



中药全球化联盟

CONSORTIUM FOR GLOBALIZATION OF CHINESE MEDICINE

CGCM 20th 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

Henqin

2024/08/20-22



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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



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



臺北醫學大學
TAIPEI MEDICAL UNIVERSITY



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



高雄醫學大學
Kaohsiung Medical University



中央研究院
ACADEMIA SINICA



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



杏輝醫藥集團
SINPHAR GROUP

3i Smart Plant Factory
三宜智能型植物工廠



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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Board of Directors



Chairman

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

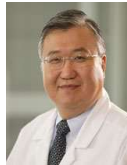


Vice Chairman

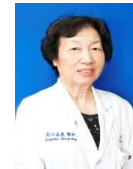
Chairman, CGCM Taiwan Chapter

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)



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Department of Chinese Medicine and Pharmacy (MOHW)

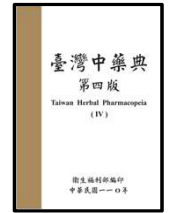


- The combined treatment model between western medicine (WM) and traditional Chinese medicine (TCM)-chronic wounds, stroke, cancer, infertility, etc.
- Standardization of terminologies for TCM symptoms
- Construction of tongue diagnosis database

Strengthening of TCM professional competency and continuous medical education

Improving TCM product quality & safety management

- Established THP (Taiwan Herbal Pharmacopoeia) 5rd Editing Committee in 2022
- Publication of 4rd Edition THP in 2021
 - New adapted 3 single herb monographs and 7 concentrated preparations
- regulatory limitation of abnormal substances (heavy metals, aflatoxins, sulfur dioxide, and pesticide residue) in TCM raw materials and products



- Continuously publishing JTCCM
- International exchanges with New Southbound Policy countries

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

TCM international interactions & promotion of industry innovation and research



ADR site

- Creation of Taiwan Herbal Pharmacopoeia and Drug Herb Interaction Database
- TCM Adverse Drug Reactions Reporting System





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NRICM

Division of Basic Chinese Medicine

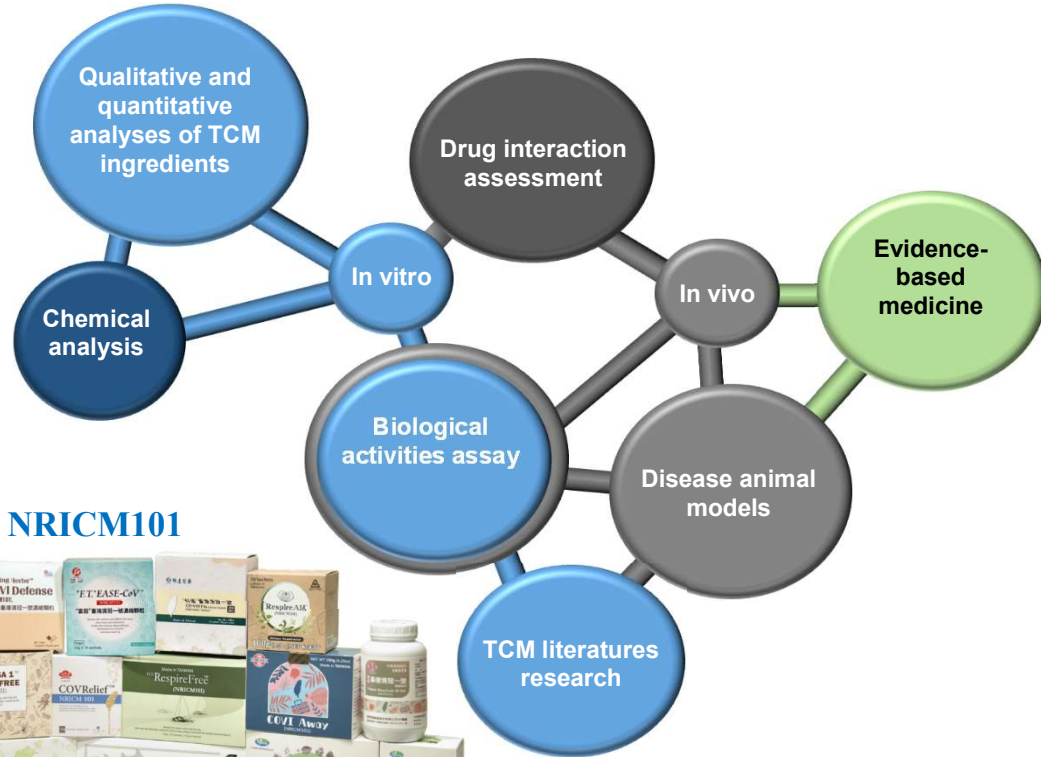


Division of Chinese Materia Medica Development

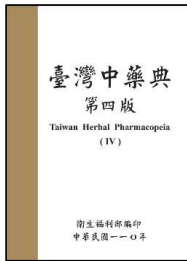
Division of Clinical Chinese Medicine

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>)



NRICM101



- ◆ More than 200 TCM items were studied. (2014 – 2024)
- ◆ 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



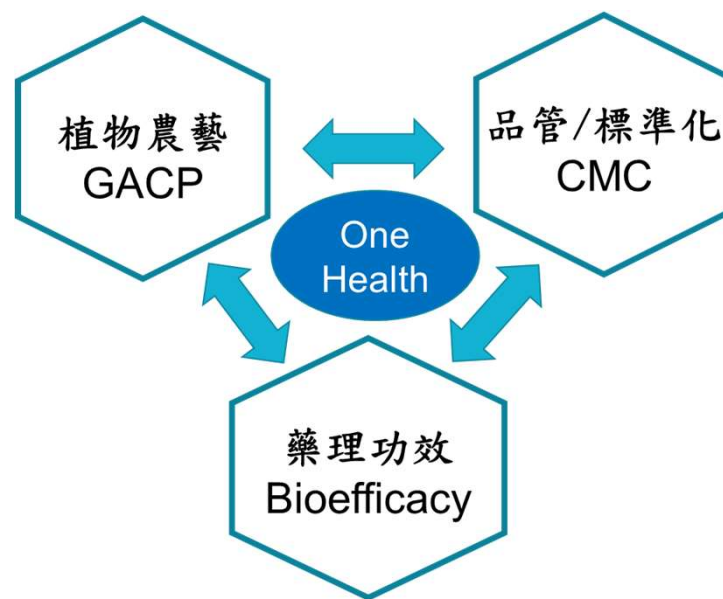
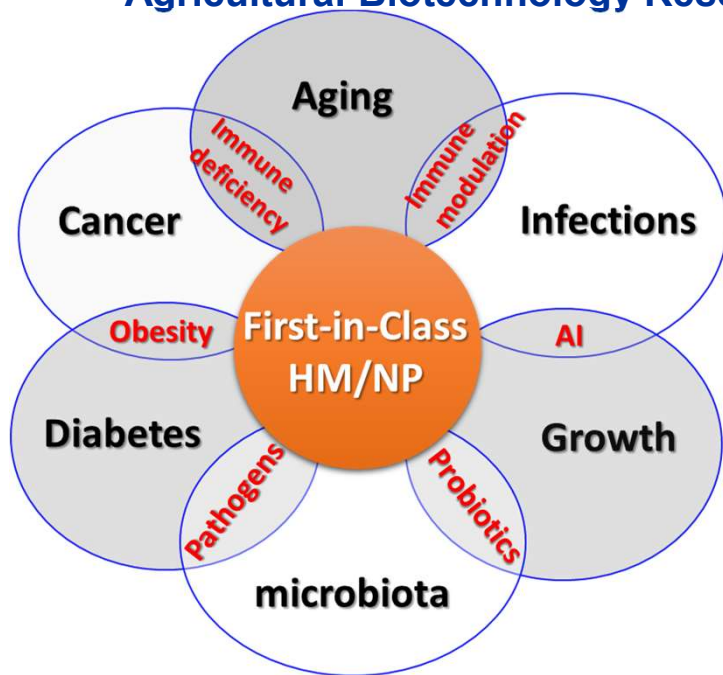
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R&D of phytomedicines for human and animal healthcare

Agricultural Biotechnology Research Center, Academia Sinica, Taipei



Herbal medicine (HM)/Natural product (NP)

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



Lie-Fen Shyur



Wen-Chin Yang



Pei-Wen Hsiao



Yu-Liang Yang



Yu-Ling Lin



Hui-Ming Chen



Tai-Na Wu



Yu-Chuan Liang



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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



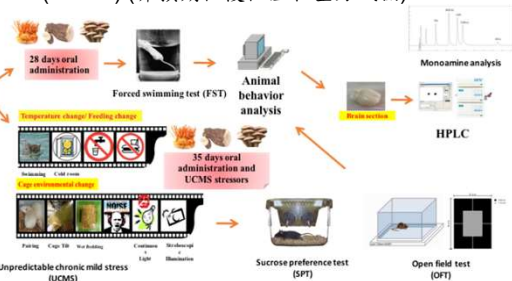
Investigating the antidepressant-like effects of mushrooms (菇類) and *Gastrodia elata* Blume (天麻) in stress-induced rat models, alongside an evaluation of their safety.

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)

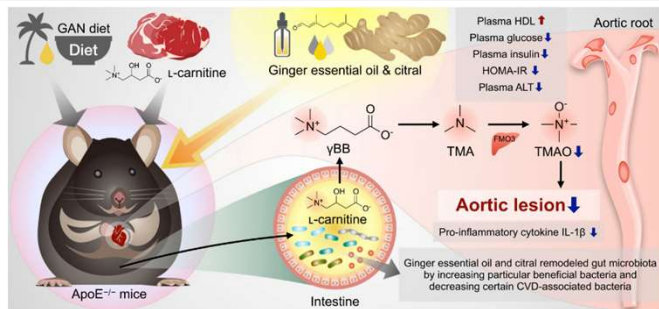
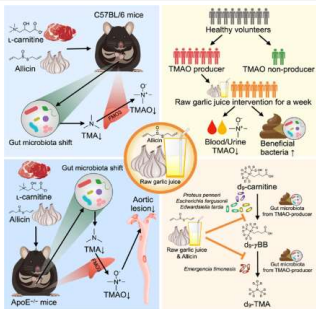
28-day subacute oral toxicity assessment (28天亞急性毒性試驗)



Genotoxicity assays 基因毒性試驗

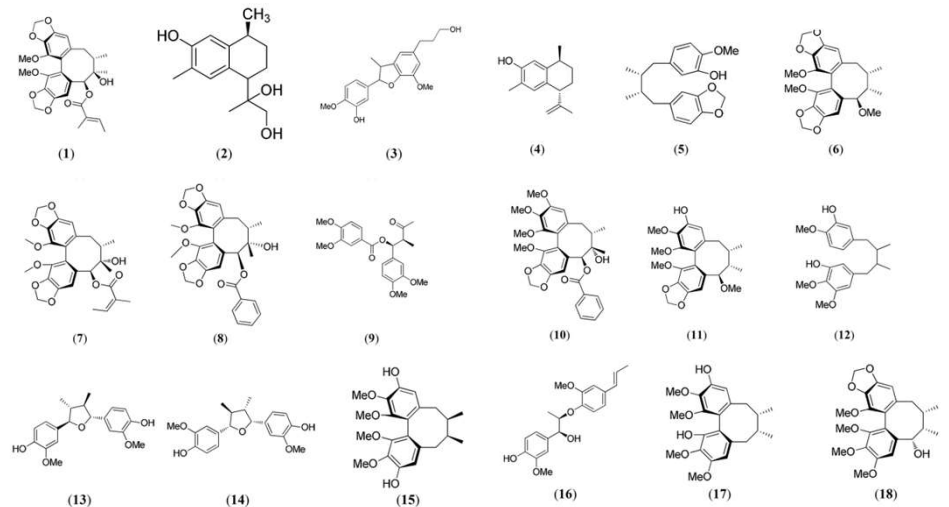


Investigating the effects of functional foods, specifically garlic (大蒜) and ginger essential oil (薑精油), on cardiovascular disease prevention through gut microbiota-host interaction.



Prof. Shen's research subjects :

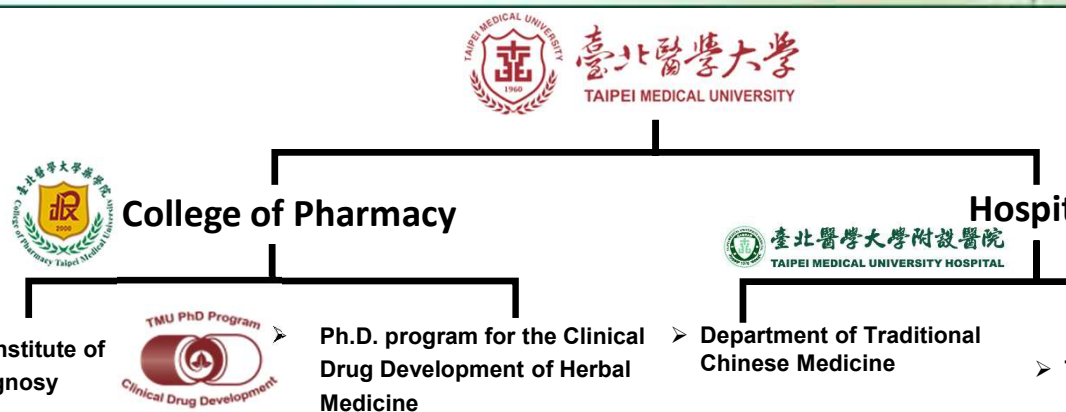
In addition to eighteen known compounds, three new compounds have been isolated from the stems of *Schisandra arisanensis* Hayata, an endemic species in Taiwan. Compound **1** is a dibenzocyclo-octadiene lignan with C18 skeleton. Compound **2** is a sesquiterpene. Compound **3** is a dihydrobenzofuran 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.





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Research areas	Clinical herbal medicine translational research and development							
	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: 01/01/2023~08/16/2024

Institution	0<=IF<5	5<=IF<10	IF>=10	number of articles	Average of IF
Graduate Institute of Pharmacognosy	34	37	4	75	5.409
Ph.D. program for the Clinical Drug Development of Herbal Medicine	32	31	3	66	5.055

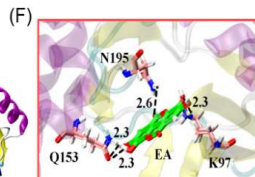
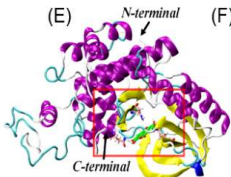
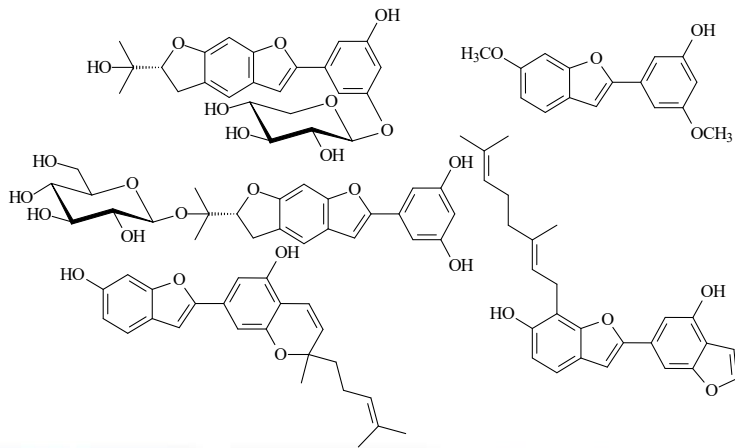


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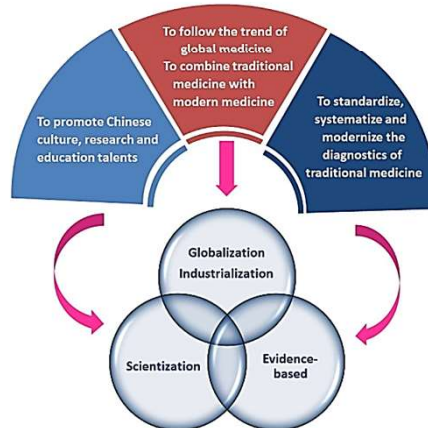
(2) Department of Pharmacy (藥學系) College of Pharmaceutical Sciences (藥科院)



Binding affinity: -8.7 kcal/mol

陽明交通大學

(3) School of Chinese Medicine (中醫系)-est. 2024



(1) 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



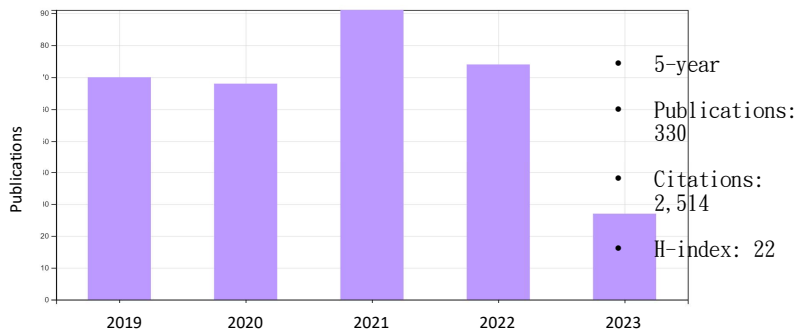
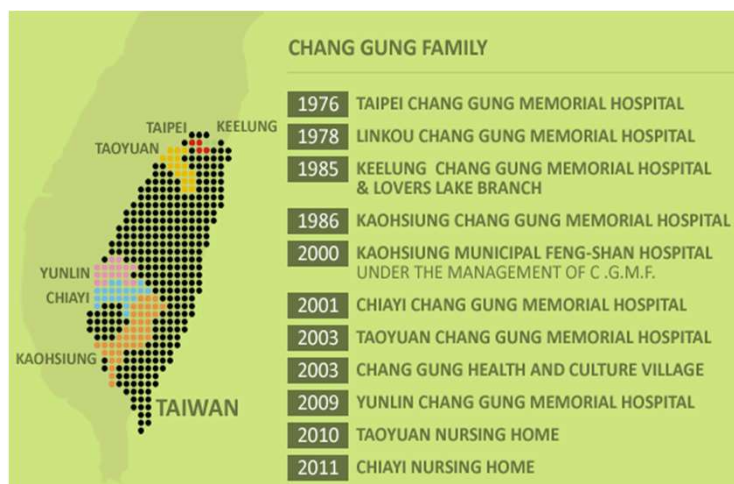
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長庚醫療財團法人
Chang Gung Medical Foundation

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 Yeh BY	Corresponding 1st	JOURNAL OF MEDICAL INTERNET RESEARCH	5.428
14	2019	Zheng WZ	1st	FRONTIERS IN IMMUNOLOGY	7.561
15	2019	Chen YS	1st	CELLS	6.6



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Chung Hsing University

- 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.



Dr. Sheng Yang Wang
Distinguished Professor



Dr. Gow Chin Yen
Chair Professor

College of Agriculture and Natural Resources
Academy of Circular Economy

- 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.



Dr. Nai Wen Tsao
Assistant Professor



Dr. Jason T. C. Tzen
Chair Professor



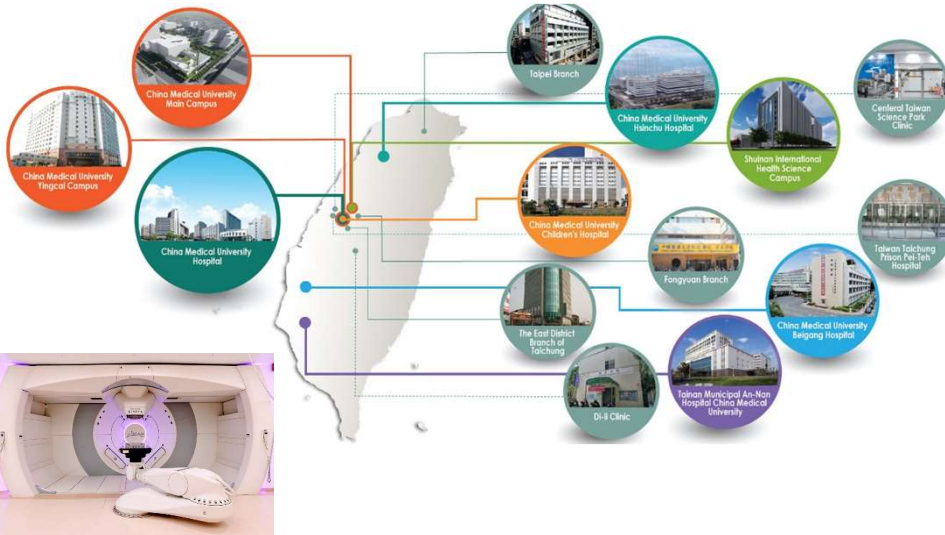


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China Medical University and Hospitals



Chinese Medicine Research Center, CMU

Center Director
Lu-Hai Wang

Academician
Jaung-Geng Lin

Dean of college of Chinese Medicine
Hung-Rong Yen

Academician and Vice President
Lu-Hai Wang

Theme 1.
AI and precision Chinese medicine

Theme 2.
Integrated East and West treatment of diseases

Theme 3.
Development of new botanical remedies and derivative compounds for treatment of cancer and immune related diseases

Research Platform

The Core Platform for Identification of Chinese Materia Medica and Taiwan Native Species

Chinese Herbal Medicine Ingredients Analysis Platform & Metabolomics Platform

National Botanical Extracts and Compounds Database

National Chinese Medicine Clinical Trial Consortium

China Medical University Hospital's Achievements of Smart Hospital Initiatives

- 20 patents on diseases treatment
- 8 Academic/Industrial collaboration on new drug development



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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.





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



Chief. Hsien-Chang Wu
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



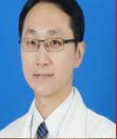
Paul Wang
Epidemiology and Biostatistics Consulting Center, Hualien Tzu Chi Hospital



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



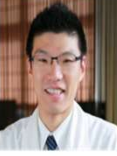
Tung-Wu Chang
Division of Crop Improvement, Hualien District Agricultural Research and Extension Station, Council of



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



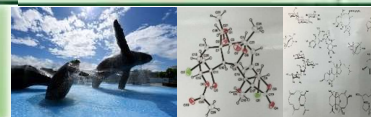
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Museum of Marine Biology & Aquarium

Planning & Research Division



Marine Natural Products

Sampling

Identification

Culture

Extraction

Purification

Structure id

Bio-screening

Animal test

Amplify

Lead drugs

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



杏輝醫藥集團
SINPHAR GROUP

Organic farm & Phytonutrient



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**



- 1** GAP
GAP Cultivation 
- 2** Organic
Peptide &
pollution free 
- 3** Extraction
GMP compliance 
- 4** Quality Control
Phytomics QC™
Standardized Extract



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SUN TEN PHARMACEUTICAL 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



Japan Accreditation Certification of Foreign Drug Manufacturer

APP





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



<p>Production no pesticides, no heavy metals Chinese herbal medicine 無農藥、無重金屬藥用植物</p>	<p>Industrial-scale production of high-quality Chinese herbal medicine 產業量化規模生產 高質量藥用植物</p>
<p>Our Goals 企業使命</p>	
<p>Promote market development of Chinese herbal medicine 促進藥用植物市場發展</p>	<p>Promote development of Chinese herbal medicine internationally 促進中草藥全球化市場的流通</p>



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



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Greetings !

From Prof. Yi-Tsau Huang

**Extend the Heartfelt Congratulations and Best Wishes for the Complete Success of
CGCM 2024.**

