The 2nd Symposium on Drug Discovery

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Speaker information

General Information

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Affiliation	School of Pharmacy, College of Pharmacy, Taipei Medical University
Education Background	Ph.D., Graduate Institute of Pharmaceutical Sciences, National Taiwan University
Professional Appointment	Distinguished Professor
Research Interest	Structure optimization through rational drug design and intelligent modification.
Website	https://hub.tmu.edu.tw/en/persons/jing-ping-liou

Recent Publications

1. Sharma R, Chiang YH, Chen HC, Lin HY, Yang WB, Nepali K, Lai MJ, Chen KY, **Liou JP***, Hsu TI*. *Cancer Lett.* **2024** Apr 1;586:216666. (IF = 9.7; ONCOLOGY; 34/241 14.1%)
2. Sharma S, Wang SA, Yang WB, Lin HY, Lai MJ, Chen HC, Kao TY, Hsu FL, Nepali K*, Hsu TI*, **Liou JP***. *J Med Chem.* **2024** Feb 22;*67*(4):2963-2985. (IF = 7.3; CHEMISTRY, MEDICINAL; 4/60 6.6%)
3. Narwanti I, Yu ZY, Sethy B, Lai MJ, Lee HY, Olena P, Lee SB*, **Liou JP***. *Eur J Med Chem.* **2023** Jun 2;258:115505. (IF = 6.700; CHEMISTRY, MEDICINAL; 7/60 11.6%)
4. Tseng HJ, Banerjee S, Qian B, Lai MJ, Wu TY, Hsu TI, Lin TE, Hsu KC, Chuang KH, **Liou JP***, Shih JC*. *Eur J Med Chem.* **2023** Aug 5;256:115459. (IF = 6.700; CHEMISTRY, MEDICINAL; 7/60 11.6%)
5. Wu TY, Chen M, Chen IC, Chen YJ, Chen CY, Wang CH, Cheng JJ, Nepali K*, Chuang KH*, **Liou JP*** *J Adv Res.* **2023** Apr;46:159-171. (IF = 10.7; MULTIDISCIPLINARY; 10/73 13.6%)
6. Nepali K, Wu AC, Lo WL, Chopra B, Lai MJ, Chuang JY*, **Liou JP***. *Eur J Med Chem.* **2023** Feb 15;248:115054. (IF = 6.700; CHEMISTRY, MEDICINAL; 7/60 11.6%)
7. Mehndiratta S, Qian B, Chuang JY, **Liou JP***, Shih JC*. *J Med Chem.* **2022** Feb 10;*65*(3):2208-2224. (IF = 7.3; CHEMISTRY, MEDICINAL; 4/60 6.6%)
8. Thakur A, Faujdar C, Sharma R, Sharma S, Malik B, Nepali K*, **Liou JP***. *J Med Chem.* **2022** Jul 14;*65*(13):8596-8685. (IF = 7.300; CHEMISTRY, MEDICINAL; 4/60 6.6%)
9. Ojha R, Chen IC, Hsieh CM, Nepali K, Lai RW, Hsu KC, Lin TE, Pan SL, Chen MC*, **Liou JP***. *J Med Chem.* **2021** Dec 23;*64*(24):17824-17845. (IF = 7.300; CHEMISTRY, MEDICINAL; 4/60 6.6%)
10. Liu YM, Tu HJ, Wu CH, Lai MJ, Yu SC, Chao MW, Wu YW, Teng CM, Pan SL*, **Liou JP***. *Eur J Med Chem.* **2021** Jul 5;219:113428. (IF = 6.700; CHEMISTRY, MEDICINAL; 7/60 11.6%)

Speaker information

Speech Topic and Abstract

Title:
New Immunosensitizer for Treatment of Colorectal cancer

Abstract:
Utilizing rational drug design approach to synthesize a series of small molecule compounds. Lead compound exhibited not only direct cytotoxicity to cancer cells but also downregulated immune checkpoints (PD-L1 and IDO) expression in tumors via the inhibition of STAT1 pathway and degradation of oncogene proteins (Src, AKT, Rb, and FAK), leading to in vivo tumor growth inhibition. These multiple effects enabled the effector T cells to largely infiltrate into the tumor region and release granzyme B to kill cancer cells. In addition, Lead also decreased TGF-β secretion from normal cells, resulting in the systemic reduction of immunosuppressive regulatory T cells. Delightfully, a cocktail treatment of lead compound and anti-PD-1 antibodies demonstrated synergistic efficacy to eliminate solid tumors with 83.9% of tumor growth inhibition.