The first symposium on frontier in PROTAC drug discovery and development was held successfully at ShanghaiTech University in association with Jing Medicine

On May 16th, 2019, the first “Symposium on Frontier in PROTAC Drug Discovery and Development” hosted by the Shanghai Institute for Advanced Immunochemical Studies (SIAIS) of ShanghaiTech University was held at the conference center at ShanghaiTech University in Zhangjiang, Shanghai. This first symposium on the cutting-edge PROTAC technology has attracted a broad spectrum of interest from local and international academic research institutes, investment and business communities, as well as pharmaceutical/biotech companies with about 600 attendees, over 50% of which came from pharmaceutical industry and business communities.

For this symposium, the SIAIS of ShanghaiTech Univ has invited world renowned scientists and experts in the PROTAC drug discovery and development field to share their latest progresses on discovering novel PROTACs and E3 ligase ligands. The invited speakers included Prof. Jian Jin from Mount Sinai Hospital in New York, Prof. Shaomeng Wang from University of Michigan, Prof. Yue Xiong from University of North Carolina, Prof. Mikihiko Naito from National Institute of Health Sciences in Japan, Prof. Yu Rao from Tsinghua University, Prof. Boxun Lu from Fudan University, Prof. Zhengyu Jiang from China Pharmaceutical University, Prof.s Xiaobao Yang, and Yong Cang from ShanghaiTech University, Dr. Andrew J. Phillips, the CEO of C4 Therapeutics, a PROTAC-specialized biotech company from US, and Dr. Xiangquan Ma, the VP in Chemistry at Shanghai MediCilon.

This symposium was collectively chaired by Prof. Jian Jin, Prof. Shaomeng Wang, and Prof. Yue Xiong. To kick-off the symposium, Prof. Biao Jiang of SIAIS gave an opening welcome remark. After that, Prof. Shaomeng Wang gave the keynote speech titled “Drugging the undruggables by PROTAC”. Prof. Jian Jin subsequently presented his recent research on degradation of methyl transferase EZH2. Followed his talk, Prof. Yue Xiong presented the research on mechanism of cullin-RING E3 ubiquitin ligase, CRLs. Prof. Mikihiko Naito presented the research and updates as regard to the recent development on SNIPERs technology. Dr. Andrew J. Philips presented the potential applications of PROTAC technology in CAR-T cell therapy area. Prof. Yu Rao shared his recent research in developing BTK-PROTACs to overcome Ibrutinib-resistant Non-hodgkin’s lymphoma (NHL). Prof. Boxun Lu presented a new potential strategy to treat neurodegenerative diseases via autophagy-mediated protein degradation. Prof. Zhengyu Jiang shared their research on discovering light-induced controllable PROTAC tools. The two faculty members of the SIAIS from ShanghaiTech University, Prof. Yong Cang and Prof. Xiaobao Yang, presented their research on chemical-induced neomorphic screen for oncoprotein degraders,
as well as the recent progresses on discovering new CRBN ligands for the development of novel proteolysis-targeting drugs for the treatment of lung and breast cancers, and multiple myeloma.

In addition, to promote and facilitate closer interactions and collaborations between basic academic researchers and industry/business communities, the Symposium arranged a Panel Discussion, and invited many leading experts and industry executives in the field, which included Dr. Jun Zhang, the Director of Oncology at Ruijin Hospital, Dr. Ying Luo, the CEO of Cullgen, Dr. Michael Xie, the CEO of Jing Medicine, Mr. Qiang Sheng, the partner of WisdoMont Asset management, Mr. Hua Bai, the former Chairman of Hisun Pharmaceuticals, Dr. Xiaohui Gu, Senior Director of Medicinal Chemistry at Simcere Pharmaceuticals, Dr. Jiefei Cheng, President of Otsuka Shanghai Research Institute, Dr. Chunlin Chen, the CEO of Shanghai Medicilon, and Dr. Yiyun Song, Associate Editor in Nature Chemical Biology. The panelists had a vivid discussion in various perspectives on the impact of the recent advancement of PROTAC technology on biomedical research and industry applications, future development trend, and investment potentials. The Panelist Discussion further benefited the attendees to understand the PROTAC technology as the recent advancement and its potential applications in biotech industry and biomedical research field. All panelists were in consensus that the PROTAC technology will play an important role in future new drug discovery and development.

As one of the most recent therapeutic modalities in drug discovery, PROTAC protein degradation technology has been rapidly gaining momentum in the drug discovery field. The first oral PROTAC drug candidate (ARV-110) has recently been approved for entering phase I clinical studies by the U.S. FDA in March, 2019. This has further fueled the enthusiasm and generated excitement in the drug discovery community, and many big global pharma have recently made big investments entering this important field. Since 2014, our SIAIS institute at ShanghaiTech University has initiated PROTAC research and made significant investment in this new technology. Currently, Prof. Biao Jiang Lab at the SIAIS has established a comprehensive platform for PROTAC new drug discovery. A strategic collaboration agreement valued up to $100 million in total milestone payments was reached between the SIAIS and Jing Medicine in Shanghai on February 2nd, 2018.

This symposium was a total success in many ways. It has enhanced the influence of ShanghaiTech University on PROTAC technology and demonstrated ShanghaiTech University’s capability in this field. It will further promote communications and collaborations between academic research institutes, industry, and business communities, which will have a positive impact on translation of academic research to future industry applications.
Prof. Biao Jiang from SIAIS gave an opening welcome remark
Invited speakers

Panel discussion

Picture of all panelists
Attendees at the symposium

Symposium on Frontier in PROTAC Drug Discovery and Development

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Attendees at the symposium
Dr. Michael Xie, CEO of Jing Medicine, speaking at Panel Discussion