



The University of Hong Kong

Department of Pharmacology and Pharmacy & Dr. Li Dak-Sum Research Centre

Present

Seminar series – Drug Delivery and Translational Medicine

Chemical Biology 2.0: Molecular Toolkits Development towards

Precision Theranostics

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Prof. Xing Bengang

Chair Professor

Department of Applied Biology and Chemical Technology The Hong Kong Polytechnic University

Date: 29 July 2025 (Tuesday) Time: 10:00 a.m. - 11:00 a.m.

Venue: HKJC-S2, G/F, The HKJC Bldg for

Interdisciplinary Research, 5 Sassoon Road, Pokfulam



Abstract:

Precision theranostics is transforming personalized medicine by enabling early disease detection, targeted intervention, and real-time therapeutic feedback. However, biological complexity and the lack of precise molecular tools remain major challenges. Chemical biology, bridging programmable chemistry and complex biology, offers innovative solutions that may address these issues. Along this event, Prof. Xing Bengang, Chair Professor of Chemical Biology at The Hong Kong Polytechnic University, proposes the "Chemical Biology 2.0" concept—developed over nearly two decades of interdisciplinary research and has built up a versatile chemical toolbox for disease-specific recognition, multimodal imaging, targeted therapy, and accelerated drug screening, effectively bridging basic research and potential clinical application.

Bio:

Prof. Xing received his Ph.D. from Nanjing University in 2000 and pursued postdoctoral research at UCLA and Stanford, Since 2005, he held progressive academic positions across Assistant/Associate/ Full Professor at Nanyang Technological University, Singapore, before joining PolyU in 2025 under the Global STEM Scholar and Chair Professorship Scheme. He has published over 150 peer-reviewed papers (14,300+ citations, h-index 70), holds 20+ international patents, and serves on Chairs of international conferences, and editorial boards of several leading journals. He is a Fellow of the Royal Society of Chemistry (FRSC) and recipient of the Young Innovator Award in Nanobiotechnology, etc. His research focuses on chemical biology, molecular imaging & probe development, molecular therapeutics, and nano-therapostics engineering, advancing nextgeneration precision medicine.

Moderator: Prof. Weiping Wang, Associate Professor, Department of Pharmacology and Pharmacy & Dr. Li Dak-Sum Research Centre, The University of Hong Kong For enquiries, please contact Ms. Esther Ng at +852 3917-9123 or esther09@hku.hk

