

## 282<sup>nd</sup> IBB Seminar

### Harnessing the power of natural products: towards understanding andrographolide as lead compound in the development of anti-inflammatory agents

講師 : **Prof. Christina L.L. Chai**

Dept. of Pharmacy,  
National University of Singapore



日時 : 2025 年 4 月 23 日 (水) 16:00~17:30

会場 : 東京科学大学 総合研究院 生体材料工学研究所  
第二会議室 22 号館 (1 階)

**Abstract:** Natural products have long been recognized as valuable sources of lead compounds in drug discovery and development. Despite their widespread use and documented pharmacological activities, much remains to be understood about the biological mechanisms underlying their effects. A deeper understanding of these biological targets and mechanisms of action is crucial for the efficient optimization and development of natural products as therapeutics for specific disease areas. This talk will focus on andrographolide, the principal bioactive compound of *Andrographis paniculata*, a well-known herb used in traditional Chinese and Ayurvedic medicine. Andrographolide has been shown to exhibit a broad spectrum of pharmacological activities, including anti-inflammatory effects. The anti-inflammatory properties of andrographolide are well-documented but the precise mechanisms through which andrographolide exerts these effects remain elusive. Our findings have led to exciting and unexpected discoveries that could be leveraged in the development of novel anti-inflammatory agents. Through this work, we aim to highlight the immense potential of natural products as a treasure trove for drug discovery, offering unique insights that can be harnessed in the design and development of small molecule therapeutics.

お問い合わせ : 総合研究院 生体材料工学研究所  
メディシナルケミストリー分野  
亀井(内線 8036)、玉村