

2015/02/12

EMBO 講義コースのご案内

広島大学 大学院理学研究科 数理分子生命理学専攻 楠 真一

Structural and biophysical methods for biological macromolecules in solution

EMBO Global Exchange Lecture Course, 4 – 10 May 2015, Taipei, Taiwan

<http://events.embo.org/15-macromolecule/index.html>

The main objective of the Course is to teach the young PhD students and postdocs from all areas of biology the methods applicable to study biological macromolecules in solution. We aim at a comprehensive coverage of the field including the major structural and biophysical techniques employed for the characterization of high and low resolution structure and structural transitions, macromolecular complex formation, protein folding and stability, protein-protein and protein-ligand interactions and enzymatic mechanisms. The Course will include lectures on small-angle X-ray and neutron scattering (SAXS/SANS), nuclear magnetic resonance (NMR), static and dynamic light scattering (SLS/DLS), analytical ultracentrifugation (AUC), differential and isothermal calorimetry (DSC/ITC) and spectroscopic approaches. Bioinformatic tools to analyze protein-protein interactions will be considered, and the joint use of the solution characterization methods with the major non-solution structural techniques including macromolecular crystallography (MX) and electron microscopy (EM) will be covered. Special attention will be paid to interdisciplinary approaches, where the synergistic use of complementary techniques leads to a comprehensive description of macromolecular systems.

The course will be held at the Institute of Biological Chemistry, Academia Sinica, in Taipei.

The Course is oriented towards applicants active in structural biology, mostly late Ph.D. students and early post-docs but more senior scientists, depending on circumstances, could also participate.

Students working in Taiwan or Taiwanese students working abroad will be given preference but all applications are welcome.

Application deadline for the Course: February, 15th, 2015