



Pharmaceutical Sciences in a Pandemic World

May 31 – June 3, 2021 (Canada)

June 1 – June 4, 2021 (Japan)

2021 Virtual Symposium

Presented by:

Canadian Society for Pharmaceutical Sciences (CSPS)

The Pharmaceutical Society of Japan (PSJ)

Canadian Chapter of Controlled Release Society (CC-CRS)

SYMPOSIUM PROGRAM (PRELIMINARY)

NOTE: The program is preliminary and all times/speakers subject to change

Sun. May 30 (PDT - Vancouver)	Sun. May 30 (MDT - Edmonton)	Sun. May 30 (EDT - Toronto)	Sun. May 30 (NDT - St. John's)	Mon. May 31 (JST -Japan)	<i>Pharmaceutical Sciences Research Day</i>		
3:00 PM	4:00 PM	6:00 PM	7:30 PM	7:00 AM	CSPS Early Career Awardee Talk		
3:30PM	4:30 PM	6:30 PM	8:00 PM	7:30 AM	CSPS Award of Leadership Awardee Talk		
BREAK (5 minutes)							
4:00 PM	5:00 PM	7:00 PM	8:30 PM	8:00 AM	Group 1 Oral Presentations	Group 2 Oral Presentations	IF REQUIRED Group 3 Oral Presentations
BREAK (15 minutes)							
5:15 PM	6:15 PM	8:15 PM	9:45 PM	9:15 AM	Group 4 Oral Presentations	Group 5 Oral Presentations	IF REQUIRED Group 6 Oral Presentations
BREAK (15 minutes)							
6:30 PM	7:30 PM	9:30 PM	11:00 PM	10:30 AM	Group 7 Oral Presentations	Group 8 Oral Presentations	IF REQUIRED Group 9 Oral Presentations
7:30 PM	8:30 PM	10:30 PM	12:00 AM	11:30AM	Oral Poster Presentations End		

Mon. May 31 (PDT - Vancouver)	Mon. May 31 (MDT - Edmonton)	Mon. May 31 (EDT – Toronto)	Mon. May 31 (NDT – St. John's)	Tues. June 1 (JST -Japan)	Pharmaceutical Sciences in a Pandemic World - DAY 1		
3:35 PM	4:35 PM	6:35 PM	8:05 PM	7:35 AM	Welcome: CSPS – Christine Allen , President PSJ – Shigeki Sasaki , President CC-CRS – Marta Cerruti , President		
3:50 PM	4:50 PM	6:50 PM	8:20 PM	7:50 AM	PLENARY – OPENING KEYNOTE – Dr. Michael Houghton , 2020 Nobel Prize Laureate in Physiology or Medicine, Director of Li Ka Shing Applied Virology Institute (LKSAVI), Professor, Department of Medical Microbiology & Immunology, University of Alberta - <i>Longevity of protection by Covid-19 vaccines</i>		
Break (10 minutes)							
5:00 PM	6:00 PM	8:00 PM	9:30 PM	9:00 AM	CSPS/PSJ SESSION 1: Information and Disinformation around COVID Therapeutics Chairs: Noriko Daneshtalab (Memorial University of Newfoundland) and Itsuko Ishii (Chiba University Hospital)	CSPS/PSJ SESSION 2: EDI in Pharmaceutical Sciences Chairs: Abby Collier (UBC) and Yuji Ishii (Kyushu University)	CC-CRS SESSION: Nano Beyond Cancer Chairs: Afsaneh Lavasanifar (University of Alberta) and Hasan Uludag (University of Alberta)
					Srinivas Murthy (University of British Columbia) - <i>WHO perspectives on COVID 19 and therapeutics</i> Jaime A Yáñez (Universidad Peruana de Ciencias Aplicadas)- <i>COVID-19 pandemic in Peru: infodemic</i> Itsuko Ishii (Chiba University Hospital) <i>Considering the role of pharmacists in drug treatment that has not been established from experience with COVID-19</i> Hidetoshi Igari (Chiba University Hospital) <i>COVID-19 treatment strategy in JAPAN, the introduction of anti-viral agents and steroid</i> For Session 1, each speaker will present for 15 to 20 minutes, followed by live panel discussion with Q & A	Yuji Ishii (Kyushu University) <i>Preclinical Sex Differences in Development Using a Rat Model of Dioxin Exposure</i> Junko Kurokawa (University of Shizuoka) <i>Sex-related clinical differences in drug response and QT syndrome in Women</i> Jason Min (University of British Columbia) and Larry Leung (University of British Columbia) <i>Decolonizing Research</i> Abby Collier (University of British Columbia) <i>A Female Perspective on Leadership and Crisis Management: Lessons from implementing the inaugural Bachelor of Pharmaceutical Sciences class in a global pandemic.</i> Q & A with speakers will follow at end of all presentations	Marianna Foldvari (University of Waterloo) <i>Non-viral gene delivery technologies and application for neuroprotection in glaucoma</i> Cory Berkland (University of Kansas) <i>Designing immunotherapies for injection site retention or drainage to lymphatics</i> May Xiong (University of Georgia) <i>Design of Reactive Oxygen Species-Responsive Nanochelators for Normalizing Systemic and Hepatic Iron Levels in Iron Chelation Therapy</i> Hasan Uludag (University of Alberta) <i>Deploying Nanoparticles for Nucleic Acid Delivery: Diverse Possibilities from Bone Regeneration to COVID-19 Therapy</i> Q & A with speakers will follow at end of all presentations
7:00 PM	8:00 PM	10:00 PM	11:30 PM	11:00 AM	End of DAY 1 Sessions		
Young Scientist Network will have Pre-Recorded Skills Sessions available for viewing for the entire duration of the Symposium. These skill sessions include “Presenting Online Skills” with Makiya Nishikawa (Tokyo University of Science) and Matthew Lamont (Memorial University of Newfoundland) as well as “Paper Writing and Reviewing Skills” with Sumio Ohtuki (Kumamoto University) and Raimar Loebenberg (University of Alberta)							
Pre-Recorded video sessions for Young Scientist Network Session 1 Equity, Diversity and Inclusion: The importance of these concepts in scientific research will be posted for viewing on May 31, by 3:00 PM PDT							

Tues. June 1 (PDT - Vancouver)	Tues. June 1 (MDT - Edmonton)	Tues. June 1 (EDT - Toronto)	Tues. June 1 (NDT - St. John's)	Wed. June 2 (JST - Japan)	Pharmaceutical Sciences in a Pandemic World - DAY 2		
2:50 PM	3:50 PM	5:50 PM	7:20 PM	6:50 AM	YOUNG SCIENTIST NETWORK 1 - <i>Equity, Diversity and Inclusion: Work with students to understand the terms equity, diversity and inclusion and to acknowledge the importance of these concepts in scientific research</i> <i>Chairs: Kayla Kitselman (Memorial University of Newfoundland) and Aki Yamamoto (Kyoto University)</i> LIVE Q & A with Speakers: Brent Page (UBC) <i>Efforts towards Breaking the Equity Diversity and Inclusion Bubble in Pharmaceutical Sciences</i> Anne Nguyen (UBC) <i>We all deserve to feel safe – looking towards an inclusive future</i> Yuriko Higuchi (Kyoto University)		
3:50 PM	4:50 PM	6:50 PM	8:20 PM	7:50 AM	PLENARY – Keynote Speaker – Dr. Yoshiharu Matsuura , Director, Center for Infectious Diseases Education and Research (CIDER), Osaka University – <i>Characteristics of SARS-CoV-2 and its control measures</i> Q & A with Dr. Matsuura will follow at end of presentation		
Break (10 minutes)							
5:00 PM	6:00 PM	8:00 PM	9:30 PM	9:00 AM	CSPS/PSJ SESSION 3: <i>Drug Delivery and Nanotechnology</i> Chairs: Neal Davies (University of Alberta) and Yoshinobu Takakura (Kyoto University) Afsaneh Lavasanifar (University of Alberta) <i>Nanodelivery of novel inhibitors of DNA repair for targeted cancer therapy: making a case for the use of nanomedicine in drug development</i> Glen Kwon (University of Wisconsin) <i>Anticancer oligo(lactic acid)-prodrug-based nanomedicines for injection</i> Yoshinobu Takakura (Kyoto University) <i>Development of Drug Delivery Systems based on Small Extracellular Vesicles (Exosomes)</i> Mariko Takeda-Morishita (Kobe Gakuin University) <i>Development of Oral and Nose-to-Brain Delivery Systems of Peptide Drugs</i> Q & A with speakers will follow at end of all presentations	CSPS/PSJ SESSION 4: <i>Treat the Patient/Eradicate the Virus</i> Chairs: Fakhreddin (Mo) Jamali (University of Alberta) and Jun-ichiro Inoue (Institute of Medical Science, University of Tokyo) Matthias Götte (University of Alberta) <i>New developments on antiviral drugs</i> Jun-ichiro Inoue (Institute of Medical Science, University of Tokyo) <i>Nafamostat is an existing drug with multiple possible therapeutic effects on COVID-19</i> Andy Zhu (Takeda Pharmaceuticals) <i>Kallikrein-kinin system (KKS) pathway involvement in Acute Respiratory Distress Syndrome (ARDS) and COVID-19: Utilization of Model Informed Approaches to Inform Dosing Regimen</i> Irvin Mayers (University of Alberta) <i>Treating outpatients in the era of COVID-19</i> Q & A with speakers will follow at end of all presentations	CC-CRS SESSION: <i>Biologics: Challenges and Opportunities</i> Chairs: Marc-Andre Gauthier (Institut National de la Recherche Scientifique), Sarah Hedtrich (University of British Columbia) Ryan Wiley (McMaster University) <i>Biomaterials for Immune Modulation: Local Infusion of Antibody Immunotherapeutics</i> Sarah Hedtrich (University of British Columbia) <i>Challenges and opportunities of biologics delivery to human epithelia</i> Ravin Narain (University of Alberta) <i>Versatile Glycopolymer-based Nanomedicines and Hydrogels for Biomedical Applications</i> Heather Maynard (University of California Los Angeles) <i>Naturally-derived polymers for therapeutic protein stabilization and delivery</i> Q & A with speakers will follow at end of all presentations
7:00 PM	8:00 PM	10:00 PM	11:30 PM	11:00 AM	End of DAY 2 Sessions		
Young Scientist Network will have Pre-Recorded Skills Sessions available for viewing for the entire duration of the Symposium. These skill sessions include “Presenting Online Skills” with Makiya Nishikawa (Tokyo University of Science) and Matthew Lamont (Memorial University of Newfoundland) as well as “Paper Writing and Reviewing Skills” with Sumio Ohtuki (Kumamoto University) and Raimar Loebenberg (University of Alberta)							
***Pre-Recorded video sessions for Young Scientist Network Session 2 <i>Transition to Workforce: Professionals from the academic, regulatory, and industry explain their transition to the workforce</i> will be posted for viewing on June 1st by 3:00 PM							

Wed. June 2 (PDT - Vancouver)	Wed. June 2 (MDT - Edmonton)	Wed. June 2 (EDT - Toronto)	Wed. June 2 (NDT - St. John's)	Thurs. June 3 (JST - Japan)	Pharmaceutical Sciences in a Pandemic World - DAY 3		
3:50 PM	4:50 PM	6:50 PM	8:20 PM	7:50 AM	<p>YOUNG SCIENTIST NETWORK 2 - Transition to Workforce: Professionals from the academic, regulatory, and industry explain their transition to the workforce</p> <p>Chairs: Kayla Kitselman (Memorial University of Newfoundland) and Aki Yamamoto (Kyoto University)</p> <p>LIVE Q & A with Speakers: Christine Allen (University of Toronto) Roland Halil (University of Ottawa) <i>A Clinical and Academic Pharmacist's Transition to the Workforce</i> Akihiro Matsumoto (Astellas) <i>Transition from Ph.D. students to the workforce</i> Yuta Arima (PMDA) <i>Regulations for pharmaceuticals in Japan; what and how is PMDA's review?</i> Hidenori Okamura (Tohoku University) <i>Pursuing a career in academia: how I decided to be an academic researcher</i></p>		
Break (10 minutes)							
5:00 PM	6:00 PM	8:00 PM	9:30 PM	9:00 AM	<p>CSPS/PSJ SESSION 5: AI in drug discovery and Medicinal Chemistry of cyclic peptide or nucleic acid drug candidates</p> <p>Chairs: Robert Young (Simon Fraser University) and Hideko Nagasawa (Gifu Pharmaceutical University)</p> <p>Hiroaki Suga (Research Center for Advanced Science and Technology, University of Tokyo) <i>RaPID display of pseud-natural peptides and products</i></p> <p>Artem Cherkasov (University of British Columbia) <i>AI in Drug Discovery and in Particular in Ultra-Large Scale Virtual Screening for New Lead Discovery</i></p> <p>Kenji Mizuguchi (National Institutes of Biomedical Innovation, Health and Nutrition) <i>Data integration and AI-driven drug discovery</i></p> <p>Brent Martin (Director of Chemical Biology, Scorpion Therapeutics and Adjunct Assistant Professor of Medicinal Chemistry, College of Pharmacy, University of Michigan) <i>Oncology 2.0 tailored covalent ligand discovery</i></p> <p>Q & A with speakers will follow at end of all presentations</p>	<p>CSPS/PSJ SESSION 6: Pharmacognosy of Natural Products and Drug Delivery</p> <p>Chairs: Raimar Loebenberg (University of Alberta) and Yoshinori Kobayashi (Kitasato University)</p> <p>Sumiko Hyuga (Oriental Medicine Research Center, Kitasato University) <i>Development of ephedrine alkaloids-free Ephedra Herb extract (EFE), a novel crude drug extract with therapeutic effects against pain, cancer, and early-stage viral infections</i></p> <p>Raimar Loebenberg (University of Alberta) <i>Medical Cannabis - Points to Consider</i></p> <p>Hiroaki Kiyohara (Ōmura Satoshi Memorial Institute, Kitasato University) <i>Kampo medicines- their active components and mechanisms of action for infection control</i></p> <p>Nadia Bou-Chacra (Universidade de São Paulo) <i>Antiulcerogenic Potential Activity of Free and Nanoencapsulated Passiflora serratodigitata L. Extracts</i></p> <p>Q & A with speakers will follow at end of all presentations</p>	<p>CSPS/PSJ SESSION 7A: An Industry Perspective: Lessons Learned from COVID-19 Vaccine Development</p> <p>Chair: Marianne Stanford (Dalhousie University) Speakers from the vaccine industry will give short presentations followed by Q&A that will:</p> <ul style="list-style-type: none"> Highlight how COVID-19 has catalyzed changes in the R&D, regulatory and public health landscape Showcase the role of partnerships and collaboration in driving industry's COVID-19 response Review lessons from COVID-19 on pandemic responses and pandemic preparedness <p>Nathalie Charland (Medicago) <i>Developing a Canadian vaccine in times of pandemic: it takes a village...and a lot of coffee!</i></p> <p>Francisco Diaz-Mitoma (VBI Vaccines) <i>SARS CoV2 Variants: Implications for Vaccine Development</i></p> <p>John Lewis (Entos Pharmaceuticals)</p> <p>Ying Tam (Acuitas Therapeutics) <i>A Novel Vaccine Approach Using Messenger RNA-Lipid Nanoparticles: Preclinical and Clinical Perspective</i></p> <p>Q & A with speakers will follow at end of all presentations</p>

7:00 PM	8:00 PM	10:00 PM	11:30 PM	11:00 AM	End of DAY 3 Sessions		
Young Scientist Network will have Pre-Recorded Skills Sessions available for viewing for the entire duration of the Symposium. These skill sessions include “Presenting Online Skills” with Makiya Nishikawa (Tokyo University of Science) and Matthew Lamont (Memorial University of Newfoundland) as well as “Paper Writing and Reviewing Skills” with Sumio Ohtuki (Kumamoto University) and Raimar Loebenberg (University of Alberta)							

Thurs. June 3 (PDT - Vancouver)	Thurs. June 3 (MDT - Edmonton)	Thurs. June 3 (EDT - Toronto)	Thurs. June 3 (NDT – St. John's)	Fri. June 4 (JST -Japan)	Pharmaceutical Sciences in a Pandemic World - DAY 4		
3:30 PM	4:30 PM	6:30 PM	8:00 PM	7:30 AM	AWARDS PRESENTATION SESSION		
4:00 PM	5:00 PM	7:00 PM	8:30 PM	8:00 AM	Young Scientist Network Skills Session – Live Q & A with: Makiya Nishikawa (Tokyo University of Science) <i>Making your presentation slides attractive and informative</i> Matthew Lamont (Memorial University of Newfoundland) <i>Defending During the COVID-19 Pandemic: Tips for Remote Presentations</i> Sumio Ohtuki (Kumamoto University) <i>Paper Writing and Reviewing; From the Viewpoint of Non-Native Scientist</i> Raimar Loebenberg (University of Alberta) Q & A will be approximately 50 minutes		
Break (10 minutes)							
5:00 PM	6:00 PM	8:00 PM	9:30 PM	9:00 AM	CSPS/PSJ SESSION 7B: <i>Advances in Vaccine Technology: A New Era of Infectious Disease Prevention</i> Chair: Bruce Seet , VIC, Sanofi Pasteur Panel discussion with leading scientists and industry experts in the vaccine field will: <ul style="list-style-type: none"> Highlight the application of recent advances in vaccine technology and platforms Review the challenges related to evaluating and implementing new and novel vaccines Discuss Canada's opportunities to enhance vaccine research, development and commercialization Opening Remarks: Andrew Casey (BIOTECanada) Panelists include: Nathalie Charland (Medicago), Volker Gerdts (VIDO InterVac), Michael Houghton (University of Alberta), Sally Mossman (GlaxoSmithKline), Rajeev Nepal (Pfizer) Q & A with speakers will follow at end of all presentations	CSPS/PSJ SESSION 9: <i>Imaging and Pharmaceutical Sciences</i> Chairs: Michael Doschak (University of Alberta) and Tomoya Uehara (Chiba University) Urs Häfeli (University of British Columbia) <i>Liver Tumor Radioembolization with Theranostic Precision Rhenium-188 Microspheres</i> Tomoya Uehara (Chiba University) <i>Radiometal-labeling agents of antibody fragments for low renal radioactivity levels</i> Hiroyuki Kimura (Kyoto Pharmaceutical University) <i>Noninvasive imaging of pancreatic β cells: Synthesis of ^{18}F-labeled streptozotocin derivatives and in-vivo kinetics using positron emission tomography(tentative)</i> Frank Wuest (University of Alberta) <i>Synthesis and in vivo evaluation of a radiofluorinated ketone body derivative</i> Q & A with speakers will follow at end of all presentations	
7:00 PM	8:00 PM	10:00 PM	11:30 PM	11:00 AM	Symposium Concludes		
Young Scientist Network will have Pre-Recorded Skills Sessions available for viewing for the entire duration of the Symposium. These skill sessions include "<i>Presenting Online Skills</i>" with Makiya Nishikawa (Tokyo University of Science) and Matthew Lamont (Memorial University of Newfoundland) as well as "<i>Paper Writing and Reviewing Skills</i>" with Sumio Ohtuki (Kumamoto University) and Raimar Loebenberg (University of Alberta)							