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

Dr Li Dak-Sum Research Centre
李達三博士研究中心

The University of Hong Kong

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

Seminar series – Drug Delivery and Translational Medicine

Leveraging the Natural Cellular and Biomolecular Interactions in Blood for the Design of Targeted, Anti-Inflammatory Particle Therapeutics

by

Prof. Lola Eniola-Adefeso

Dean and Professor
College of Engineering
University of Illinois Chicago (UIC) ,Chicago

Date: 03 December 2025 (Wednesday)
Time: 10:00 a.m. – 11:00 a.m.
Venue: Faculty Board Room, 1/F, Daniel & Mayce Yu Administration Wing, LKS Faculty of Medicine, 21 Sassoon Road, Pokfulam

Abstract:

Vascular-targeted particle therapeutics can enhance drug efficacy while reducing systemic side effects. Key factors for successful targeting include identifying a disease-specific target, selecting the appropriate drug carrier type and geometry for effective interaction with the vascular wall, and designing a drug-carrier system that releases therapeutics as needed. Prof. Eniola-Adefeso's research investigates how particle geometry, material chemistry, and blood flow dynamics influence the interaction between drug carriers and blood vessel walls. This interaction is crucial for improving targeting efficiency across various diseases. The presentation will explore how carrier-blood cell interactions affect binding to the vascular wall and impact neutrophil functions during disease. Prof. Eniola-Adefeso will also present the material design parameters for the optimal design of drug carriers for active and passive use in treating acute lung injury and other inflammatory diseases.

Bio:

Prof. Lola Eniola-Adefeso is the 10th dean of UIC College of Engineering. A distinguished chemical and biomedical engineer, she has over 25 years of experience advancing interdisciplinary research and inclusive excellence. She has published more than 70 peer-reviewed papers, obtained significant federal funding, and holds three patents, one of which is licensed to a biotech firm. Dean Eniola-Adefeso serves as president of the American Institute for Medical and Biological Engineering and holds leadership roles with the American Institute of Chemical Engineers and the National Academies. She actively advocates for diversity in engineering, leading initiatives like NextProf and co-founding BME Women Faculty UNITE. She helped organize the 2024 Forging Futures Together summit, connecting HBCU and Big Ten+ engineering deans. Before joining UIC, she was a professor at the University of Michigan, holding the Vennema Endowed Professorship and being named a University Diversity and Social Transformation Professor. She earned her PhD from the University of Pennsylvania and is a Meyerhoff Scholar alumna of UMBC.

Moderator: Prof. Weiping Wang, Associate Professor, Department of Pharmacology and Pharmacy & Dr. Li Dak-Sum Research Centre, The University of Hong Kong
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Seminar series website QR code