Feng-Yun (Jimmy) Huang PhD, 黃蜂運 助理教授

Department of Medical Imaging and Radiological Sciences
Central Taiwan University of Science and Technology
No.666, Buzih Road, Beitun District,
Taichung City 406053, Taiwan

fyhuang@ctust.edu.tw
jimmyhuang1007@gmail.com
Office: 886-4-2239-1647 ext.3005
Mobile: 886-918-494-218

Summary

Feng-Yun J. Huang received his postdoctoral researcher training in the Cyclotron and Radiochemistry Program of the Department of Radiology of the University of Texas Southwestern Medical Center in the USA from 2019 to 2020. He was involved in the Current Good Manufacturing Practice (CGMP) manufacturing of PET radiopharmaceuticals under US-FDA's Investigational New Drug Application (IND) and Abbreviated New Drug Application (ANDA) approvals for clinical research. At the same time, he was engaged in several collaborative projects developing novel radiotracers for cancer and brain imaging through multimodality imaging techniques (SPECT/CT, PET/CT, and MRI). Dr. Huang currently serves as Assistant Professor of the Department of Medical Imaging and Radiological Sciences at Central Taiwan University of Science and Technology, Taiwan. His current research focuses on the development of immunoPET molecular imaging probes, such as ^{64}Cu, ^{68}Ga, and ^{89}Zr-labeling of biomolecules of oligonucleotides, peptides, and monoclonal antibodies via conjugation with bifunctional chelating agents. Moreover, he works on radioanalytical chemistry in radiation detection and measurement, such as separating and determining difficult-to-measure radionuclides, monitoring environmental radiation, and managing nuclear waste.

Education

National Tsing Hua University (NTHU), Taiwan
Doctor of Philosophy, Bioengineering — Sep 2008 – Jun 2015
Mentors: Prof. Jem-Mau Lo and Chien-Wen Chang
Dissertation: Theranostic evaluation of ^{188}Re-Labeled PEGylated nanoliposome in glioma bearing rat model

Central Taiwan University of Science and Technology (CTUST), Taiwan
Master of Science, Medical Imaging and Radiological Science — Sep 2005 – Jan 2008
Mentors: Prof. Bor-Tsung Hsieh (CTUST), Ling-Kuen Huang (CTUST), and Chang-Shu Tsai (TCUST)
Thesis: Study of thermosensitive chitosan-based hydrogel for the delivery of therapeutic radio and chemo pharmaceuticals

Tzu Chi University of Science and Technology (TCUST), Taiwan
Bachelor of Science, Medical Imaging and Radiological Science — Sep 2001 – Jun 2005

Licenses

Senior Radiation Protection Personnel (No. 00728; Atomic Energy Council, Taiwan)
Medical Radiation Technologist (No. 004957; Ministry of Health and Welfare, Taiwan)

Research and Clinical Experience

Central Taiwan University of Science and Technology (CTUST), Taiwan — Feb 2021 – Present
Assistant Professor

- Site-specifically radiolabeled ^{89}Zr-DFO*-immunoPET tracer for imaging PD-L1 expression in tumor
- Development of radiochemoimmunotherapy agent using pretargeting nanoliposome system based on click chemistry
- Development of analytical technology for wet oxide carbon-14 difficult-to-measure nuclides
- Relationship between radium isotopes and their chemical analogues in a hot spring area in Taiwan
- Determination of difficult-to-measure radionuclides, such as ^{3}H, ^{14}C, ^{63}Ni, ^{99}Tc, ^{241}Pu, ^{241}Am etc.

University of Texas Southwestern (UTSW) Medical Center, Dallas, TX, USA — Jun 2019 – Oct 2020
Postdoctoral Fellow
Mentor: Prof. Xiankai Sun

- CGMP production of ANDA PET drugs (^{18}F-FDG and ^{13}N-NH_3) and IND radiotracers (^{11}C-Acetate, ^{18}F-FLT, ^{18}F-AV1451, ^{64}Cu-$CuCl_2$, ^{68}Ga-PSMA-11, ^{89}Zr-Atezolizumab) for clinical research
- Radiosynthesis of radiometal-based novel tracers for PET imaging of kidney cancer and neurodegenerative diseases and immune checkpoint blockade therapy – Namely, ^{64}Cu, ^{68}Ga, ^{89}Zr-labeling of biomolecules such as oligonucleotides, peptides, and monoclonal antibodies via conjugation with bifunctional chelating agents
- Multimodality imaging evaluation (SPECT/CT, PET/CT and MRI) of the radiotracers in the corresponding animal models and quantitative data analysis

Nuclear Science and Technology Development Center, NTHU, Taiwan — Aug 2018 – Jun 2019
Assistant Researcher

- Development of radioanalytical technique for difficult-to-measure radionuclides from low-level radwaste such as ^{14}C and ^{63}Ni
- Investigation of background radiation in the production area of hokutolite in Taiwan

Feng-Yun (Jimmy) Huang PhD, 黃蜂運 助理教授

Department of Medical Imaging and Radiological Sciences
Central Taiwan University of Science and Technology
No.666, Buzih Road, Beitun District,
Taichung City 406053, Taiwan

fyhuang@ctust.edu.tw
jimmyhuang1007@gmail.com
Office: 886-4-2239-1647 ext.3005
Mobile: 886-918-494-218

Nuclear Science and Technology Development Center, NTHU, Taiwan — Nov 2016 – Jul 2018
Postdoctoral Fellow
Mentor: Dr. Jiunn-Hsing Chao

- Estimation of radiation dose from naturally occurring radionuclides in soil
- Environmental radiation monitoring including samples from water, air, plant and soil via γ radionuclide analysis (HPGe), β radionuclide analysis (LSC) and gross α/β analysis (proportional counter)

National Tsing Hua University, Taiwan — Sep 2008 – Jun 2015
Graduate Student (PhD Program)
Mentors: Prof. Jem-Mau Lo (NTHU), Chien-Wen Chang (NTHU) and Dr. Te-Wei Lee (INER)

- Radiosynthesis of single photo emission computed tomography (SPECT) molecular imaging tracers for cancer diagnosis and/or treatment including ^{99m}Tc, ^{131}I, and ^{188}Re-labelled small and/or large molecules
- Development of liposome and human serum albumin (HSA)-based nanoparticle as molecular imaging tracer
- Development of kit for preparation of nanoparticle-based radiopharmaceuticals

Central Taiwan University of Science and Technology, Taiwan — Sep 2005 – Jan 2008
Graduate Student (Master)
Mentors: Prof. Bor-Tsung Hsieh (CTUST) and Ling-Kuen Huang (CTUST), and Chang-Shu Tsai (TCUST)

- Development of injectable chitosan-based co-crosslinking hydrogel for local delivery of ^{188}Re-LIPO-DOX to breast-tumor-bearing mouse model
- Development of chitosan-based thermosensitive hydrogel as drug delivery system for cancer treatment

Professional Experience

Radiochemistry and nuclear medicine radiopharmaceuticals

- Operation of automated radiosynthesizers for clinical production of PET drugs including GE TRACERlab modules (FX-FN, FXM/FXMeI, FXC-PRO, FXN-PRO), GE FASTlab, and TRASIS modules (miniAIO and AllinOne)
- Production of metal radionuclides (e.g., ^{64}Cu, ^{68}Ga, and ^{89}Zr) via solid-target processing system (COMECER ALCEO) and their radiosynthesis for preparation of PET molecular imaging probes
- Preparation of SPECT tracers including ^{99m}Tc, $^{125/131}$I, and ^{188}Re-labelled molecular imaging probes for research

Translational research

- Creating animal tumor models (xenograft, patient-derived xenograft, orthotopic) including glioma (GBM), hepatocellular carcinoma (HCC), breast carcinoma, renal cell carcinoma (RCC), colon cancer
- Conducting various animal experiments including anesthesia, surgery, drug administration (SC, IM, IC, IT, IV), biodistribution, metabolism, radiation dosimetry (MIRD), pharmacokinetic (PK), maximum tolerance dose (MTD), autoradiography, therapeutic efficacy (treatment)
- Operating non-invasive small animal imaging including PET/CT, SPECT/CT, MRI, Ultrasound and IVIS

Health physics

- Handling and maintaining TAF (ISO/IEC 17025) radioactivity measuring laboratory
- Radiation detection and measurement including α, β and γ-decay radionuclides
- Radioactive waste management and radioanalytical techniques
- Guidance of radiation protection and safety

Nanomedicine and drug delivery system

- Preparation of smart liposome as drug delivery system, as well as molecular imaging tracer
- Preparation of HSA-based nanoparticle as drug delivery system, as well as molecular imaging tracer
- Preparation of chitosan-based hydrogel as drug delivery system for internal radionuclide therapy

Teaching Experience

Department of Medical Imaging and Radiological Science, CTUST, Taiwan
Assistant Professor — Feb 2021 – Present
Adjunct Assistant Professor — Feb 2017 – Jun 2019
Adjunct Instructor — Feb 2011 – Jun 2015

Feng-Yun (Jimmy) Huang PhD, 黃蜂運 助理教授

Department of Medical Imaging and Radiological Sciences
Central Taiwan University of Science and Technology
No.666, Buzih Road, Beitun District,
Taichung City 406053, Taiwan

fyhuang@ctust.edu.tw
jimmyhuang1007@gmail.com
Office: 886-4-2239-1647 ext.3005
Mobile: 886-918-494-218

Subject:

- Radiopharmaceuticals
- Nuclear Medicine Technology
- Principle and Instrumentation of Nuclear Medicine
- Radiation Detection and Measurement
- Radiochemistry
- Molecular Imaging Pharmaceutical

Awards

Young Investigator Award. Kang YC, Qiu XY, Tsai SC, Farn SS, Chen KT, **Huang FYJ***. Effects of chelator-to-antibody ratio on development of 89Zr-ImmunoPET tracer for imaging of PD-L1 expression on tumor. 13th Congress of the World Federation of Nuclear Medicine and Biology. Sep. 7–11, 2022, Kyoto, Japan. Poster (2022 WFNMB)

Invited Speaker

Development of radioimmunotheranostic agents based on pretargeting strategy. 2024 Annual Conference of Society of Nuclear Medicine, Taipei, Taiwan, Nov 2, 2024.

Publications

1. **Huang FYJ***, Chen YL, Tsai TL, Fang CY, Chen WL, Hsieh LL, Chao JH. Determination of 14C in radwaste samples through sequential wet oxidation and acid stripping extraction. *Appl Rad Isot*, 2025. **(SCIE) (in revised)**
1. Lin YC, Yang CW, Tsai SC, Farn SS, Ou Yang FY, Lo WL, Chen LC, Chen KT, Weng MC, Kung JY, Qiu XY, Lu CC, **Huang FYJ***. Random and Site-specific Radiolabeling of [89Zr]Zr-DFO-anti-PD-L1-mAb iPET Tracer. J. Radioanal. Nucl. Chem. 2024; 333: 5997-6005. **(SCIE)** *(IF: 1.6; Ranking: 17/40; Scope: NUCLEAR SCIENCE & TECHNOLOGY).*
2. **Huang FYJ***, Chang FC, Chuang CY, Kuo CL, Lin CC, Hsieh LL, Chao JH. Relationship between radium isotopes and their chemical analogues in a hot spring area in Taiwan. J. Radioanal. Nucl. Chem. 2024; 333: 5969-5997. **(SCIE)** *(IF: 1.6; Ranking: 17/40; Scope: NUCLEAR SCIENCE & TECHNOLOGY).*
3. Tsai SC, Farn SS, Lo WL, Ou Yang FY, Kang YC, Chen LC, Chen KT, Liao JW, Kung JY, Chen JT, **Huang FYJ***. Evalua-tion of Chelator-to-Antibody Ratio on Development of 89Zr-iPET Tracer for Imaging of PD-L1 Expression on Tumor. Int J Mol Sci 2023, 24, 17132. **(SCIE)** (*IF: 5.6; Ranking: 66/285; Scope: Biochemistry & Molecular Biology*)
4. Hung SY, Huang ML, Huang HH, Tsao CH, **Huang FYJ***. Transoral Robotic Surgery and Transarterial Embolization to Treat Adult Laryngeal Hemangioma. Ear Nose Throat J. 2023 Sep 13:1455613231198439. **(SCIE)** doi:10.1177/01455613231198439. **(SCIE)** (*IF: 1.3; Ranking: 42/64; Scope: Otorhinolaryngology*)
5. Frankl JA, An Y, Sherwood A, Hao G, **Huang FYJ**, Thapa P, Clegg DJ, Sun X, Scherer PE and Öz OK*. Comparison of BMIPP-SPECT/CT to 18FDG-PET/CT for Imaging Brown or Browning Fat in a Preclinical Model. Int J Mol Sci 2022, 23, 4880. **(SCIE)** (*IF: 6.208; Ranking: 67/298; Scope: Biochemis-try & Molecular Biology*)
6. Chao JH, Ting CY, **Huang FYJ**, Tsai TL, Liu CC, Liu WC, Kang LC, Chin CY, Lin CC. Background radiation in the production area of hokutolite in Taiwan. Radiation Physics and Chemistry. 2020; 172:108769. **(SCIE)** *(IF: 2.226; Ranking: 4/34; Scope: NUCLEAR SCIENCE & TECHNOLOGY)*
7. **Huang FYJ**, Hsu FY, Chen TY and Chao JH. Radiation Dose due to Naturally Occurring Radionuclides in Soil from Varying Geological Environment. Health Phys. 2019; 116:657-663. **(SCIE)** *(IF: 1.316; Ranking: 18/34; Scope: NUCLEAR SCIENCE & TECHNOLOGY)*
8. **Huang FYJ**, Hung CC, Chang CW, Chao JH and Hsieh BT. Evaluation of injectable chitosan-based co-cross-linking hydrogel for local delivery of ^{188}Re-LIPO-DOX to breast-tumor-bearing mouse model. Anticancer Res. 2018; 38: 4651-4659. **(SCIE)** *(IF: 1.994; Ranking: 203/244; Scope: ONCOLOGY)*
9. **Huang FYJ**, Su TY, Tsai TL, Chao JH. "Analysis of ^{63}Ni in radwastes by extraction chromatography and radiometric techniques". J Radioanal Nucl Chem 2017; 314:879–886. **(SCIE)** *(IF: 1.137; Ranking: 21/34; Scope: NUCLEAR SCIENCE & TECHNOLOGY)*
10. Su TY, **Huang FYJ**, Chao JH. **"**Rapid determination of Ni-63 by automated solid phase extraction", Taiwanese Journal of Applied Radiation and Isotopes 2016; 12:1347-1352.
11. Chen WJ, **Huang FYJ**, Chang HY, Lee TW, Chang CW, Lo JM. "The novel preparation of ^{99m}Tc(I)-Labeled human serum albumin (HSA) nanoparticles as a SPECT imaging agent", J. Radioanal. Nucl. Chem. 2016; 307: 141-150. **(SCIE) (co-first author)** *(IF: 1.137; Ranking: 21/34; Scope: NUCLEAR SCIENCE & TECHNOLOGY)*
12. **Huang FYJ**, Lee TW, Chang CH, Chen LC, Hsu WH, Chang CW, Lo JM. "Evaluation of ^{188}Re-Labeled PEGylated nanoliposome as a radionuclide therapeutic agent in an orthotopic glioma-bearing rat model", Int. J. Nanomed., 2015; 10:463-473. **(SCIE)** *(IF: 5.115; Ranking: 24/270; Scope: PHARMACOLOGY & PHARMACY)*
13. Chung WJ, Cui Y, **Huang FYJ**, Tu TH, Yang TS, Lo JM, Chiang CS and Hsu IC. "^{99m}Tc pyrene derivative complex causes

Feng-Yun (Jimmy) Huang PhD, 黃蜂運 助理教授

Department of Medical Imaging and Radiological Sciences
Central Taiwan University of Science and Technology
No.666, Buzih Road, Beitun District,
Taichung City 406053, Taiwan

fyhuang@ctust.edu.tw
jimmyhuang1007@gmail.com
Office: 886-4-2239-1647 ext.3005
Mobile: 886-918-494-218

double-strand breaks in dsDNA mainly through cluster-mediated indirect effect in aqueous solution", PLoS ONE 2014; 9(9): e108162. **(SCIE)** *(IF: 2.740; Ranking: 27/71; Scope: MULTIDISCIPLINARY SCIENCES)*

14. **Huang FYJ**, Gan GY, Lin WY, Huang LK, Luo TY, Hong JJ, Hsieh BT. "Investigation of the local delivery of an intelligent chitosan-based ^{188}Re thermo-sensitive in situ-forming hydrogel in an orthotopic hepatoma-bearing rat model", J. Radioanal. Nucl. Chem. 2014; 299: 31-40. **(SCIE)** *(IF: 1.137; Ranking: 21/34; Scope: NUCLEAR SCIENCE & TECHNOLOGY)*
15. **Huang FYJ**, Chen WJ, Lee WY, Lo ST, Lee TW, Lo JM. "In vitro and in vivo evaluation of lactoferrin-conjugated liposomes as a novel carrier to improve the brain delivery", Int. J. Mol. Sci. 2013; 14: 2862-2874. **(co-first author) (SCIE)** *(IF: 4.556; Ranking: 74/297; Scope: BIOCHEMISTRY & MOLECULAR BIOLOGY)*
16. **Huang FYJ**, Lee TW, Kao CHK, Chang CH, Zhang X, Lee WY, Chen WJ, Wang SC, Lo JM. "Imaging, autoradiography and biodistribution of ^{188}Re-Labeled PEGylated nanoliposome in orthotopic glioma bearing rat model", Cancer Biother. Radiopharm. 2011; 26: 717-725. **(SCIE)** *(IF: 2.314; Ranking: 58/120; Scope: RADIOLOGY, NUCLEAR MEDICINE & MEDICAL IMAGING)*
17. **Huang FYJ**, Huang LK, Lin WY, Luo TY, Tsai CS, Hsieh BT. "Development of a thermo-sensitive hydrogel system for local delivery of ^{188}Re colloid drugs", Appl. Radiat. Isot. 2009; 67: 1405-1411. **(SCIE)** *(IF: 1.270; Ranking: 16/34; Scope: NUCLEAR SCIENCE & TECHNOLOGY)*
18. **Huang FYJ**, Huang LK, Tsai CS, Hsieh BT. "In situ formed thermo-reversible hydrogels as drug delivery system". Journal of Central Taiwan University of Science and Technology 2006; 18: 107-132.

Podium and Poster Presentations

1. **Huang FYJ***, Lu CC, Lo WL, Farn SS, Yang CW. Preparation and Characterization of Site-Specifically Radiolabeled 89Zr-DFO-anti-PD-L1-mAb ImmunoPET Tracer. 11th International Conference on Isotopes, Saskatoon, Canada, July 23-27, 2023. Poster
2. **Huang FYJ***, Chang FC, Chao JH. Measurement of 224Ra, 226Ra and 228Ra in natural waters through gamma-ray spectrometry. 11th International Conference on Isotopes, Saskatoon, Canada, July 23-27, 2023. Poster
3. **Huang FYJ***, Ou-Yang FY, Lo WL, Chen LC, Kang YC, Kung JY, Chen JT, Chen KT, Farn SS, Tsai SC. 89Zr-ImmunoPET tracer for imaging of PD-L1 expression on colorectal cancer. 2022 Annual Conference of Society of Nuclear Medicine, Nov 12, 2022, Taipei, Taiwan. Oral
4. Kang YC, Qiu XY, Tsai SC, Farn SS, Chen KT, **Huang FYJ***. Effects of Chelator-to-Antibody Ratio on Development of 89Zr-ImmunoPET Tracer for Imaging of PD-L1 Expression on Tumor. 13th Congress of the World Federation of Nuclear Medicine and Biology, Sep 7 – 11, 2022, Kyoto, Japan. Poster
5. Frankl J, Hao G, **Huang FYJ**, Oz O. Comparison of ^{125}I-BMIPP-SPECT/CT to ^{18}F-FDG-PET/CT for imaging brown fat in a preclinical model. J Nucl Med. May 1, 2020 vol. 61 no. supplement 1 48. **Poster**
6. **Huang FYJ** and Chao JH. Influence of extraction yield of ^{14}C from water sample by different parameters through wet oxidation-acid stripping method. 13th International Symposium on Nuclear and Environmental Radiochemical Analysis. Sep. 13-17, 2018, Cambridge, United Kingdom. **Poster**
7. **Huang FYJ**, Hsu FY, Chao JH. Effective Dose Rate from the Naturally Occurring Radionuclides in Soils. 9th International Conference on Isotope, Nov. 12~16, 2017, Doha, Qatar. **Poster**
8. **Huang FYJ**, Hung CC, Luo TY, Chao JH, Hsieh BT. Evaluation of Co-cross-linking Hydrogels for Local Delivery ^{188}Re-Dox-nanoliposome drugs in breast tumor bearing mice. 9th International Conference on Isotope, 2017, Doha, Qatar. **Poster**
9. **Huang FYJ**, Lee TW, Chang CW, Lo JM. "Therapeutic efficacy evaluation of ^{188}Re-Labeled PEGylated nanoliposome in orthotopic glioma bearing rat model", 2014 Annual Meeting of the Society of Nuclear Medicine, ROC (Taiwan) & the 5th Cross-strait Nuclear Medicine Conference, Taiwan, November 1, 2014. **Podium** (**Honorable Podium)**
10. **Huang FYJ**, Lee TW, Lo JM. "Dosimetry and maximum tolerated dose evaluation of ^{188}Re-Nanoliposome on glioma bearing- or normal Fischer344 rat model", 2013 Japan-Taiwan Symposium on Polyscale Technologies for Biomedical Engineering and Environmental Sciences. Tokyo University of Science, Oshamambe, Hokkaido, Japan, 2013. **Poster**
11. Hong JJ, **Huang FYJ**, Kan KY, Lin WY, Luo TY, Huang LK and Hsieh BT. "Evaluation of the hepatic tumor therapeutic efficacy of a C/GP/Dox/^{188}Re-Sn colloid", J Nucl Med. 2013; 54 (Supplement 2):1396. **Poster**
12. Hong JJ, **Huang FYJ**, Gan GY, Huang LK, Hsieh BT. "Evaluation of a novel C/GP/Dox/^{188}Re-Tin colloid characteristic in hepatic tumor", 20th International Symposium on Radiopharmaceutical Sciences, Jeju Island, Korea, 2013. **Poster**
13. Chen PY, **Huang FYJ**, Lee TW, Hsu MH, Lo JM. "Development of auto-assembly of nanotargeted complexes using ^{131}I-streptavidin and biotin-bearing liposomes for rapid tumor imaging: An In Vitro Study", International Symposium on Frontier Biomedical and Molecular Imaging, Taipei, Taiwan, Nov. 5-6, 2011. **Poster**
14. Chen WY, **Huang FYJ**, Lee TW, Lo JM. "In vitro and ex vivo examination of ^{188}Re-E[c(RGDyK)]2-PEG-liposome as antitumor agent in C26 tumor-bearing mouse model", European Association of Nuclear Medicine, Birmingham, UK, 15-19

Feng-Yun (Jimmy) Huang PhD, 黃蜂運 助理教授

Department of Medical Imaging and Radiological Sciences
Central Taiwan University of Science and Technology
No.666, Buzih Road, Beitun District,
Taichung City 406053, Taiwan

fyhuang@ctust.edu.tw
jimmyhuang1007@gmail.com
Office: 886-4-2239-1647 ext.3005
Mobile: 886-918-494-218

October, 2011. **Poster**

15. Lee WY, Lo JM, **Huang FYJ**, Chen WJ. "Lactoferrin-modified liposome with improved brain drug delivery", World Molecular Imaging Congress, San Diego, California, 7-10 September, 2011. **Poster**
16. **Huang FYJ**, Lee WY, Lee TW, Lo JM. "Biodistribution, pharmacokinetics and imaging of ^{188}Re-labeled PEGylated nanoliposome in rat orthotopic glioma model", Japan-Taiwan Symposium on Polyscale Technologies for Biomedical Engineering and Environmental Sciences with The 5th Polyscale Technology Workshop, Japan, 2011. **Poster (Best Poster)**
17. **Huang FYJ**, Lee TW, Kao CHK, Chang CH, Lee WY, Chen WY, Lo JM. "Development of ^{188}Re-BMEDA encapsulated pegylated liposome as a diagnostic and therapeutic agent for glioma", International Symposium on technetium and other radiometals in chemistry and medicine. Bressanone (Bolzano) – Italy September 8-11, 2010. **Poster**
18. **Huang FY**, Huang LK, Luo TY, Lin WY, Tsai CS, Hsieh BT. "Development of a thermosensitive hydrogel system for local delivery of radioactive and anticancer drugs", 6th International Conference on Isotope, 2008, Seoul, Korea. **Poster**
19. **Huang FY**, Luo TY, Huang LK, Lin WY, Hsieh BT. "Re-188 thermogelling radiopharmaceuticals in vitro kinetic study", 3th International Conference on Medical Imaging and Radiological Sciences, Taiwan, 2007. **Poster (Second Place)**
20. **Huang FY**, Huang LK, Tsai CS, Hsieh BT. "Feasibility study of chitosan-based hydrogel for controlled release of the therapeutic radio and chemo pharmaceuticals", Ann Nuci Med Sci. vol. 20 supplement (2007, Taipei, Taiwan). **Podium**
21. Huang LK, **Huang FY**, Tsai CS, Hsieh BT. "Design of a chitosan-based hydrogel for the delivery of therapeutic radiopharmaceuticals", 14 ISRRT (2006, 1, 15 Taichung, Taiwan). **Poster**

Research Grant

編號	補助機構	計畫主持人／共同主持人	計畫名稱（計畫編號）	核定總金額	執行期限
1	110 年度中臺科技大學教師校內個人型專題研究計畫	主持人	預標靶 ImmunoSPECT/PET 造影劑之專一性 TCO 修飾抗體複合體製備與特性分析（CTU110-P-101）	160,000 元	2021/08/01 ~ 2022/07/31
2	110 年度澄清綜合醫院中港分院與中臺科技大學產學合作研究計畫	主持人	^{89}Zr ImmunoPET 抗體藥物複合體製備與特性分析（CTU110-CCGH-004）	100,000 元	2021/08/01 ~ 2022/07/31
3	111 年度原子能科技學術合作研究計畫	主持人	專一性放射標誌 ^{89}Zr-DFO*-ImmunoPET 造影劑於腫瘤 PD-L1 表現之偵測（MOST 111-2623-E-166 -001 -NU）	600,000 元	2022/01/01 ~ 2022/12/31
4	111 年度臺中榮民總醫院與中臺科技大學合作研究計畫	主持人	螯合劑-抗體比於 ^{89}Zr-DFO*-labeled Anti-PD-L1 Antibody 之影響（TCVGH-CTUST1117703）	190,000 元	2022/01/01 ~ 2022/12/31
5	111 年度行政院原子能委員會核能研究所	主持人	除役核電廠難測核種實驗室間能力比對測試件製作（NL1110493）	250,000 元	2022/06/08 ~ 2022/12/31
6	112 年度原子能科技學術合作研究計畫	共同主持人	濕氧化碳-14 難測核種分析技術開發（NSTC 112-2623-E-166-001 –NU）	850,000 元	2023/01/01 ~ 2023/12/31
7	112 年度臺中榮民總醫院與中臺科技大學合作研究計畫	主持人	專一性預標靶免疫檢查點放射示蹤劑研製（TCVGH-CTUST1127701）	260,000 元	2023/01/01 ~ 2023/12/31
8	112 年度中臺科技大學教師校內個人型專題研究計畫	主持人	預標靶微脂體放射化學免疫治療劑之製備與特性研究（CTU112-P-003）	170,000 元	2023/01/01~ 2023/12/31
9	財團法人工業技術研究院	主持人	資源循環及減碳效益驗證技術(2/4)-計畫分包計畫：SRF 生質碳比例檢測技術（CTU113-C-012）	1,500,000 元	2024/01/01~ 2024/12/31
10	核能安全委員會輻射偵測中心	主持人	核能安全委員會-環境中鎝-99 放射化學分析方法建立（輻秘字第 1130000627 號）	820,000 元	2024/01/01~ 2024/12/31
11	113 年度臺中榮民總醫院與中臺科技大學合作研究計畫	主持人	利用 IEDDA 點擊化學技術發展預標靶 iPET 造影劑（TCVGH-CTUST1137701）	220,000 元	2024/01/01~ 2024/12/31
12	113 年度中臺科技大學教師校內個人型專題研究計畫	主持人	鎝-99 核種之放射化學分離與量測技術建立（CTU113-P003）	170,000 元	2024/01/01~ 2024/12/31
13	114 年度童綜合醫院與中臺科技大學產學合作研究計畫	主持人	核子醫學心肌灌流影像自動化分析報告系統的診斷準確度驗證（CTU114-TUNG-003）	115,000 元	2025/01/01~ 2025/12/31
14	114 年度臺中榮民總醫院與中臺科技大學合作研究計畫	主持人	不同生物分析方法量測藥物-抗體比之關聯性研究（TCVGH-CTUST1147704）	200,000 元	2025/01/01~ 2025/12/31
15	114 年度國科會原子能合作研究計畫	主持人	利用萃取層析法及液態閃爍計數技術進行水試樣中鎳-63 分析（NSTC 114-2623-E-166-001-NU）	700,000 元	2025/01/01~ 2025/12/31
16	財團法人工業技術研究院	主持人	資源循環及減碳效益驗證技術(3/4)計畫分包計畫：液體閃爍計數器量測碳 14（RM113249）	1,200,000 元	2025/01/01~ 2025/12/31

Feng-Yun (Jimmy) Huang PhD, 黃蜂運 助理教授

Department of Medical Imaging and Radiological Sciences
Central Taiwan University of Science and Technology
No.666, Buzih Road, Beitun District,
Taichung City 406053, Taiwan

fyhuang@ctust.edu.tw
jimmyhuang1007@gmail.com
Office: 886-4-2239-1647 ext.3005
Mobile: 886-918-494-218

Patents

1. Shu-Pei Chiu, Bo-Sian Lin, Liang-Ting LIN, Yi-Jang Lee, Te-Wei Lee, **Feng-Yun Huang**, Jem-Mau Lo, "Kit for preparation of target radiopharmaceuticals and method of using it ".
   - US: Publication Number: US9717808 B2
   - JP: Publication Number: JP5956533 B2
   - EP: Publication Number: EP3011977 A1
2. Lih-Ching Chiueh, Che-Yang Lin, Shiou-Wei Tsuei, Yuan-Hsin Chang, Hsu-Yang Lin, Jiunn-Hsing Chao, **Feng-Yun Huang**. Method for rapid determination of fruit juice authenticity. (In submitted No.: 106137674, TW).