

Hokkaido-Montréal Bilateral Symposium on Advanced Life Sciences

July 10th 2026 | Sapporo, Hokkaido University
The Auditorium, Faculty of Veterinary Medicine



北海道大学
HOKKAIDO UNIVERSITY

Faculté de médecine

Université 
de Montréal



HOKKAIDO UNIVERSITY
AMBITIOUS LEADER'S PROGRAM
Fostering Future Leaders to Open New Frontiers in Materials Science



GI-CoRE



GRADUATE SCHOOL OF
CHEMICAL SCIENCES AND
ENGINEERING
HOKKAIDO UNIVERSITY



IGP **HU** International
Graduate Program



HOKKAIDO UNIVERSITY
WISE Program for
One Health Frontier
Graduate School of Excellence



Institut Courtois
d'innovation
biomédicale



- 7 Central Institute of Isotope Science
- 8 Research Center for Integrated Quantum Electronics
- 9 Field Science Center for Northern Biosphere
- 10 Meme Media Laboratory
- 11 Research and Education Center for Brain Science
- 12 Research Center for Zoonosis Control
- 13 Hokkaido University Archives
- 14 Center for Advanced Tourism Studies
- 15 Center for Language Learning
- 16 Center for Ainu & Indigenous Studies
- 17 Center for Experimental Research in Social Sciences
- 18 Research Institute for Information Law & Policy
- 19 Research Center for Environmental Nano and Bio Engineering
- 20 Research Center for Integrative Mathematics
- 21 Center for Sustainability Science
- 22 Center of Education and Research for Topological Science and Technology
- 23 Center for Environmental and Health Sciences
- 24 Health Care Center
- 25 Environmental Preservation Center
- 26 Dental Clinical Division of Hokkaido University Hospital
- 27 Veterinary Teaching Hospital
- 28 Green Nanotechnology Research Center
- 29 Frontier Research Center for Post-Genomic Science and Technology
- 30 Shionogi Innovation Center for Drug Discovery
- 31 Platform for Research on Biofunctional Molecules (PRBM)
- 32 Hokkaido Collaboration Center
- 33 The Open University of Japan Hokkaido Study Center
- 34 Frontier Research in Applied Sciences Bldg.

- Facilities**
- 1 Conference Hall
 - 2 Centennial Hall, Restaurant Nicola's House
 - 3 Furukawa Hall
 - 4 Hokkaido University Co-op
 - 5 Career Center
 - 6 Clark Memorial Student Center, Clark Cafeteria
 - 7 Humanities and Social Sciences Classroom Building
 - 8 Kodomonosono Nursery
 - 9 Chuo Cafeteria
 - 10 Faculty House Trillium, Elm Restaurant
 - 11 Experimental Farms
 - 12 Gym
 - 13 Enyu Gakusha Community Hall
 - 14 Student Services, Hokubu Cafeteria
 - 15 Multimedia Education Building
 - 16 Sports Training Center
 - 17 Keiteki-Ryo Student Dormitory
 - 18 Hokkaido University International House Kita 23
 - 19 Hokkaido University International House Kita 8
 - 20 Foreign Scholars' Accommodation
 - 21 South Gate Security

- Tourist Spots**
- 1 Information Center & Elm Forest Shop (Elm no Mori)
 - 2 Sakushukotoni River
 - 3 Central Lawn
 - 4 Bust of Dr. William S. Clark
 - 5 Elm Grove
 - 6 Former School of Agriculture Library
 - 7 The Hokkaido University Museum
 - 8 Monument to First Artificial Snow Crystal
 - 9 Ono Pond
 - 10 Gingko Avenue
 - 11 Flowering Tree Garden
 - 12 Monument in Honor of Dr. Inazo Nitobe
 - 13 Poplar Avenue
 - 14 Heisei Poplar Avenue
 - 15 Site of Old Village
 - 16 Model Barn (Closed until late May 2015)
 - 17 Botanic Garden

University Organization

- 1 Administration Bureau
- 2 Center for Innovation and Business Promotion
- 3 Admission Center
- 4 Front Office for Human Resource Education and Development
- 5 Creative Research Institution, Restaurant Popular
- 6 Office of International Affairs
- 7 International Student Center
- 8 Institute for the Advancement of Higher Education
- 9 University Library
- 10 North Library
- 11 Hokkaido University Hospital, Restaurant Royal

Graduate Schools, Faculties and Schools

- 1 Graduate School of Letters
- 2 Graduate School of Law
- 3 Graduate School of Economics and Business Administration
- 4 Graduate School of Medicine
- 5 Graduate School of Health Sciences
- 6 Graduate School of Dental Medicine
- 7 Graduate School of Veterinary Medicine

- 8 Graduate School of Information Science and Technology
- 9 Graduate School of Environmental Science
- 10 Graduate School of Science
- 11 Faculty of Pharmaceutical Sciences
- 12 Graduate School of Agriculture
- 13 Faculty of Advanced Life Science
- 14 Graduate School of Life Science
- 15 Graduate School of Education
- 16 Graduate School of International Media, Communication and Tourism Studies
- 17 Graduate School of Engineering
- 18 Graduate School of Chemical Sciences and Engineering
- 19 Graduate School of Public Policy

Research Institutes & Centers and Other

- 1 Institute of Low Temperature Science
- 2 Research Institute for Electronic Science
- 3 Institute for Genetic Medicine
- 4 Catalysis Research Center
- 5 Slavic Research Center
- 6 Information Initiative Center North / South Bldgs.

Facts about Hokkaido University (as of May 2014)

- Established 1876 as Sapporo Agricultural College
- Hokkaido University is a comprehensive University with a 12 Undergraduate Schools, 20 Graduate Schools, and 27 Research Institutes and Centers
- Total Area of Sapporo Campus: 1,776,249m² (the equivalent of 38 Tokyo Domes!)
- Staff: 3,920
- Total Students: 17,909 (including 1,524 International Students from 80 countries/regions)
- Total International Partnerships: 365 agreements in place from 52 countries/regions
- For more detailed information, type 'Hokkaido University Guidebook' into any search engine.

Program

Friday July 10th

The Auditorium, Faculty of Veterinary Medicine, Hokkaido University

8:30 Registration opens

Opening remarks

8:45-8:55 **Koichiro Ishimori** (Executive Vice President, HU)

8:55-9:05 **Hélène Girouard** (Vice-dean, Faculty of Medicine, UdeM)

Session 1: Protein and RNA

Session chair: Koichiro Ishimori

9:05-9:25 **Tomoyasu Aizawa**

(Faculty of Advanced Life Science, HU)

NMR Analysis Strategies for Antimicrobial Peptides as Immune Effector Molecules

9:25-9:50 **James Omichinski**

(Department of Biochemistry and Molecular Medicine and CI²B, UdeM)

Identifying functional short linear interaction motifs (SLiMs) in human and viral proteins

9:50-10:05 **Pascale Legault**

(Department of Biochemistry and Molecular Medicine and CI²B, UdeM)

How the Zika Virus Capsid Protein Inhibits Dicer and Disrupts microRNA Maturation

10:05-10:25 **Akira Kitamura**

(Faculty of Advanced Life Science, HU)

Dissecting TDP-43 condensates and repeat RNA folding by live-cell biophotonics

10:25-10:40 **Coffee break**

Session 2: Cell Biology 1

Session chair: Tomoyasu Aizawa

10:40-11:00 **Yuma Yamada**

(Faculty of Pharmaceutical Sciences, HU)

Mitochondrial Delivery as a Gateway to Therapeutic Innovation

11:00-11:25 **Sven van Teeffelen**

(Department of Microbiology, Immunology and Infectiology and CI²B, UdeM)

The physics and physiology of bacterial cell shape and size

11:25-11:50 **Frédérique Le Roux**

(Department of Microbiology, Immunology and Infectiology and CI²B, UdeM)

Oysters as living laboratories: natural experiments in vibrio-phage ecology

11:50-12:10 **Toyotaka Sato**
(Faculty of Veterinary Medicine, One Health, HU)
Antimicrobial Resistance in Companion Animals: Current Trends, Public Health Risks, and the One Health Approach

Poster Session

12:10-14:00 **Poster session** (Lunch is provided on site)

14:00-14:10 **Group Photo**

Session 3: Cell Biology 2

Session chair: Motohiro Horiuchi

14:10-14:35 **Fumio Motegi**
(Institute for Genetic Medicine, HU)
Cooperative induction of oogenesis by cytoplasmic suction within germline cysts

14:35-15:00 **Louis-Eric Trudeau**
(Department of Pharmacology and Physiology and Department of Neurosciences, SNC, CIRCA and CI²B, UdeM)
Understanding the origin of Parkinson's disease from both a cell-autonomous and a non-cell-autonomous perspective

15:00-15:25 **Hélène Girouard**
(Department of Pharmacology and Physiology and CI²B, UdeM)
Hypertension and Cognitive Decline: The Cerebrovascular Inflammation Link

15:25-15:50 **Fumino Fujiyama**
(Faculty of Medicine and Graduate School of Medicine, HU)
Morphological Reevaluation of Basal Ganglia Network

15:50-16:10 **Coffee break**

Session4: Cryo-EM

Session chair: Kazuhiro Abe

16:10-16:35 **Katsumi Maenaka**
(Faculty of Pharmaceutical Sciences, HU)
Advancing Infectious Disease Research via Cryo-EM Infrastructure at Hokkaido University: Contributions to COVID-19 Therapeutics and Future Bilateral Collaborations

16:35-17:00 **Malik Chaker-Margot**
(Department of Biochemistry and Molecular Medicine and CI²B, UdeM)
Towards a structural understanding of cell motility regulation in cancer

- 17:00-17:25 **Mike Strauss**
(Department of Biochemistry and Molecular Medicine and CI²B, UdeM)
Early phases of infection: understanding viral uncoating in picornaviruses
- 17:25-17:50 **Nobuo Noda**
(Institute for Genetic Medicine, HU)
Mechanistic dissection of de novo autophagosome formation
- Closing remarks**
- 17:50-18:00 **Motohiro Horiuchi** (Faculty of Veterinary Medicine, One Health, HU)
- 19:00-21:00 Dinner at Sapporo Beer Garden (Invited Speakers)

Poster Session

Friday July 10th, 12:10 – 14:00

P01	William Gauthier-Naud	Functional Characterization of Parkinson's Disease-Associated MicroRNAs in Alpha-Synuclein Regulation
P02	Ryota Fujimura	Elucidation of the Molecular Mechanism of the W931R Disease-Associated Mutant of a Sodium Pump Exhibiting Ion Channel-Like Behavior Through Structural Analysis
P03	Alex Tchung	6-OHDA knows no bound: unexpected toxicity beyond dopamine neurons
P04	Yukari Kondo	Elucidation of the Mechanism by Which NDRG3 Inhibits Na ⁺ , K ⁺ -ATPase Activity
P05	Yuichi Suzuki	Splenic B cell targeting - lipid nanoparticles for safe and effective mRNA vaccine
P06	Barbeau N	Pathological Pulsatility Increases Oxidative Stress and Impairs Cerebral Artery Function
P07	Manaka Suzuki	Identification and characterization of novel isoforms of the Japanese cedar pollen allergen, Cry j 7
P08	Kanon Hattori	Production and purification of recombinant bovine antimicrobial peptides using a calmodulin fusion system
P09	Jeffrey Liang	Variation in the mobile genome shapes diversity in a Canadian collection of <i>Vibrio parahaemolyticus</i>
P10	Mai Kanai	A storage-stable, fusogenic lipid nanocapsule encapsulating mitochondrial components lowers mutant mtDNA heteroplasmy in MELAS cells
P11	Miho Akasaka	A study of the effect of different ploidy levels in mulberry leaves on its metabolites and useful compounds using NMR metabolomics
P12	Charlie Golingay	Reconstitution of the H ⁺ ,K ⁺ -ATPase in a Native Lipid Environment with Saposin Nanodisc
P13	Marguerite Cusson	Structural and biochemical analysis of allosteric inhibitors of human DNA-damage repair enzyme PARP1
P14	Kaito Ugajin	Molecular dissection of anti-freeze protein using neutron crystallography
P15	Mohamed Mourad Kenfaoui	Functional Role of OGDH in Metabolic Regulation: A Structural and Molecular Approach
P16	Yoshiki Hirano	Elucidation of the Structural Characteristics of the Inhibitor-Binding Site of ATP12A
P17	Natchanok Puangjit	LH signaling alters extracellular vesicle RNA cargo to mediate ovarian intercellular communication during the periovulatory period
P18	Bon Leif D. Amalla	Lipid packing effects in the structure and electron transfer activity of cytochrome c oxidase
P19	Akinobu Tatsumi	FMN-mediated electron transfer drives NADH-dependent heme degradation by PM0042
P20	Vui Yin (Mafer) Seow	Uncovering the Determinants of Fast Growth in <i>Vibrio natriegens</i>

Hosted by:

Department of Chemistry, Faculty of Science, Hokkaido University

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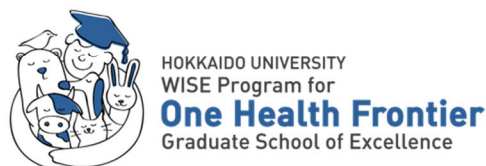
- ✓ **Ambitious Leader's Program** (Fostering Leaders for Innovation in Chemistry and Materials Science)
- ✓ **SMCR** (Soft Matter Collaborative Research Unit, Frontier Research Center for Advanced Material and Life Science)
- ✓ **Faculty of Advanced Life Science**
- ✓ **GI-CoRE** Cooperating Hubs
- ✓ **International Graduate Program (IGP)**, Graduate School of Life Science
- ✓ **One Health** (Graduate School of Veterinary Medicine)
- ✓ **WISE Program** (Program for Leading Graduate Schools)
- ✓ **FCC** (Frontier Chemistry Center)



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