

# 2<sup>nd</sup> KPU *International* Symposium

March 10 – 11, 2026

Co-organized by: Plan for Fostering Next-Generation Cancer Specialists

Aigaku-kan Building, Aigaku Hall (3F) · Kyoto Pharmaceutical University

## Day 1 Tue, March 10

### SESSION 1: CUTTING EDGE TECHNOLOGIES FOR PHARMACEUTICAL SCIENCE

- 13:00 *Opening Remark*
- 13:10 **Takeshi Sato** *Kyoto Pharm. Univ.*  
What's Going on in the Membrane? – Molecular Dynamics Meets Causality
- 13:30 **Yu Ishima** *Kyoto Pharm. Univ.*  
Riding the Albumin Highway: A New Frontier in Cancer Drug Delivery
- 14:00 **Yuki Kiguchi** *Kyoto Pharm. Univ.*  
Applications of High-Affinity Artificial Antibody Fragments: Toward the Development of Competitive Digital ELISA
- 14:30 **Xiaolin Cheng** *Ohio State Univ.*  
AI-Driven Drug Discovery: Bridging Data-Driven Models with Biophysical Simulations
- 15:30 **Yuichi Sekine** *Kyoto Pharm. Univ.*  
Elucidating the mechanisms of axon regeneration in CNS: Insights from genome-wide screening
- 16:00 **Blake Peterson** *Ohio State Univ.*  
Fluorescent Probes of Engagement of Drug Targets by Small Molecules in Living Cells

### SESSION 2: DRUG DISCOVERY AND PHARMACOLOGICAL SCIENCES

- 16:30 **Shinji Kobuchi** *Kyoto Pharm. Univ.*  
Pharmacometric approaches to optimize chemotherapy in colorectal and pancreatic cancer: predicting therapeutic efficacy, toxicity, and prognosis
- 17:00 **Deanna Kroetz** *Ohio State Univ.*  
iPSC-derived models for understanding drug-induced neurotoxicity

## Day 2 Wed, March 11

### SESSION 3: ORGANIC CHEMISTRY & CHEMICAL BIOLOGY FOR PHARM. SCIENCE

- 9:30 **Yusuke Kobayashi** *Kyoto Pharm. Univ.*  
Molecular Technologies for the Design and Synthesis of Prodrugs Targeting Amide-Containing Pharmaceuticals
- 10:00 **Keisuke Tomohara** *Kyoto Pharm. Univ.*  
Synthesis of unnatural peptides via in situ construction of  $\alpha$ -disubstituted amino acid units
- 10:30 **Mark Mitton-Fry** *Ohio State Univ.*  
New Drugs to Treat MDR Infections
- 11:00 **Kristian Strømgaard** *Univ. of Copenhagen*  
Targeting receptor complexes with therapeutic peptides

### SESSION 4: UNDERSTANDING DISEASE MECHANISMS

- 12:45 **Eri Kawashita** *Kyoto Pharm. Univ.*  
Fibrinolysis Modulation for Brain Protection and Recovery After Cerebral Ischaemia
- 13:15 **Kaneyasu Nishimura** *Doshisha Univ.*  
Modeling pathological features of neurodegenerative diseases using human iPSC-derived brain organoids
- 13:45 **Hidekazu Kawashima** *Kyoto Pharm. Univ.*  
Translational research based on the in vivo patho-functional analysis using small animal SPECT/CT
- 14:15 **Sara Neyt** *Ghent Univ.*  
Advancing Translational Research Through Preclinical Imaging: Multimodal PET/SPECT/MRI/CT Studies at Core Facility Infinity

### SESSION 5: CANCER BIOLOGY AND THERAPEUTIC STRATEGIES

- 15:15 **Susumu Nakata** *Kyoto Pharm. Univ.*  
A therapeutic approach that disrupts the antioxidant control of cancer cells by blocking the supply of cysteine and inducing ferroptosis
- 15:45 **Violaine Goidts** *German Cancer Research Ctr.*  
Deciphering resistance mechanisms in glioblastoma ~a journey towards innovative technology development~
- 16:15 **I-Chun Chen** *NTU Cancer Center*  
Optimize immunotherapy for ER positive/HER2 negative metastatic breast cancer: from bedside to bench
- 16:45 **Chiun Hsu** *NTU Cancer Center*  
Immunotherapy for advanced hepatocellular carcinoma: looking into the interaction between innate and adaptive immunity