.
- Establish in** : 1946, over 70 years.
- Products Portfolio** : Traditional Chinese Herbal Extracts, Quality Medicinal Chinese Herbs, Over the Counter Products, ODM & OEM service.
- Global Distribution** : More than 20 countries, including the United States, Canada, Japan, Malaysia, Singapore, Australia, New Zealand, Switzerland, Germany, United Kingdom, Ireland, Sweden, Macau, Indonesia, etc.

Manufacturing Excellence

Sun Ten is a leading manufacturer of traditional Chinese herbal extracts, producing dosage forms of powder, granule, tablet, capsule, honey pills and so on. As a manufacturer, Sun Ten also functions as full service OEM/private-label and ODM with well-experienced research and development expertise.

Testing Standard



Raw Material Superiority

Supplier Management

Only obtain the raw materials from contracted suppliers or private grower who strictly follow Sun Ten quality standards. Herb authenticity and quality are secured.

Source Management

Traceability & Transparency for every batch.

Herb Sourcing Team

On-site quality inspection, suppliers and partner survey are conducted every year.

Quality Warranty with Advanced Facility



RD / QC
Certificate



Testing Laboratory
3009



HALAL Certification

Japan Accreditation
Certification of Foreign
Drug Manufacturer

APP





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CONSORTIUM FOR GLOBALIZATION OF CHINESE MEDICINE

3i Plant Factory Group (3i Herbal Plant Factory)



Production no pesticides, no heavy metals Chinese herbal medicine
無農藥、無重金屬藥用植物

Industrial-scale production of high-quality Chinese herbal medicine
產業量化規模生產高質量藥用植物

Our Goals
企業使命

Promote market development of Chinese herbal medicine
促進藥用植物市場發展

Promote development of Chinese herbal medicine internationally
促進中草藥全球化市場的流通



The world's first mass-produced *Anoectochilus*, *Dendrobium* and *Antrodia cinnamomea* plant factory



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CONSORTIUM FOR GLOBALIZATION OF CHINESE MEDICINE

Greetings !
from Chairman Jaung-Geng Lin,
Chinese Traditional Medicine Research and
Development Foundation (Taiwan)



Extend the Heartfelt Congratulations and Best Wishes
for the Complete Success of **CGCM 2023.**

