

# Day 1: Wednesday, January 28<sup>th</sup>

## Theoretical block 1 (open to off-site Zoom participants)

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### Room: Central Building, C210

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08:45	-	09:15	Opening remarks	Toshiaki Mochizuki (OIST)
09:20	-	09:50	<i>The forgotten wisdom of cryo-EM SPA, overshadowed by an aggressive pursuit of resolution</i>	Toshio Moriya (KEK)
09:55	-	10:25	<i>Dimensions, dose and damage: testing the limits for single particle analysis</i>	Raymond Burton-Smith (NIPS)
10:30	-	11:00	<i>OIST's new JEOL cryoARM300-II cryo-TEM with narrow-gap optics</i>	Matthias Wolf (OIST)
11:05	-	11:35	<i>Toward a structural understanding of chromatin by cryo-EM</i>	Yoshimasa Takizawa (University of Tokyo)
11:35	-	12:30	Lunch break	

12:30	-	13:00	<i>Workflow of cryo-electron tomography and cryo-focused ion beam</i>	Yoshiyuki Fukuda (Tokushima University)
13:05	-	13:40	<i>Structural characterization of a Nanobdellati archaeon symbiotic system by cryo-electron tomography</i>	Sakurako Goto (RIKEN Yokohama)
14:00	-	16:00	<b>Practical session 1 (specialist-led interactive demos for onsite participants)</b>	
			Group 1: Plunge freezing for SPA and sample screening	Endang Rinawati Purba (OIST)
			Group 2: Plunge freezing for cryo-ET and cryo-FIB milling	Mingjun Xu (OIST)
16:00	-	16:20	Coffee break	
16:20	-	18:20	<b>Practical session 2 (specialist-led interactive demos for onsite participants)</b>	
			Group 2: Plunge freezing for SPA and sample screening	Endang Rinawati Purba (OIST)
			Group 1: Plunge freezing for cryo-ET and cryo-FIB milling	Mingjun Xu (OIST)

# Day 2: Thursday, January 29<sup>th</sup>

Theoretical block 2 (open to off-site Zoom participants)

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## Room: Central Building, B250

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09:20	-	09:50	<i>Learning the practical principles of cryo-electron microscopy from public structural databases</i>	Takayuki Kato (Osaka University)
09:55	-	10:25	<i>Cryo-EM analysis of multiple states of bacterial transport systems</i>	Satomi Inaba-Inoue (KEK)
10:30	-	11:00	<i>Structural snapshots of dynamic protein-protein complexes using cryo-EM</i>	Kuen-Phon Wu (Academia Sinica)
11:05	-	11:35	<i>The cryo-EM structure of vaccinia virus entry fusion complex</i>	Wen Chang (Academia Sinica)
11:35	-	12:30	Lunch break	
12:30	-	13:00	<i>Cryo-EM of dystrophin-glycoprotein complexes</i>	Yongchan Lee (Yokohama City University)

13:05 - 13:40 *Cryoelectron tomography: current state, challenges, future directions* Oleg Sitsel (OIST)

14:00 - 16:00 **Practical session 3 (specialist-led interactive demos for onsite participants)**

Group 1: Data acquisition for SPA

Endang Rinawati Purba (OIST)

Group 2: Data acquisition for cryo-ET

Simon Corroyer-Dulmont (OIST)

15:35 - 16:00 Coffee break

16:20 - 18:20 **Practical session 4 (specialist-led interactive demos for onsite participants)**

Group 1: Data acquisition for cryo-ET

Simon Corroyer-Dulmont (OIST)

Group 2: Data acquisition for SPA

Endang Rinawati Purba (OIST)

# Day 3: Friday, January 30<sup>th</sup>

## Theoretical block 3 (open to off-site Zoom participants)

### Room: Lab 3, C700

09:20	-	09:50	<i>Reconstructing giants: practical challenges in cryo-EM reconstructions of bacteriophages</i>	Mihnea Bostina (University of Otago)
09:55	-	10:25	<i>Cryo-ET data processing: roadmap to obtain the structures in the native environment</i>	Kunimichi Suzuki (Keio University)
10:30	-	11:00	<i>In situ cryo-ET analysis of macromolecular complexes: NPC as an example</i>	Reiya Taniguchi (Riken Yokohama)

11:05 - 11:20 Photo shoot

11:25 - 12:30 Lunch break

12:40 - 14:40 **Practical session 5 (specialist-led interactive demos for onsite participants)**

Group 1: Processing cryo-ET datasets

Simon Corroyer-Dulmont and Mingjun Xu (OIST)

		Group 2: Processing SPA datasets	Rafael Ayala Hernandez (OIST) and Raymond Burton-Smith (NIPS)
14:40	-	14:55	Coffee break
15:00	-	17:00	<b>Practical session 6 (specialist-led interactive demos for onsite participants)</b>
		Group 1: Processing SPA datasets	Rafael Ayala Hernandez (OIST) and Raymond Burton-Smith (NIPS)
		Group 2: Processing cryo-ET datasets	Simon Corroyer-Dulmont and Mingjun Xu (OIST)
17:00	-	17:10	Closing remarks
			<i>Lab 3, C700</i>