WCP2018 Satellite Symposium
Systems Pharmacology and Artificial Intelligence based on Real World 'Big' Data

Date and time	Friday, July 6, 2018 from 2:00pm - 5:30pm
Venue and room	Kyoto University Clock Tower Centennial Hall Yoshidahonmachi, Sakyo, Kyoto 606-8501, Japan http://www.kyoto-u.ac.jp/en/about/profile/facilities/staff/clocktower Room: Memorial Hall
Purpose of this symposium	Systems pharmacology aims to holistically understand genetic, molecular, cellular, and clinical mechanisms of drug actions through data-driven predictions. This symposium focuses on the use of big data from real world medications, such as self-reports of adverse events, in generating novel hypotheses of drug actions. Dr. Kaneko introduces a combination of data mining and experimental verification in elucidating preventive treatment for drug adverse events. Dr. Shu will talk about a strategy of integrated analysis on clinical records and drug off-targets based on statistical and structural analyses. Dr. Tatonetti will overview the use of systems pharmacology and real-world health records for pharmacovigilance. Dr. Smaïl-Tabbone will present integrative machine-learning for understanding side-effect profiles. Finally, Dr. Yamaguchi will present the use of artificial intelligence 'Watson' in optimizing cancer treatments. These impose a great challenge on model management, integration, and translation of systems pharmacology.
Organizers and Chairpersons:	Dr. Nobuo Katsube, CAC Croit Corporation, Japan Prof. Shuji Kaneko, Kyoto University, Japan
Speakers:	**Exploration of the Molecular Mechanism of Side Effects** Prof. Shuji Kaneko, Kyoto University, Japan
	Clinical and Structural Analysis of Side Effect Dr. Mao Shu, Chongqing University of Technology, China
	Systems Pharmacology and Real-world Health Records for Pharmacovigilance Dr. Nicholas P. Tatonetti, Columbia University, USA
	Integrative Machine Learning for Understanding Side Effect Profiles Dr. Malika Smaïl-Tabbone, Universite de Lorraine, France
	Clinical Sequencing with Whole Genome Sequence and Multi Omics Data Accelerated by Supercomputer and AI Dr. Rui Yamaguchi, Tokyo University, Japan