Curriculum Vitae

Name
Hsing-Pang Hsieh, Ph.D.

Current Position
Director/Distinguished Investigator
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Education & Professional Experiences

Ph.D., Organic Chemistry, State University of New York
B.S., Chemistry, National Tsing Hua University
Distinguished Investigator/Director, Institute of Biotechnology and Pharmaceutical Research, National Health Research Institutes. (2023/1~)
Jointly Appointed Professor, Department of Chemistry, National Tsing Hua University. (2007 – present)
Jointly Appointed Professor, Department of Chemistry, National Yang Ming Chiao Tung University. (2014 – present)
Research Fellow/Deputy Director, Biomedical Translation Research Center (BioTReC), National Biotechnology Research Park (NBRP), Academia Sinica. (2020/1-2022/12)
Associate Director, Institute of Biotechnology and Pharmaceutical Research, National Health Research Institutes. (2015/4-2019/12)
Director-General, Department of Research Planning and Development, National Health Research Institutes. (2012-2014)
Director, Technology Transfer and Incubation Center, National Health Research Institutes. (2009-2012)
Chief, Library, National Health Research Institutes. (2007-2009)

Research Interests

Medicinal Chemistry, Drug Design, Drug Development, Chemical Biology

Selected Publications

1. Hsueh, W. Y.; Wu, Y. L; Weng, M. T.; Liu, S. Y.; Santavanond, J. P.; Liu, Y. C; Lin, C. I.; Lai, C. N.; Lu, Y. R.; Hsu, J. Y.; Gao, H. Y.; Lee, J. C.; Wei, S. C.; Lyu, P. C.; Poon, I. K. H.; **Hsieh, H. P.**[*]; Chiu, Y. H.[*] "Novel Naphthyridones Targeting Pannexin 1 for Colitis Management" **Adv. Sci.** 2025, **12**, e2411538
2. Pao, Y. S.; Liao, K. J.; Shiau, Y. C.; Chao, M. H.; Li, M. C.; Lin, L. M.; Chang, H. H.; Yeh, H. W.; Chen, Y. J.; Chiu, Y. T.; Pan, M. Y. C.; Chang, Y. H.; Shen, S. Y.; Lin, S. Y.; Hui-Chun Cheng, H. C.; Lin, Y. C.; Sun, Y. J.[*]; Kuo, C. C.[*]; **Hsieh, H. P.**[*]; Wang, L. H. C.[*] "KIF2C Mediates Paclitaxel Resistance by Resolving Polyglutamylated Microtubules" **Developmental Cell**, 2025, **60**, 2097-2113.e8.
3. Lin, S. Y.; Hsu Yung, C.; Peng, Y. H. ; Ke, Y. Y.; Lin, W. H.; Sun,H. Y.; Kuo, F. M.; Chen, P. Y.; Lien, T. W.; Chen, C. H.; Chu, C. Y.; Wang, S. Y.; Yeh, K. C.; Chen, C. P.; Hsu, J. TA; Wu, S. Y.; Yeh, T. K.; Chen, C. T.; **Hsieh, H. P.**[*] ***J. Med. Chem.*** 2019, 62, 10108-10123.

4. Li, M. C.; Coumar, M. ; Lin, . Y.; Lin, Y. S.; Huang, G. L.; Chen, C. H.; Lien, T. W.; Wu, Y. W.; Chen, Y. T.; Chen, C. P.; Huang, Y. C.; Yeh, K. C.; Yang, C. M.; Kalita, B.; Pan, S. L.; Hsu, T. A.; Yeh, T. K.; Chen, C. T.; **Hsieh, H. P.*** "Development of Furanopyrimidine-Based Orally Active Third-Generation EGFR Inhibitors for the Treatment of Non-Small Cell Lung Cancer" ***J. Med. Chem.*** 2023, **66**, 2566–2588.

Lecture Title

From Bench to Clinic: Novel HER2/EGFR Kinase Inhibitor DBPR112

Abstract (500 words maximum)

Lung cancer is one of the chief causes of cancer death in the world; in addition, non-small cell lung cancer (NSCLC) accounts for 85% of the lung cancer deaths. The development of tyrosine kinase inhibitors (TKIs) targeting epidermal growth factor receptor (EGFR) have shown remarkable effects in patients but some acquired resistance after treatment. Therefore, the discovery of efficacious EGFR-TKIs poses an utmost priority.

Based on our achievement, we established a knowledge-based screening, followed by High Throughput Parallel Synthesis (HTPS) to synthesize more than 500 compounds. Further structure modification based on scaffold hopping approach by changing the pharmacophore moiety had led us to discover **DBPR112** as a potent EGFR-TKI clinical candidate showing excellent inhibitory ability on $EGFR^{L858R/T790M}$ and $EGFR^{exon20ins}$. **DBPR112** was orally effective against the growth of human lung H1975 tumors subcutaneously xenografted in nude mice. A dramatic reduction in tumor size was noted with **DBPR112** treatment, while displaying negligible body weight loss in all dosing groups. Furthermore, **DBPR112** was more tolerable than afatinib in mice. To date, all pre-clinical studies were completed, and the IND application of **DBPR112** was approved by US FDA and TW FDA in 2016. **DBPR112** was licensed to a new startup company, AnBogne Therapeutics in 2020. Currently, the Phase 1b/2 clinical trial has been undergoing in Taiwan.