College of Pharmacy, Kaohsiung Medical University, Taiwan Academic Profile (2023)

Yung-Yi Cheng	Ph.D.	Assistant Professor	
College of Pharmacy			Re
E-mail: yungyi@kmu.edu.tw			
Website:			

Research Interests

Research of interest includes structural modification of natural products as well as ionizable lipids for nucleic acids delivery, drug metabolism, and herb-drug interactions. Currently, my research is focused on the synthesis and design of drug-loaded lipids for liver/lung diseases.

Key Expertise

- Design and synthesis of novel ionizable lipids for nucleic acids lipid nanoparticle delivery
- Structural modifications of natural products as drug-loaded lipids for mRNA delivery/bioactive improvements
- Pharmacokinetics and pharmacodynamics for herb-drug interaction/food safety
- Plasmid DNA and mRNA delivery platform

Five Key Publications (up to 5)

- 1. Cheng, Y.-Y.; Tuzo, E. T.; Dalley, J. W.; Tsai, T.-H., The effects of Hedyotis diffusa extract onthe pharmacokinetics of tamoxifen, 4-hydroxytamoxifen, and N-desmethyltamoxifen. *Biomedicine & Pharmacotherapy*, **2022**, 145, 112466. doi: 10.1016/j.biopha.2021.112466.
- 2. Cheng, Y.-Y.; Zheng, T.; Chang, M. W.; Dalley, J.W.; Chen, Y.-J.; Tsai, T.-H. and Hsieh, C.-H. Impact of Irradiation on the Pharmacokinetics and Biotransformation of Tamoxifen. *Front. Oncol.* **2022**, 12, 833108. doi: 10.3389/fonc.2022.833108.
- 3. Cheng, Y.-Y.; Hsieh, C. H.; Tsai, T. H., Concurrent administration of anticancer chemotherapydrug and herbal medicine on the perspective of pharmacokinetics. *J Food Drug Anal*, **2018**, 26(2S), S88-S95.
- 4. Cheng, Y.-Y.; Tsai, T. H., Pharmacokinetics and Biodistribution of the Illegal Food Colorant Rhodamine B in Rats. *J Agric Food Chem*, **2017**, 65 (5), 1078-1085.
- 5. Liu, Q.*; Cheng, Y.-Y.*; Li, W.; Huang, L.; Asada, Y.; Hsieh, M. T.; Morris-Natschke, S. L.; Chen, C. H.; Koike, K.; Lee, K. H., Synthesis and Structure-Activity Relationship Correlations of Gnidimacrin Derivatives as Potent HIV-1 Inhibitors and HIV Latency Reversing Agents. *J Med Chem*, **2019**, 62 (15), 6958-6971. (*equal contribution)

Fields wish to collaborate with (up to 3)

- Molecular Biology
- Bioinformatics
- Analytical Chemistry