

U LKS Faculty of Medicine Department of Pharmacology & Pharmacy 香港大學藥理及藥劑學系

The University of Hong Kong

Department of Pharmacology and Pharmacy

Presents

Seminar series —— Drug Delivery and Translational Medicine Nano-/microscale materials-enabled drug delivery technologies

by

Dr. Wei Tao

Principal Investigator in the Center for Nanomedicine and Faculty Member in the Department of Anesthesiology, Perioperative, and Pain Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, USA **Date:** 21 July 2023 (Friday)

 Time:
 9:30 a.m.
 10:30 a.m.

 Venue:
 Zoom Seminar

 Zoom Link:
 https://hku.zoom.us/j/93978280816

 Meeting ID:
 939 7828 0816
 Password:
 335620

Abstract:

Despite all of the coverage of new drugs, it is not enough to just have an effective drug. To enhance therapeutic efficacy and reduce the side effects, the drugs have to be protected and transported to the right location to get an effect at the right time. Over the past few decades, nano-/microscale materials-enabled drug delivery platforms have made tremendous advancement in preventing and treating human diseases. Especially, the recent great success achieved by the two highly effective mRNA nanoparticle vaccines during the COVID-19 pandemic has further highlighted the great potential of drug delivery technologies. During the evolution of these drug delivery technologies, materials science innovation has played an important role from drug modification to the synthesis of different drug delivery platforms, which fulfills effective medical applications in various diseases including cancers, cardiovascular diseases, diabetes, infectious diseases, and many others. In this talk, I will introduce our current studies on nano-/microscale materials-enabled drug delivery technologies with the promise to improve health care, as well as our effort in accelerating their translation into the drug development pipeline.

Bio:

Dr. Wei Tao is the Farokhzad Family Distinguished Chair for Innovation (Endowed Chair) and Principal Investigator in the Center for Nanomedicine, Faculty Member in the Department of Anesthesiology, Perioperative, and Pain Medicine, and Faculty Member in the Gillian Reny Stepping Strong Center for Trauma Innovation at Brigham and Women's Hospital, Harvard Medical School. He is also the first Chaired Professor as an assistant professor in his institution. He has published over 100 papers in prestigious journals, including Nature/Science/Cell Press/PNAS family journals, and he is among Clarivate's Global Highly Cited Researchers List (continuously selected since 2021). Prof. Tao's research interests include biomaterials, nanotechnology and drug delivery, as well as their various applications in translational medicine.

Dr. Tao has received multiple awards/grants including the American Heart Association (AHA) Transformational Project Award, American Lung Association (ALA) Courtney Cox Cole Lung Cancer Research Award, AHA Collaborative Sciences Award, ALA Cancer Discovery Award, Novo Nordisk ValidatioNN Award, Harvard/Brigham Health Technology Innovator Award, etc. He also serves on numerous editorial boards including as Founding Editor-in-Chief of Biomedical Technology (Elsevier, KeAi's new journal), Deputy Editor of Exploration (Wiley), Associate Editor of Journal of Nanobiotechnology (Springer Nature & BMC) and Aggregate (Wiley); Guest Editor of eLife, etc.; Editorial Board Member of Bioactive Materials (Elsevier, KeAi), Nano-Micro Letters (Springer Nature), etc.; and Advisory Board Member of Matter (Cell Press).

