

## Frontier of dynamic structural biology

Date : September 26-27, 2018 Venue : IPR, Osaka University, 1F Lecture Hall

## Wednesday, September 26

13:00	Opening Remarks	Atsushi Nakagawa (IPR, Osaka Univ.)
	<b>Session 1</b>	Chair: Mikako Shirouzu (RIKEN)
13:10	Structural basis of chromatin transcription by RNA polymerase II	Shun-ichi Sekine (RIKEN BDR)
13:35	Dynamic and Functional states of protein structure revealed by CryoEM	Akihiro Kawamoto (IPR, Osaka Univ.)
14:00	Cryo-EM with and without phase plates	Radostin Danev(Grad. Sch. of Med., Univ. of Tokyo)
14:25	Break	
	<b>Session 2</b>	Chair: Masaki Yamamoto (RIKEN RSC)
14:45	Qualitative change of structural information provided by quantitative change in data collection	Kunio Hirata (RIKEN/SPring-8 Center)
15:10	Structural basis for selective binding of export cargoes by exportin-5	Eiki Yamashita (IPR, Osaka Univ)
15:35	Dynamic structural biology for chromatin	Hitoshi Kurumizaka (IQB, Univ. of Tokyo)
16:00	Break	
	<b>Session 3</b>	Chair: Yuji Sugita (RIKEN)
16:20	Dynamic structure of nucleosomes and transcription regulation: Molecular simulation approach	Shoji Takada (Grad. Sch. Sci., Kyoto Univ.)
16:45	Flexible docking and affinity calculation between CDK2 and its inhibitor using multicanonical MD	Gert-Jan Bekker (IPR, Osaka Univ.)
17:10	Structure refinement of large biomolecular systems by cryo-EM flexible fitting	Takaharu Mori (RIKEN)
17:35	Application of NV center to life science measurement	Yoshie Harada (IPR, Osaka Univ.)
18:00	Social gathering : La Scena	

## Thursday, September 27

	<b>Session 4</b>	Chair: Yuji Goto (IPR, Osaka Univ.)
9:30	NMR approaches for protein structure and dynamics in the cellular environment	Takanori Kigawa (RIKEN BDR)
9:55	SAIL-NMR method for studying structural dynamics of larger proteins	Yohei Miyanoiri (IPR, Osaka Univ.)
10:20	Protein structure analysis by combination of NMR data and structure prediction method	Hajime Tamaki (IPR, Osaka Univ.)
10:45	Break	
	<b>Session 5</b>	Chair: Masahiro Ueda (Grad. Sch. Sci., Osaka Univ)
11:05	Dynamic conformation changes of microtubule by kinesin	Yasushi Okada (RIKEN BDR/ Univ. of Tokyo)
11:30	Integration of high-speed AFM and computational science	Noriyuki Kodera (WPI NanoLSI, Kanazawa Univ.)
11:55	Lunch	
	<b>Session 6</b>	Chair: Atsushi Nakagawa (IPR, Osaka Univ.)
13:00	Prospects and challenges for time-resolved crystallography at SACLA	Minoru Kubo (Grad. Sch. Life Sci., Univ. Hyogo)
13:25	Structural atlas of the dynamic electron transfer complexes around Ferredoxin	Genji Kurisu (IPR, Osaka Univ.)
13:50	A mechanism for the H <sup>+</sup> extrusion revealed by the crystal structures of the gastric proton pump	Kazuhiro Abe (CeSPI, Nagoya Univ.)
14:15	General Discussion	Chair: Masaki Yamamoto (RIKEN RSC) Genji Kurisu (IPR, Osaka Univ.)
14:45	Concluding Remarks	Yuji Sugita (RIKEN)