PROGRAM

Osaka University Symposium, 3rd WPI-PRIMe International Symposium

As of Mar 4, 2025

-Towards Patient Bio-Digital Twin- Mar.14 (Fri) 9:30-19:00

Opening			
9:30- 9:35		Opening remarks by Shojiro Nishio (President, Osaka University)	
9:35- 9:40		Congratulatory speech by Akira Ukawa (Program Director, JSPS WPI Center)	
9:40- 9:50		Opening by Kohji Nishida (Center Director)	
Session 1		**Technological Innovations for Bio-Digital Twin and Biological Modeling**	**Chairperson: Elisa DOMÍNGUEZ-HÜTTINGER, Vivian Hwa**
9:50-10:15	ONLINE	Linking morphological and anatomical properties of brain cells with spatial transcriptomics	Joshua Welch
10:15-10:40		Elucidating Kinase Binding Mechanisms in Cancer Pathways through State-of-the-Art molecular dynamics Simulations	Ai Shinobu
10:40-11:05		Machine learning models of omics data: Inferring biochemical principles using prior knowledge	David Sebastian Fischer
Keynote Lecture 1			**Chairperson: Kenji Kamimoto**
11:05-11:45	ONLINE	Mapping the multiscale human	Gary Bader
11:45-12:15		**Flash Talk by Poster Presenters**	
12:15-14:15		**Lunch Break/ Poster Session**	
Session 2		**Harnessing AI for Disease Research and Healthcare Applications**	**Chairperson: Imad Abugessaisa, Hideo Yokota**
14:15-14:40		Advances in Predictive Modeling for Biomedical Research and Applications	Ayako Yachie
14:40-15:05		Autonomous Acquisition of Disease Model Digital Twin by Deep Learning	Jun Seita
Keynote Lecture 2			**Chairperson: Takahiro Nemoto**
15:05-15:45		Signaling in time and space	Edda Klipp
15:45-16:00		BREAK	
Session 3		**Future Scientific Paradigms for Patient Bio-Digital Twin and ELSI**	**Chairperson: Hajime Nagahara, Takanori Takebe**
16:00-16:25		Life Course Modelling and Patient Bio-Digital Twin	Kazuhiro Sakurada
16:25-16:50		Towards a digital twin: from cancer omics data to patient-specific mechanistic models	Laurence Calzone
16:50-17:15		Patient's Digital Twin for Cardiac Diseases, Machine Learning and "Tensor Cardiography"	Shingo Tsukada
17:15-17:40		Indications from public engagements for envisioning a future with Bio-digital Twins	Sayaka Itoh
Closing			
17:40 -17:45		Closing remarks by Takao Onoye (Executive Vice President, Osaka University)	
17:45-19:00		Exchange event @Foyer	

＊Contents are subject to change.