

18th Lecture on Molecular Engine

第18回発動分子科学セミナー

4th WRHI SatelliteLab Seminar

第4回WRHIサテライトラボセミナー

Associate Professor Christopher D. Snow

Colorado State University, USA

“Engineered Protein Scaffold Crystals for Sensing, Delivery, Hybrid Materials, and Structure Determination”



Engineering protein crystals offers a less explored pathway to create and test the properties of highly precise nanostructured materials. To avoid the technical challenge of forming crystals from diverse proteins, we instead grow scaffold crystals with large nanopores (~13 nm diameter) and stabilize the scaffold using covalent crosslinks. The resulting “molecular pegboard” materials can capture and organize functional guest molecules: enzymes for catalysis, fluorescent proteins for sensing, DNA for barcoding, and inorganic particles for hybrid materials. Unlike other porous materials, a crystalline scaffold may ultimately organize guest molecule with sufficient precision so as to allow structure determination via X-ray diffraction.

日時：2019年9月2日（月）

16:00~17:30

場所：B2棟大会議室（426室）

連絡先：上野 隆史（内線 5844）



Molecular Engine

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