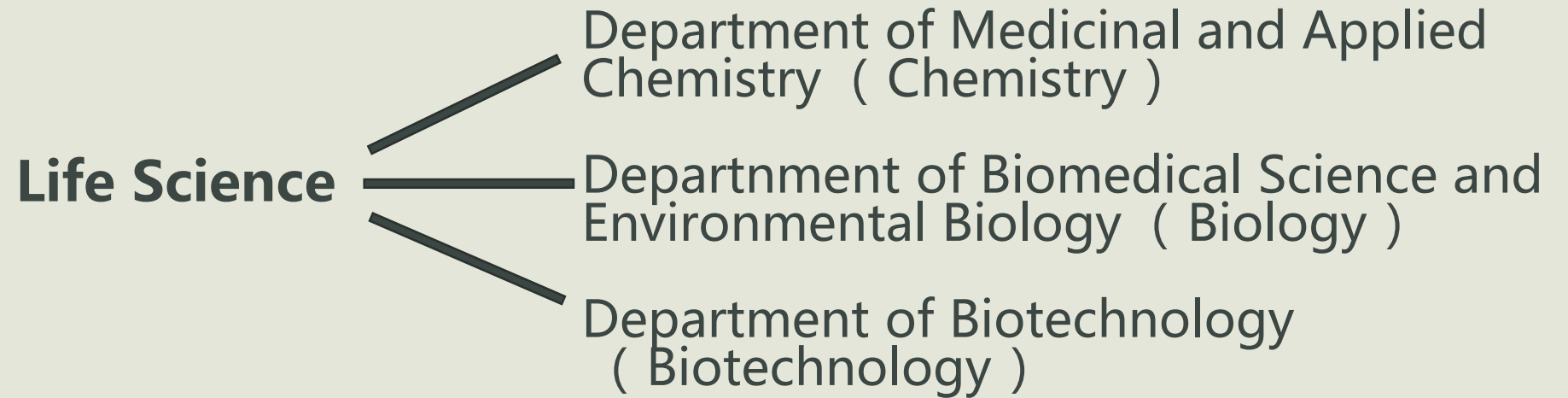


Bachelor Program in Life Science



THEME: Data Integration of Professors of Life Science.

Chemistry (21 Professors)

- **Professors**

Chai-Lin Kao, Jeh-Jeng Wang, Li-Fang Wang, Yeh-Long Chen,
Meng-Yang Chang, Sodio C. N. Hsu, Po-Yu Chen, Chih-Kuang Wang,
Hsing-Yin Chen, Hsuan-Ying Chen, Genin Gary Huang

- **Associate Professors**

Long-Chin Hwang, Tzu-Pin Wang, Wei-Yu Lin, Vinoth Kumar

- **Assistant Professors**

Po-Jui Huang, Tsai-Hui Duh, Hui-Fen Chen, Chien-Hung Li,
Chia-Hsiang Chen, Wei-Peng Li

Chai-Lin Kao Professor



E-mail : clkao@kmu.edu.tw

Telephone : 07-312110 ext 2620

Lab : N848

- Academic Interests:
Applications and Synthesis of Dendrimers Solid-phase Synthesis of Peptide and Dendrimers、 Development of Peptide Drugs
- Recent Publications(Link): [recent publications web page](#)

Jeh-Jeng Wang Professor



E-mail : jjwang@kmu.edu.tw
Telephone : 07-3121101 ext 2275
Lab: N842

- Academic Interests:
Drug Design and Synthesis, Organic Synthesis, Structural Biology

• Recent Publications:

-G. Kim, A. Kirschning, P. Bergon, Y. Ahn, **J. J. Wang**, M. Shibuya and H. G. Floss, "Formation of 3-amino-5-hydroxybenzoic Acid, the Precursor of mC₇N Units in Ansamycin Antibiotics, by a New Variant of the Shikimate Pathway", *J. Amer. Chem. Soc.* **1992**, *114*, 4941~4943.

J. Wang, G. C. Hill, and L. H. Hurley, "Template-directed Design of a DNA-DNA Cross-linker Based upon a Bis-Tomaymycin-Duplex Adduct", *J. Med. Chem.* **1992**, *35*, 2995~3002.

Li-Fang Wang Professor



E-mail : lfgang@kmu.edu.tw
Telephone : 07-3121101 ext 2217
Lab: N832

- Academic Interests :

1. Development of Polymeric Nanoparticles Based on Natural Polysaccharides for Anticancer Drug and/or Nucleic Acid Drug Delivery
2. Construction of Magnetic Iron Oxides for Theranostic Applications
3. Synthesis of Amphiphilic Block Copolymers Containing Disulfides Via ROP and ATRP for Multifunctional Biomedical Applications

- Recent Publications :

Venkatesh Ravula, Yu-Lun Lo, **Li-Fang Wang***, and Srilakshmi V. Patri*, "Gemini lipopeptide bearing an ultrashort peptide for enhanced transfection efficiency and cancer-cell-specific cytotoxicity" ACS Omega, 2021, **6(35)**, 22955-22968.

Yeh-Long Chen Professor



E-mail: yeloch@kmu.edu.tw

Telephone: 07-3121101 ext 2684

Lab: N844

- Academic Interests:

Design and Synthesis of New Heterocyclic Derivatives to Explore Their Physical and Chemical Properties, and Research Their Development into Anticancer, Antibacterial or Antiviral Drugs

- Recent Publications:

Liu FC, Yu HP, Chen PJ, Yang HW, Chang SH, Tzeng CC, Cheng WJ, Chen YR, **Chen YL**,* Hwang TL* "A novel NOX2 inhibitor attenuates human neutrophil oxidative stress and ameliorates inflammatory arthritis in mice" *Redox Biology*, **2019**, *26*, 101273. (SCI, IF₂₀₁₈ = 7.793; 28/298, BIOCHEMISTRY & MOLECULAR BIOLOGY)

Meng-Yang Chang Professor



E-mail : mychang@kmu.edu.tw
Telephone : 07-3121101 ext 2220
Lab: N837

- Academic Interests :

Using Unusual Base Acids as Neighbors, and Shortening the Key Steps of The Ring or Ring Reaction in a Special Way, and Focusing on The Atomicity of The Arylalkyl Ring, the Names of The Groups Using Them Were Named Respectively. Items or Entry Carbon Chains to Develop New Methods to Design and Synthesize Different Known Drugs or Natural

- Recent Publications:

Chang, M.-Y.*; Tsai, Y.-L.; Chang, Y.-L. *J. Org. Chem.* **2020**, *85*, 1033-1043. "Gram-Scale Synthesis of 3-Sulfonyl Flavanones"

Chang, M.-Y.*; Chen, K.-T.; Hsiao, Y.-T.; Chen, S.-M. *J. Org. Chem.* **2020**, *85*, 3605-3616. "Ac₂O-Mediated Dearylacetylation Dimerization of 2-Arylacetyl-1-naphthols. Synthesis of Naphtho[1,2-*b*]furan-3-ones"

Sodio C. N. Hsu Professor



E-mail : sodiohsu@kmu.edu.tw

Telephone: 07-3121101 ext 6984

Lab: N833

- Academic Interests :

1. Design and Synthesis of Copper Coordination Compounds Mimic Copper Chemistry in Biological
2. Systems Self-assembly Chemistry of Metal Cyano Groups and Isocyano Groups

- Recent Publications :

Chand, K.; Chu, Y.-C.; Wang, T.-W.; Kao, C.-L.; Lin, Y.-F.*; Tsai, M.-L.*; **Hsu, S. C. N.***, Nitric oxide generation study of unsymmetrical β -diketiminato copper(II) nitrite complexes. *Dalton Trans.* **2022**, Accepted Manuscript, DOI: 10.1039/D1DT03711K

Narwane, M.; Dorairaj, D. P.; Chang, Y.-L.; Karvembu, R.; Huang, Y.-H.; Chang, H.-W.*; **Hsu, S. C. N.***, Tris-(2-pyridyl)-pyrazolyl Borate Zinc(II) Complexes: Synthesis, DNA/Protein Binding and In Vitro Cytotoxicity Studies. *Molecules*, **2021**, *26*, 7341.

Po-Yu Chen Professor



E-mail : pyc@kmu.edu.tw

Telephone : 07-3121101 ext 2587

Lab: N834

- Academic Interests :

1. Preparation of Nanomaterials Via Electrochemical Techniques in Ionic Liquids for Applications of Sustainable Energy and Chemical Analysis
2. Integrating Electrochemical Techniques and Ionic Liquids to Develop Sustainable Techniques for Recovering Metals from Metal Oxides
3. Preparation and Application of Ionic Liquid-graphene Composite Electrodes
4. Electrografted Electrodes for Applications in Energy, Chemical and Biochemical Analyses (Including Cancer Cell Detection)

- Recent Publications :

Nai-Chang Lo, I-Wen Sun*, **Po-Yu Chen***, "Electrochemical preparation of porous ZnCuNi by electrodeposition in ethaline deep eutectic solvent followed by anodic or cathodic dealloying in alkaline aqueous solutions for higher nitrate reduction activity" , *Journal of Electroanalytical Chemistry*, 890, 115256, (2021).

Chih-Kuang Wang Professor



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Telephone : 07-3121101 ext 2360 (Office)

07-3121101 ext 2677 (Lab)

Lab: N836

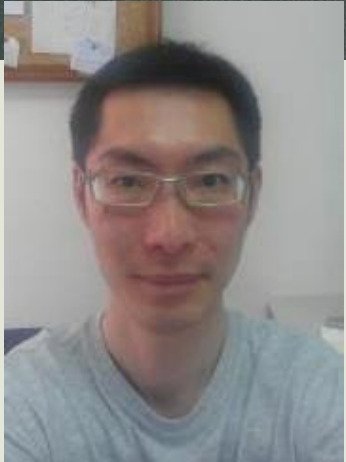
- Academic Interests :

1. Design and Fabrication of Scaffold Materials for Tissue Engineering of Bone & Cartilage (Especially We Have Developed 3D Ceramic Bio-ink for 3D Printing)
2. Polymeric Micelle Micro-, Nano-particle System for Drug/Gene Delivery
3. Other interesting at advanced materials

- Recent Publications :

Chih-Kuang Wang, Jiin-Huey Chern Lin*, Chien-Ping Ju, Hong Choon Ong and Robert P. H. Chang, "Structural characterization of pulsed laser-deposited hydroxyapatite on titanium substrate" , **Biomaterials**, 18:1331-1338, 1997. (IF: 604 at 2012, ranking:3/79=3.9% in ENGINEERING, BIOMEDICA)

Hsing-Yin Chen Professor



E-mail : hychen@kmu.edu.tw

Telephone : 07-3121101 ext 2807

Office: 2F, No. 72, Zizhong St., Sanmin Dist., Kaohsiung City

- Academic Interests :

1. Reductive and Oxidative DNA Damages
2. Fenton and Fenton-like Reactions
3. Chemical Reaction Mechanisms

- Recent Publications :

Hsing-Yin Chen,* Yu-Fen Lin, "DFT mechanistic study on the formation of 8-oxoguanine and spiroiminodihydantoin mediated by iron Fenton reactions" *Dalton Trans.* **2021**, 50, 9842-9850.

I-Chen Lu, Chia-Nung Tsai, Yu-Ting Lin, Shin-Yi Hung, Vincent P. S. Chao, Chi-Wei Yin, Dao-Wen Luo, **Hsing-Yin Chen**,* John F. Endicott, Yuan-Jang Chen,* "Near-IR Charge-Transfer Emission at 77 K and Density Functional Theory Modeling of Ruthenium(II)-Dipyrrinato Chromophores: High Phosphorescence Efficiency of the Emitting State Related to Spin-Orbital Coupling Mediation of Intensity from Numerous Low-Energy Singlet Excited States" *J. Phys. Chem. A* **2021**, 125, 903-919.

Hsuan-Ying Chen Professor



E-mail : hchen@kmu.edu.tw

Telephone : 07-3121101 ext 2585

Lab: N1131

- Academic Interests :

1. Design and Synthesis of Catalysts for Cyclic Ester Polymerization
2. Design and Synthesis of Novel Biodegradable Polymers
3. Study on Organic Coupling Reaction

- Recent Publications :

Yi-Chen Chan, Yuna Bai, Wen-Ching Chen, **Hsing-Yin Chen**, Chen-Yu Li, Ying-Yann Wu, Mei-Chun Tseng, Glenn P. A. Yap, Lili Zhao,* Hsuan-Ying Chen,* and Tiow-Gan Ong* *Angew. Chem. Int. Ed.* **2021**, *60*, 19949–19956.

Someswara Rao Kosuru, Feng-Jie Lai, Yu-Lun Chang, Chen-Yu Li, Yi-Chun Lai, Shangwu Ding, Kuo-Hui Wu,* **Hsuan-Ying Chen**,* and Yung-Han Lo *Inorg. Chem.* **2017**, *56*, 7998–8006.

Genin Gary Huang Professor

E-mail: genin@kmu.edu.tw

Telephone: 07-3121101 ext 2810

Lab: N1128



• Projects:

1. Fabrication and Application of Plasmonic Nanocomposites for Surface-enhanced Raman Scattering Spectroscopy (SERS).
2. The Application of Nanocomposite Substrates in Nanocatalysts and Chemical Sensing Materials.
3. Monitor Catalytic Reactions with Vibrational Spectroscopy and Predict Intermediates and Possible Mechanisms.
4. Development and Application of Electrochemical-vibrational Spectroscopy Interface System.
5. Development and Application of New Spectrochemical Sensors.
6. Fabrication and Application of Green Nanomaterials (e.g. carbon quantum dots).
7. Application of Vibrational Spectroscopy in Biomedical Sensing.

Long-Chin Hwang Associate Professor



E-mail : Inchhw@kmu.edu.tw
Telephone : 07-3121101 ext 2276
Office / Lab: N829 / N846

- Academic Interests :

1. Structural Analysis and Research on the Reaction Mechanism
2. Drug Design and Synthesis and Materials Science
3. Traditional Pharmaceutical Research and Health Promotion

- Recent Publications :

Long-Chih Hwang*, Shiun-Yau Yang, Chung-Lin Chuang and Gene-Hsiang Lee, "An Optimized Synthesis, Molecular Structure and Characterization of Benzylic Derivatives of 1,2,4-Triazin-3,5(2*H*,4*H*)-dione" , *Molecules*, **2017**, 22(11), 1924.

G.H. Lee, **L.C. Hwang***, "Crystal Structure of 2-[(2-Acetoxyethoxy)methyl]-3-amino-1,2,4-triazin-5(2*H*)-one" , *International Journal of Advanced Chemistry*, **2017**, 5(1), 35-38.

Tzu-Pin Wang Associate Professor



E-mail : tzupinw@kmu.edu.tw

Telephone : 07-3121101 ext 2756

Office / Lab: N817 / N835

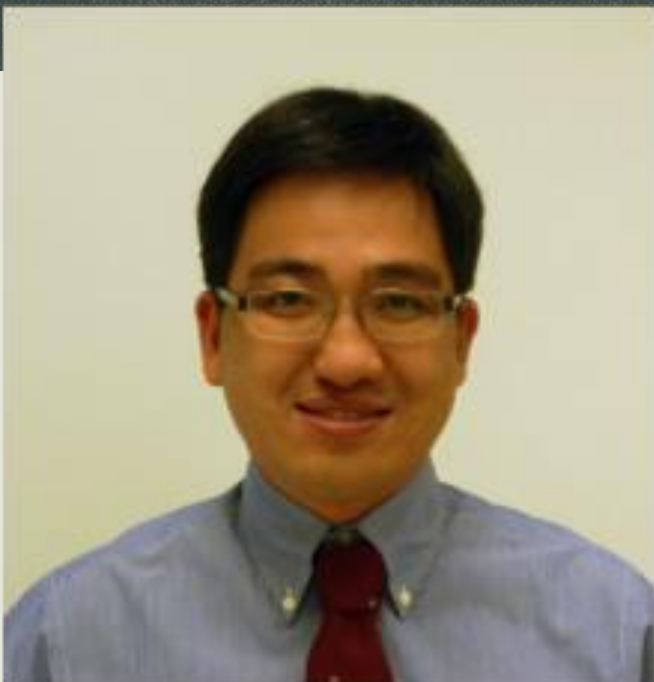
- Recent Publications :

Gong, M.-M., C.-Y. Dai, S. Severance, C.-C. Hwang, B.-K. Fang, H.-B. Lin, C.-H. Huang, C.-W. Ong, J.-J. Wang, P.-L. Lee and **T.-P. Wang***. (2020)

- Academic Interests :

1. Nucleic Acid Modifications for Biomolecule Detection and Quantification, and Nucleic Acid Therapeutics Development
2. Discovery of Novel RNA Catalysts and Aptamers
3. Organic Synthesis of Fluorescence Chemical Probes for Quantification of Enzyme Activity and Early Detection of Diseases in Human
4. Agarose Chemistry for Development of Agarose-based Biomaterials Useful in Biotechnology.

Wei-Yu Lin Associate Professor



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• Academic Interests :

1. Synthetic Organic Synthesis
2. Flow Chemistry for Rapid and High Efficiency Synthesis
3. Integrated Microfluidic Bio Chips
4. Biosensor
5. Bioorthogonal Reaction

• Recent Publications

Copper-Catalyzed Oxidative Cyclization of 2-amino-N-phenyl benzamide: Efficient Synthesis of Quinazolinone and Indazolone derivatives

Govindan, K.; Tamilseivan, D.; Alageswaran J.; Chandru, G.; **Lin, W. -Y.***Synthesis, **2022**. 54, 1115-1124

Vinoth Kumar Associate Professor



E-mail : kumar@kmu.edu.tw

Telephone : 07-3121101 ext 2219

Lab: N1117F

- Academic Interests :
Green Analytical Technology, Nano/Micro-Materials Technology
- Course : General Chemistry, Analytical Chemistry (Instrumental Analysis), Advanced Analytical Chemistry, Food Analysis and Quality Control, Advanced Chemistry Academic Writing

- Recent Publications :

Linjer Chen, **Vinoth Kumar Ponnusamy**, Shu-Ling Hsieh, Shuchen Hsieh, Chiu-Wen Chen, Cheng-Di Dong. Rapid Efficient Degradation Pathway of Tetracycline and Pb (II) Reduction Mechanism by a Novel Nanocomposite Heterojunction Photocatalysts. **Journal of Alloys and Compounds** (2021) 162015. (IF-5.316, MATERIALS SCIENCE, MULTIDISCIPLINARY, 2020, Q2, Rank: 97/333) DOI: 10.1016/j.jallcom.2021.162015; Available online: 2021/9/20

Po-Jui Huang Assistant Professor



E-mail : brhuang@kmu.edu.tw

Telephone : 07-3121101 ext 2681

Lab: N1127

- Academic Interests :

1. Chinese Herbal Medicine
2. Synthesis of Nanomedicines and Electrode Modifiers
3. Synthesis and Characterization of Ferrocene

- Recent Publications :

LeeKH,**HuangBR**(2003), "Three-dimensional pharmacophore mapping of certain anticancer γ -methylene- γ -butyrolactones." *Oncology Research incorporated with Anticancer Drug Design*, 13, 471-478.

DongTY,**HuangBR**,LinMC,andChiangMY(2003) "A functionalized pyridinyl ligand containing binuclear biferrocene" , *Polyhedron*, 22, 1199- 1204.

Tsai-Hui Duh Assistant Professor



E-mail : tshudu@kmu.edu.tw

Telephone : 07-3121101 ext 2682

Lab: N839

- Academic Interests :

Drug Analysis, Environmental Analysis, Toxic Analysis, Food Analysis, Liquid Chromatography Tandem Mass Spectrometer, Development of Analytical

Methods and Application in Clinical Medicine

- Recent Publications :

T. H. Duh¹, S. S. Siao, R. C. Chang, S. K. Wang* and C.Y. Duh*, "New Cytotoxic Terpenoids from Soft Corals *Nephthea chabroli* and *Paralemnalia thyrsoides*" , *Marine Drugs*, 2017;15:12-392.

C. L. Chen *, Y. P. Chen, M.W. Lin, Y. B. Huang, F.R. Chang, **T. H. Duh**, D. C. Wu, W.C. Wu, Y. C. Kao , P. H. Yang, "Euphol from *Euphorbia tirucalli* Negatively Modulates TGF- β Responsiveness via TGF- β Receptor Segregation inside Membrane Rafts" , *PLoS One*, 2015:10:10-e0140249.

Hui-Fen Chen Assistant Professor

E-mail : hfchen@kmu.edu.tw

Telephone : 07-3121101 ext 7055

Lab: N1124



- Academic Interests :

1. Step-by-step Time-domain Analytical Infrared Spectroscopy to Study the Dynamics of Gas Chemical Reactions
2. Step-by-step Time-domain Analytical Infrared Spectroscopy to Detect Photo-excited Isomerization and Catalytic Mechanism of Membrane Proteins
3. Interstitial Isolation Spectroscopy to Study the Spectra of Unstable Molecules and Free Radicals in the Atmosphere
4. Interstitial Isolation Spectroscopy to Simulate the Photochemical Reaction Mechanism of Interstellar Molecules
5. Quantum Chemical Calculation of Free Radical Molecule Isomers and Reaction Potential Energy Surfaces

Chien-Hung Li Assistant Professor



E-mail : chli@kmu.edu.tw

Telephone : 07-3121101 ext 2221

Lab: N843

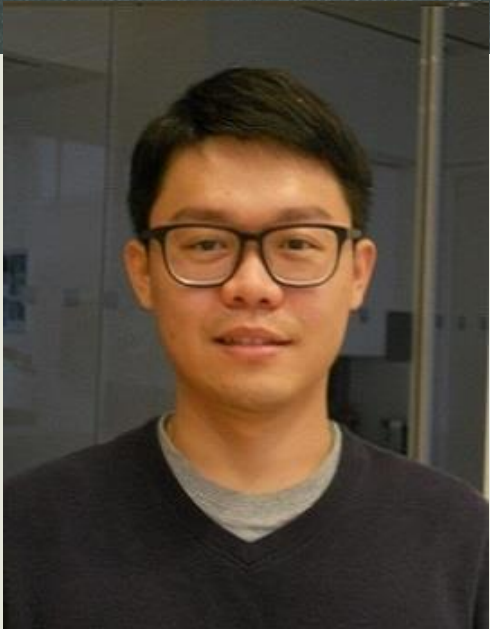
- Academic Interests :
Organic Ligands, Photonic Nanomaterials

- Recent Publications:

Liu, T.; Zhang, Y.; **Li, C.-H.**; Marquez, M. D.; Tran, H.-V.; Hernández, F. C. R.; Yao, Y.; Lee, T. R. Semihollow Core-Shell Nanoparticles with Porous SiO₂ Shells Encapsulating Elemental Sulfur for Lithium-Sulfur Batteries. *ACS Appl. Mater. Interfaces*. **2020**, 12, 47368–47376.

Li, C.-H.*; Khantamat, O.*; Liu, T.; Arnob, M. M. P.; Lin, L.; Jamison, A. C.; Shih, W.-C.; Lee, T.-C.; Lee, T. R. Optically Tunable Tin Oxide-Coated Hollow Gold-Silver Nanorattles for Use in Solar-Driven Application. *ACS Omega* **2020**, 5, 23769–23777.

Chia-Hsiang Chen Assistant Professor



E-mail : chc@kmu.edu.tw

Telephone : 07-3121101 ext 2249

Lab: N844

- Academic Interests :

1. Metal-Organic Frameworks for Nanoelectronics Devices
2. Functionalized Endohedral Fullerenes for Nanomedcines
3. Synthesis of Novel Endohedral Metallofullerene
4. Functionalized Fullerenes in Self-Assembled Monolayers

- Recent Publications:

Spree, L.;* Liu, F.; Neu, V.; Rosenkranz, M.; Velkos, G.; Wang, Y.; Schiemenz, S.; Dreiser, J.; Gargiani, P.; Valvidares, M.; **Chen, C.-H.**; Büchner, B.; Avdoshenko, S. M. ;* Popov, A. A. ;*
"Robust Single Molecule Magnet Monolayers on Graphene and Graphite with Magnetic Hysteresis up to 28 K." *Adv. Funct. Mater.* **2021**, 2105516.

Wei-Peng Li Assistant Professor



E-mail : wpli@kmu.edu.tw

Telephone : 07-3121101 ext 2374

Lab: N819

- Academic Interests : Novel Nanomaterials、 Microbial Electrochemistry
- Courses: General Chemistry、 Organic Chemistry
- Features : The First Laboratory to Combine Microbial Electrochemistry with Nanomedicine as a Featured Research

- Recent Publications:

Xizi Long, **Wei-Peng Li**, and Akihiro Okamoto*. Thin-layer Electrolyte Enhances the Rate of Extracellular Electron Transport in Bacteria. *Biosensors and Bioelectronics*, 2021, under peer-reviewing. (first author).

Wen-Jyun Wang, Chung-Dann Kan, Chih-Yen Chen, Yi-Yao Meng, Jieh- Neng Wang, Wei-Ling Chen, Chia-Hsiang Chen*, and **Wei-Peng Li***. Synthetic Poly(lactic-co-glycolic Acid) Microvesicles as a Feasible Carbon Monoxide- Releasing Platform for Cancer Treatment. *Membranes*, 2021, 11, 818-827.

Biology (16 Professors)

■ Professors

Ming-Feng Hou 、 Chang, Hsueh-Wei 、 Shieh, Bao-Sen 、
Hans-Uwe Dahms 、 Cheng, Tain-Lu

■ Associate Professors

Huang Bin 、 Chen, Chao-Chieh 、 Cheng, Chih-Mei 、
Chang, Yung-Fu 、 Li, Ruei-Nian

■ Assistant Professors

Chuang-Yu Lin 、 Kuo, Chi-Yun 、 Huang, Yin-Tse 、
Liu, Pei-Feng 、 Su, Yong-Chao

Ming-Feng Hou Professor



- Telephone : +886-7-3121101 ext 6060
- E-mail : mifeho@kmu.edu.tw
- Specialty : Breast Cancer 、 General Surgery 、 Basic Medicine 、 Clinical Medicine
- Academic Interests : Breast Cancer Diagnosis 、 Surgery and Chemotherapy 、 molecular oncology

■ Recent Publications :

Hsieh TH, Hsu CY, Yang PJ, Chiu CC, Liang SS, Ou-Yang F, Kan JY, **Hou MF**, Wang TN, Tsai EM. DEHP mediates drug resistance by directly targeting AhR in human breast cancer. Biomed Pharmacother. 2022 Jan;145:112400. doi: 10.1016/j.biopha.2021.112400. Epub 2021 Nov 18. PMID: 34801851.

Lin HY, Wu HJ, Chen SY, **Hou MF**, Lin CS, Chu PY. Epigenetic therapy combination of UNC0638 and CI-994 suppresses breast cancer via epigenetic remodeling of BIRC5 and GADD45A. Biomed Pharmacother. 2022 Jan;145:112431. doi: 10.1016/j.biopha.2021.112431. Epub 2021 Nov 16. PMID: 34798471.

Chang, Hsueh-Wei Professor



- Telephone : +886-7-3121101 ext 2691
- E-mail : changhw@kmu.edu.tw
- Office / Lab : N913 / N928
- Courses : General Biology & Laboratory 、 Biochemistry 、 Introduction to Bioinformatics 、 Genomics
- Academic Interests : Selective Killing Malignant Cells 、 Natural Antineoplastic Drug Screening 、 Radiosensitizing Agent 、 Bioinformatics

■ Recent Publications :

Yin-Chang Liu*, **Hsueh-Wei Chang**, Yi-Chyi Lai, Sheue-Ting Ding, Jih-Lin Ho. Serum responsiveness of the rat PCNA promoter involves the proximal ATF and AP-1 sites. FEBS Lett 441(2):200-204. (1998) [SCI]

Bor-Show Tzang, Yi-Chyi Lai, Mandy Hsu, **Hsueh-Wei Chang**, Chia-Chin Chang, Pien C. Huang, Yin-Chang Liu*. Function and sequence analyses of tumor suppressor gene p53 of CHO.K1 cells. DNA Cell Biol 18(4):315-321. (1999)[SCI]

Shieh, Bao-Sen Professor



- Telephone : +886-7-3121101 ext 2703
- E-mail : bsshieh@kmu.edu.tw
- Office / Lab : N925 / N932
- Courses : Animal Behavior 、 Vertebrate Zoology 、 Behavioral Ecology 、 Evolution
- Academic Interests : Animal Sound Communication 、 Animal Social Behavior

■ Recent publications :

Chun-Chieh Liao, **Bao-Sen Shieh** & Chao-Chieh Chen*. 2018. Air temperature influenced the vocal activity of birds in a subtropical forest in southern Taiwan. *Taiwan Journal of Forest Science* 33(4): 291-304.

Bao-Sen Shieh*, Shih-Hsiung Liang. 2017. Song frequency correlates with latitude and individual body size in the cicada *Mogannia formosana* Matsumura (Hemiptera: Cicadidae). *Acta Ethol.* DOI 10.1007/s10211-017-0258-3.

Hans-Uwe Dahms Professor



- Telephone : +886-7-312-1101 ext 2695
- E-mail : hansd@kmu.edu.tw
- Office / Lab : N917 / N929
- Courses : Environmental and Public Health Sciences 、
Invertebrate Zoology(LAB) 、 Vertebrate Zoology(LAB) 、
Lectures 、 Seminars 、 English Presentations in Science
- Academic Interests : Environmental and Public Health 、 Antibiotic
Resistance 、 Toxicology 、 Biomarker 、
Monitoring 、 Integrative Approach.

■ Recent Publications :

Aghalari Z., **Dahms H.-U.**, Jafarian S, Gholina H (2021). Evaluation of organizational and social commitments and related factors during the coronavirus pandemic of healthcare workers in northern Iran. *Globalization and Health* 17: 12.

Aghalari Z*, **Dahms H-U****, Sosa-Hernandez JE, Saldivar RP, Oyervides Muñoz MA, Jafarian S (printed April, 2021). Evaluation of Coronavirus transmission through indoor air in hospitals and prevention methods: A systematic review. *Environmental Research*, [Special Issue: Outdoor Air Pollution, Indoor Air Quality and COVID-19] 195, 110841.

Huang, Bin Associate Professor



- Telephone : +886-7-312-1101 ext 2704
- E-mail : huangpin2@kmu.edu.tw
- Office / Lab : N926 / N932
- Courses : Plant Tissue Culture and Genetic Engineering 、 Plant Physiology 、 Growth and Development of Plant
- Academic Interests : PTMs 、 Phytosterol 、 Photomorphogenesis 、 GMO 、 Cardiovascular pathology 、 Nanometer technique

■ Recent Publications :

Bin Huang, Shu Ling Chen and Yih Ming Chen*. Different chilling responses of brassinosteroid-biosynthetic genes in Arabidopsis and mung bean seedlings. *Crop, Environment & Bioinformatics*. 2006;3:123-34.

Bin Huang, Chien Hua Chu, Shu Ling Chen, Hsueh Fen Juan and Yih Ming Chen*. Proteomics study of mung bean epicotyl regulated by brassinosteroid under chilling condition. *Cellular Molecular Biology Letters*. 2006;11:264-78. (SCI)

Chen, Chao-Chieh Associate Professor



- Telephone : +886-7-3121101 ext 2696
- E-mail : chen5123@kmu.edu.tw
- Office / Lab : N918 / N929
- Courses : Introduction of Biodiversity 、 Ornithology 、
Experimental Designs 、 Evolution and Life
- Academic Interests : Bird ecology 、 Bird surveillance and
conservation 、 Bird migration and foraging

■ Recent Publications :

C.-C. Chen*, J.-C. Wu, B. A. Walther and P.-J. Chiang. 2020. Nocturnal migration in the Tataka Area, Yushan National Park, Taiwan in autumn 2014. *Ornithological Science* 19:135-144. (SCI)

陳炤杰*、吳禎祺、劉姿岑，2020，龍鑾潭周邊雁鴨為害水田秧苗情形。台灣生物多樣性研究 22(2):69-82

Cheng, Chih-Mei Associate Professor



- Telephone : +886-7-3121101 ext 2702
- E-mail : chmech@kmu.edu.tw
- Office / Lab : N924 / N931
- Courses : Literature Review in Biology 、 The Principle and Application of Cell Culture
- Academic Interests :
Biochemistry 、 Cytobiology 、 Molecular Biology 、 Correlation between Environmental Hormone and Pulmonary Fibrosis 、 Anti Inflammatory Drug Screening 、 In Vitro and in Vivo Model

■ Recent Publications :

Hsiang-Han Su, Hsin-Ting Lin, Jau-Ling Suen, Chau Chyun Sheu, Kazunari K.Yokoyama¹, Shau- Ku Huang *, and **Chih Mei Cheng** (2016, Sep). Aryl hydrocarbon receptor–ligand axis mediates pulmonary fibroblast migration and differentiation through increased arachidonic acid metabolism. *Toxicology*, 370:116-126.

Chih-Hua Tseng , Cherng-Chyi Tzeng , Chih-Yao Hsu , **Chih-Mei Cheng** , ChiaNing Yang , Yeh-Long Chen (2015, Apr). Discovery of 3- phenylquinolinylchalcone derivatives as potent and selective anticancer agents against breast cancers. *European Journal of Medicinal Chemistry*, 97:306-319.

Chang, Yung-Fu Associate Professor



- Telephone : +886-7-3121101 ext 2701
- E-mail : m795003@kmu.edu.tw
- Office / Lab : N923 / N931
- Courses : General Biology(LAB) 、 Techniques in Biotechnology 、 Readings of English Biomedical Journals
- Academic Interests : Biochemistry 、 Molecular Biology 、 Apoptosis Regulation 、 Differentiation of Neuron and Muscle Cells 、 Gene Knockdown Cell Model 、 Transgenic and Knockout Mouse Animal Model

■ Recent Publications :

Chang, Y.-F., Tong, W.-H., and Yuo, C.-Y., 1995. Expression of a Drosophila cell death protein in E.coli and mammalian cells. The 10th Joint Ann. Conf.Biomed. Sci., Taipei, Taiwan.

Chang, Y.-F., Tseng, C.-S., and Yuo, C.-Y., 1996. Expression and functional studies of Drosophila cell death protein, Reaper. Fourth Symposium on Recent Advance in Cellular and Molecular Biology, Kenting, Taiwan.

Li, Ruei-Nian Associate Professor



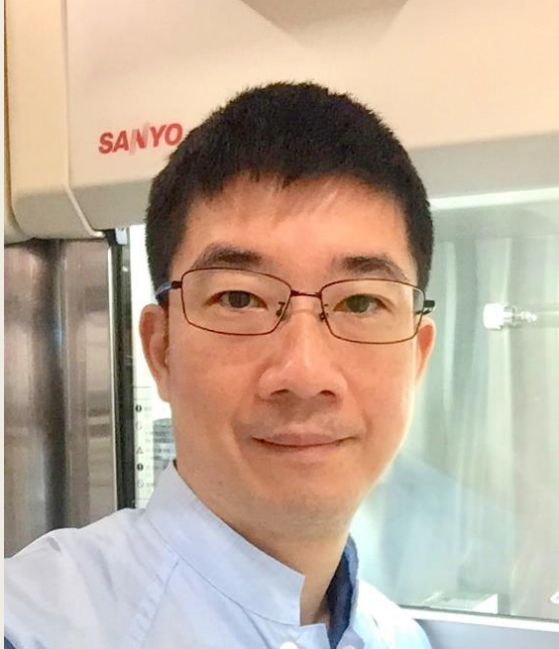
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- E-mail : runili@kmu.edu.tw
- Office / Lab : N915 / N928
- Courses : Biology 、 Virology 、 Microbiology 、 Microbial Genetics 、 Modern Biotechnology
- Academic Interests : Molecular Virology 、 Cancer Biology

■ Recent Publications :

Ruei-nian Li, Chien-yu Li, Chien-hung Lee, Chiung-yu Peng, and Ming-Tsang Wu*. Promoter methylation status of tumor suppressor genes p16 and CDH1 in cervical intraepithelial neoplasia. *Oncology Letters* 2017, 13(6):4397-4401.

Tzu-Jung Fang, Yuan-Zhao Lin, Ching-Ching Liu, Chia-Hui Lin, Ruei-Nian Li, Cheng-Chin Wu, Tsan-Teng Ou, Wen-Chan Tsai and Jeng-Hsien Yen. Methylation and gene expression of histone deacetylases 6 in systemic lupus erythematosus. *International Journal of Rheumatic Diseases* 2016, 19: 968-973.

Chuang-Yu Lin Assistant Professor



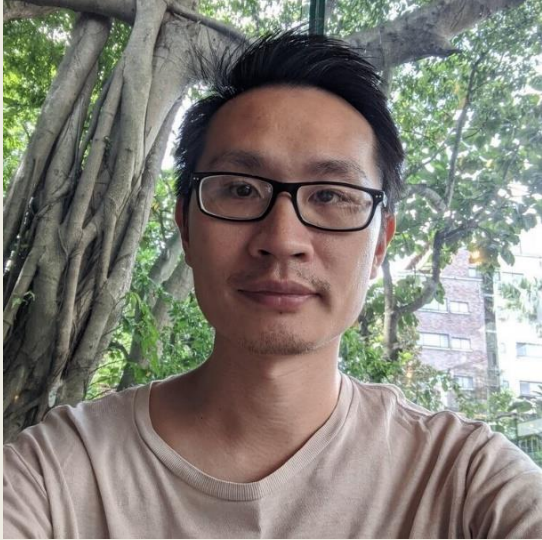
- Telephone : +886-7-3121101 ext 2692
- E-mail : lincy@kmu.edu.tw
- Office / Lab : N914 / N928
- Courses : Biology 、 Genetics
- Academic Interests : Disease Models Generated by iPS Cells 、 Interactions between Stem Cell and Microenvironment

■ Recent Publications :

Lin CY, Niwa A, Hou CY, Tsai CM, Chang H. Bidirectional myofiber transition through altering the photobiomodulation condition. *J Photochem Photobiol B.* 2020 Nov;212:112041. Epub 2020 Sep 25.

Lin CY, Yoshida M, Li LT, Saito MK. In vitro Neuromuscular Junction Induced from Human Induced Pluripotent Stem Cells. *J Vis Exp.* 2020 Dec 3;(166).

Chi-Yun Kuo Assistant Professor



- Telephone : +886-7-3121101 ext 2693
- E-mail : chiyunkuo@kmu.edu.tw
- Office / Lab : N921 / N930
- Academic Interests :
 1. The interactions between ecology and behavior, using voluntary shedding of the tail in lizards and mimicry in butterflies.
 2. The impact of warming on species abundance by integrating ecological modeling and big data from databases.

■ Recent Publications :

Hausmann AE, **Kuo C-Y**, Freire M, Rueda-M N, Linares M, Pardo-Diaz C, Salazar C, Merrill RM. 2021. Light environment influences mating behaviours during the early stages of divergence in tropical butterflies. *Proceedings of the Royal Society B* 288: 20210157

Kuo C-Y, Muñoz MM, Irschick DJ. 2019. Lizard foraging: a perspective integrating sensory ecology and life histories. In *Behavior of Lizards: Evolutionary and Mechanistic Perspectives* (Eds: Vincent Bels and Anthony Russell). Taylor and Francis.

Yin-Tse Huang Assistant Professor



- Telephone : +886-7-3121101 ext 2705
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ythuangmyco@gmail.com
- Office / Lab : N927 / N932
- Courses : Mycology 、 Literature Review
- Specialty : Mycology 、 Fungal Taxonomy 、 Phylogenetics 、
Plant Pathology 、 Ecology 、 Symbiology
- Academic Interests : Symbiosis Interaction

■ Recent Publications :

Li Y, Bateman C, Skelton J, Wang B, Black A, **Huang Y.-T.**, Gonzalez A, Jusino MA, Nolen ZJ, Freeman S, et al. 2021. Pre-invasion assessment of exotic bark beetle-vectored fungi to detect tree-killing pathogens. *Phytopathology*. (SCIE, IF: 4.025; 2020, Plant Science 46/235)

Huang, Y.-T., Skelton, J., and Hulcr, J. 2020. Lipids and small metabolites provisioned by ambrosia fungi to symbiotic beetles are phylogeny-dependent, not convergent. *The ISME Journal*. 14: 1089–1099. (SCIE, I.F.: 9.180; 2019 Ecology 5/169)

Liu, Pei-Feng Assistant Professor



- Telephone : +886-7-3121101 ext 2694
- E-mail : pfliu@kmu.edu.tw
- Office / Lab : N916 / N929
- Courses : Molecular Biology 、 Cell Biology 、 General Biology & Lab
Molecular Biotechnology 、 Molecular Oncology
- Academic Interests :
Screening biomarkers of cancers and infectious diseases to
(1) investigate their molecular mechanisms (2) identify their
potential roles in diagnosis, prognosis and targeted therapy

■ Recent Publications :

PF Liu, CW Shu, CH Lee, HC Sie, HH Liou, JT Cheng, LP Ger, CL Chen, CC Chen*, CF Chen* (2021) Clinical Significance and the Role of Guanylate-Binding Protein 5 in Oral Squamous Cell Carcinoma. *Cancers (Basel)* 13(16): 4043. (IF: 6.639, 51/242, ONCOLOGY)

Su, Yong-Chao Assistant Professor



- Telephone : +886-7-3121101 ext 6983
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- Lab : N933
- Courses : Evolutionary Biology 、 Evolutionary and Ecological Genomics 、 Entomology 、 Population Ecology 、 Field Biology 、 General Biology
- Academic Interests : Evolutionary and Ecological Genomics 、 Evolution of Social Behavior 、 Biogeography 、 Entomology 、 Arachnology

■ Recent Publications :

Chan K.O., Hutter C.R., Wood Jr P.L., Su Y.C., & Brown R.M. (2022). Gene flow increases phylogenetic structure and inflates cryptic species estimations: a case study on widespread Philippine puddle frogs (*Occidozyga laevis*). *Systematic Biology*, 71(1):40-57.

Cheng, Tain-Lu Professor



- Telephone : +886-7-3121101 ext 2697
- Email : tlcheng@kmu.edu.tw or tlcheng5024@gmail.com
- Office / Lab : N919 / N930
- Courses : Bio-Medical Journal reading and discussion (I) & (II) 、
Entrepreneurial Management : How to Start up a New
Company 、 Entrepreneurial Practice
- Academic Interests : Antibody Engineering 、 Gene Therapy 、
Tumor Immunology, 、 Functional Genomics

■ Recent Publications :

Wang YT, Cheng TL*. Computational modeling of cyclic peptide inhibitor-MDM2/MDMX Binding through global docking and Gaussian accelerated molecular dynamics simulations, J Biomol Struct Dyn. 2021 Jul;39(11):4005-4014. 2020 SCI IF= 3.310 (SCI, 125/299=41.8%) in BIOCHEMISTRY & MOLECULAR BIOLOGY.

Biotechnology (9 Professors)

- **Professors**

Shih-Shin Liang, Chien-Chih Chiu, Yi-Fu Chen

- **Associate Professors**

Bing-Hung Chen, Ying-Ting Lin,

Wei-Ting Liao, Wanta Liu, Chi-Huei Wang

Iy-Ing Kuo

Shih-Shin Liang Professor

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- Office/Lab: N1036/N1116
- Courses: Biophysical Chemistry, Bioanalytical Methods, Nano Biotechnology, Mass Spectrometry, Special Treatise on Instrumental Analysis
- Academic Interests: Tandem Mass Spectrometer and Liquid Column Separation Chromatography, Polymers and Nanocomposites, Chinese Herbal Medicine (Product Testing and Functional Evaluation) Qualitative and Quantitative Analysis Development
- Recent Publications(Link): [recent publications web page](#)



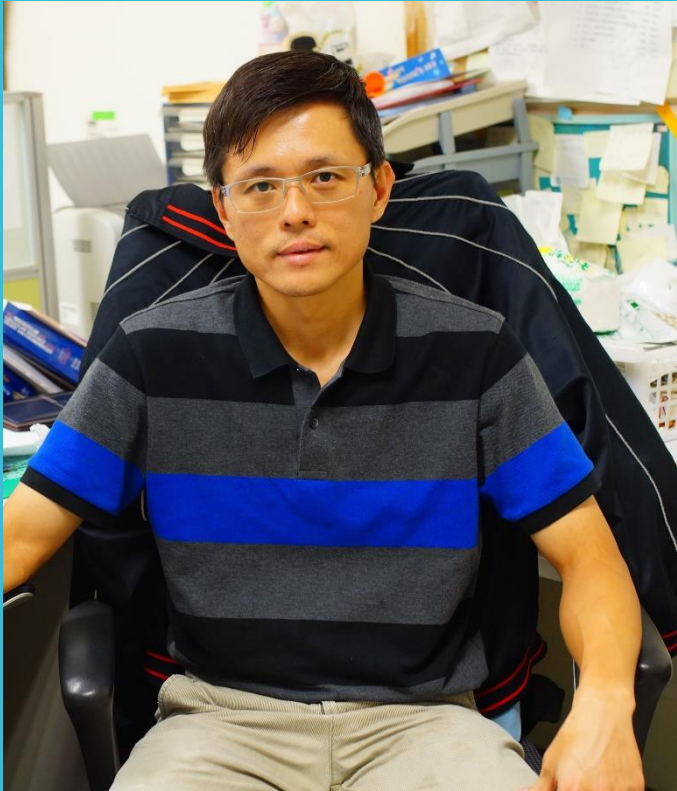
Chien-Chih Chiu Professor



- Telephone: (07)3121101ext.2368
- E-mail: cchiu@kmu.edu.tw
- Office / Lab: N1022 / N1020
- Courses: Discussion on Genomics and Proteomics Tumor Biology Books / Special Research (College juniors and seniors) / Lab Internship(College Sophomore)
- Academic Interests: Programmed Cell Death (Including Apoptosis as well as Non-apoptotic Cell Death)、 Study on The Selection and Mechanism of Anticancer Drugs、 Development of Cancer Cell Sensitization Strategies
- Recent Publications(Link): [recent publications web page](#)

Yi-Fu Chen Professor

- Telephone: (07)3121101ext.2730
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- Office / Lab: N1030 / N1024
- Courses: Molecular Cell Biology, Genetics, Tumor Biology, Genesis Biology, Genomics
- Academic Interests: The Molecular Mechanism of Betel Quid Addiction and Development of Chemoprevention in Oral Cancer, The Molecular Mechanism of Betel Quid-induced Oral Carcinogenesis, The Molecular Mechanism of Drug Resistance
- Recent Publications: [recent publications web page](#)



Bing-Hung Chen Associate Professor



- Telephone: (07)3121101ext.2676
- E-mail: bhchen@kmu.edu.tw
- Office / Lab: N1023 / N1020
- Courses: Introduction to Biotechnology, Biotechnology Experiment, Microbiology, Immunology, Book Discussion, Special Research
- Academic Interests: Controlling mechanisms underlying allergic and non-allergic inflammation, Screening and development of anti-allergic and anti inflammation regimens, Genomic and proteomic studies on signal transduction of leukocytes, Design and development of recombinant protein with medicinal potential
- Recent Publications(Link): [recent publications web page](#)

Ying-Ting Lin Associate Professor

- Telephone: (07)3121101ext.2792
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- Office / Lab: N1038 / N1025
- Courses: Bioinformatics, Chimeric Algorithm, Computer Aided Drug Design, Special Treatise on Computational Biomedical Sciences, The Application of Computer in Biomedicine
- Academic Interests: Chemical Informatics, Computational Medicinal Chemistry, Computational Biochemistry, Computerized Drug Screening, StructuralBioinformatics
- Recent Publications(Link): [recent publications web page](#)



Wei-Ting Liao Associate Professor



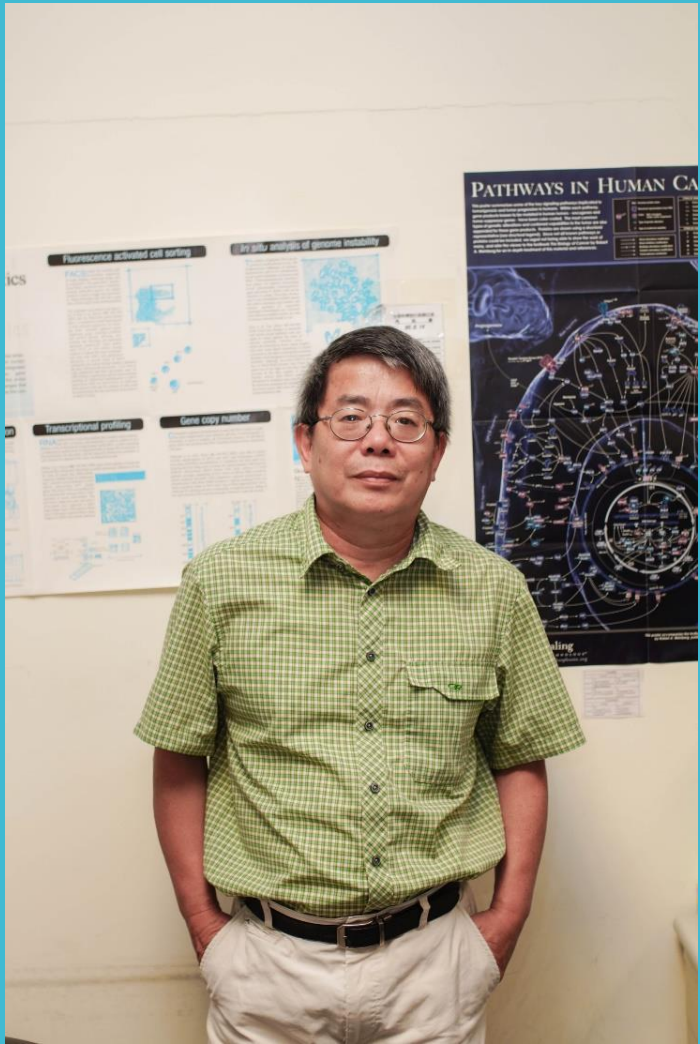
- Telephone: (07)3121101ext.2791
- E-mail: wtliao@kmu.edu.tw
- Office / Lab: N1033 / N1028
- Courses: Introduction to Biotechnology、 Toxicology、 Molecular Mechanisms of Disease and Animal Models
MolecularDiagnosis、 Specialties in Tumor Biology、 Special Treatise on Stem Cells and Tissue Engineering
- Academic Interests: Chemical Carcinogenesis、 Tumor Immunity、 Tissue Engineering、 Molecular Medicine
- Recent Publications(Link): [recent publications web page](#)

Wanta Liu Associate Professor

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- Office / Lab: N1035 / N1028
- Courses: Aquatic Animal Gene Transfer and Application, Model Organisms and Industrial Applications, 3D Printing in Biomedical Applications, Establishment and Implementation of Zebrafish Drug Screening Platform
- Academic Interests:
 - Cancer Cell Metastasis Mechanism and Drug Development, Pathogenic Mechanism and Drug Development of Organ Failure in Dialysis Patients,
 - Mechanisms and Drug Development of Neurodegenerative Diseases, 3D Printing in Biomedical Platform Technology development, Pathogenic Mechanism and Drug Development of Intrahepatic Biliary Tract Cancer
- Recent Publications(Link):[recent publications web page](#)

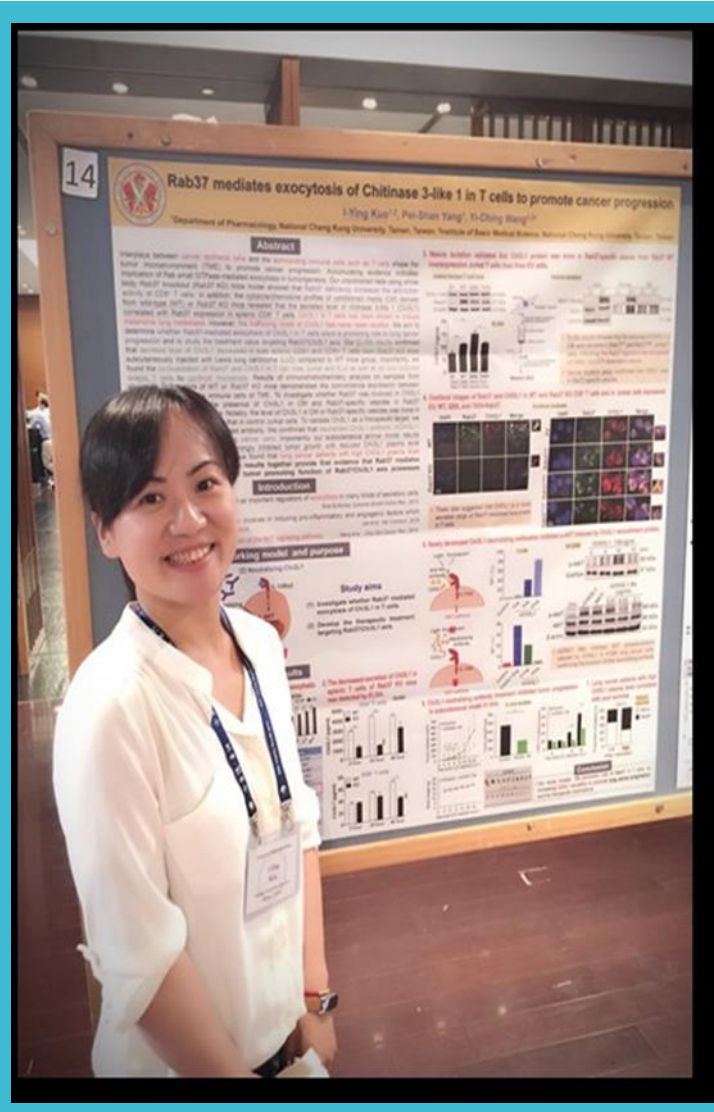


Chi-Huei Wang Associate Professor



- Telephone: (07) 3121101 ext. 2699
- E-mail: chwang@kmu.edu.tw
- Office / Lab: N1021 / N1020
- Courses: Introduction to Biotechnology, Drug Discovery, Scientific Literature Reading and Term Paper Writing, Genetics
- Academic Interests: Cancer Drug Discovery, Molecular Carcinogenesis of Prostate Cancer, DNA Repair and Cell Cycle Control, Molecular Pathway of Adipogenesis
- Recent Publications(Link): [recent publications web page](#)

Iy-Ing Kuo Associate Professor



- Telephone :(07)3121101 ext.2369
- Email: iyingkuo@kmu.edu.tw
- Office / Lab: N1030/N1024
- Course:
- Academic Interests :Tumor Immunology 、 Anticipation genetics 、 Intracellular vesicle transport regulatory pathway
- Recent Publications(Link): [recent publications web page](#)