

Workshop III : Exploring Protein Complex Systems and Enzymatic Functions through Advanced Structural Biology Approaches from Dynamic and Static Perspectives

Chairs: Chun-Hsiang Huang (黃駿翔) & Yane-Shih Wang (王彥士)

September 4 (Thursday)

Place: L100

08:30 Registration -@Activity Center (Entrance 5)

09:00 **SIKA 十週年 -- ACNS and NSRRC Remote Celebration**
Place: D260

Session Chair: Yane-Shih Wang (王彥士)

10:30 III1 **GlycoSwitch — A Novel Signaling Circuit to Control Endocytosis**
Ludger Johannes, Institut Curie, Paris, France)

11:10 III2 **Uncovering the Mechanisms of how Signaling Proteins Assemble in Forward and Reverse Orders by Cryo-EM and X-ray Studies**
Su-Chang Lin (林世昌), Academia Sinica (中央研究院)

11:40 III3 **Mechanistic Insights into Histone Modification-driven Structural Remodeling of DNMT3B in DNA Methylation**
Hanna S. Yuan (袁小玲), Academia Sinica (中央研究院)

12:10 Group Photo & Lunch

Session Chair: Yane-Shih Wang (王彥士)

13:00 III4 **Crystallographic Analysis Revealing the Mechanistic Role of the N-terminal Domain of Lon AAA+ Protease**
Chung-I Chang (張崇毅), Academia Sinica (中央研究院)

13:30 III5 **Structural Insights and Catalytic Mechanisms of Particulate Methane Monooxygenase (pMMO) from Methylococcus capsulatus (Bath) and Alkane Hydroxylase (AlkB) from Pseudomonas putida GPO1**
Steve Sheng-Fa Yu (俞聖法), Academia Sinica (中央研究院)

14:00 III6 **Synthesis of Chirality-specific Building Units Using Biocatalysts of Structure-/Mechanism-based Engineering**
Tsung-Lin Li (李宗璘), Academia Sinica (中央研究院)

14:30 Coffee Break

Session Chair: Chun-Hsiang Huang (黃駿翔)

14:45 III7 **Time-resolved Structural Biology – A New Frontier**
Ming-Daw Tsai (蔡明道), Academia Sinica (中央研究院)

15:25 III8 **Advancements in Macromolecular Crystallography Beamlines at the Swiss Light Source**
Meitian Wang, Swiss Light Source (SLS), Switzerland

16:05 III9 **From Femtoseconds to Seconds: Applying Different TRX Methodologies to Bridge the Vast Time-spans of Protein Function**
Manuel Maestre-Reyna (馬左仲), National Taiwan Univ. (國立臺灣大學)

16:35 III10 **The Current Status and Future Plan of Protein Crystallography Beamlines at NSRRC**
Chien-Chang Tseng (曾建璋), NSRRC (國家同步輻射研究中心)

17:05 **Discussion & Closing Remarks**

17:35