

HOKKAIDO × MELBOURNE

JOINT RESEARCH WORKSHOP

19 | 20 AUGUST
2026 / JST + AEST

CANCER RESEARCH ACROSS

- IMMUNOLOGY
- REGENERATION
- IMAGING + AI
- SPATIAL OMICS
- PHOTOTHERAPY
- CLINICAL TRANSLATION

FEATURED LEADS



SHINYA TANAKA
HOKKAIDO UNIVERSITY



FREDERIC HOLLANDE
UNIV. OF MELBOURNE

SAPPORO / HOKKAIDO UNIVERSITY

MELBOURNE / CITY

IN COLLABORATION



HOKKAIDO
UNIVERSITY

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THE UNIVERSITY OF
MELBOURNE



PRISM-HU

DAY 01

WEDNESDAY / 19 AUG

09:00-09:10 JST / 10:00-10:10 AEST
OPENING / Prof. Shinya Tanaka

01 TUMOR IMMUNOLOGY & INFLAMMATION IN CANCER

09:10-10:30 JST / 10:10-11:30 AEST
CHAIRS / K. Taniguchi · T. Tanaka

09:10	T. Tanaka	NLRCS-dependent anti-cancer immunity
09:30	R. Wagner	Molecular Correlates of Immune Regulation Following Chemotherapy in Colorectal Liver Metastases
09:50	K. Taniguchi	Inflammation in Cancer and Regeneration
10:10	F. Hollande	Targeted detection and therapy in metastatic colorectal cancer

02 CANCER STEM CELLS, REGENERATION & NANOBIONATERIALS

10:40-12:00 JST / 11:40-13:00 AEST
CHAIRS / S. Tanaka · H. Uji-i

10:40	T. Kondo	Challenging next-generation therapeutics by repurposing brain tumors
11:00	B. Farrugia	Extracellular matrices for pancreatic cancer organoid growth
11:20	S. Tanaka	HARP phenomenon: Creation of cancer stem cells by using synthetic polymer hydrogels
11:40	H. Uji-i	Monitoring cellular signal propagation in 3D tumor model

03 CANCER IMAGING, AI & CLINICAL ONCOLOGY

13:30-14:50 JST / 14:30-15:50 AEST
CHAIRS / H. Kitai · K. Hirata

13:30	Y. Sato	HTLV-1 Infection in Japan and Australia: Insights into Viral Pathogenesis
13:50	K. Hirata	AI in Nuclear Medicine Oncology: From Image Analysis to Large Language Models
14:10	K. Enda	LENS: Fully On-Premises AI Agents
14:30	H. Kitai	Targeting TROP2 in KRAS-Mutant Lung Cancer

04 TUMOR MICROENVIRONMENT & BIOMEDICAL ENGINEERING

15:00-16:20 JST / 16:00-17:20 AEST
CHAIRS / S. Tanikawa · M. Sonoshita

15:00	S. Tanikawa	Microglial remodeling associated with protein-folding stress in progressive supranuclear palsy
15:20	L. Fourriere	Advanced imaging to reveal cellular dynamics: from trafficking to neuron-cancer interactions
15:40	M. Sonoshita	Discovering metabolic vulnerabilities in pancreatic cancer through organism-level screening
16:00	S. Duchi	Bioengineered Models of Paediatric Bone Tumours: Advancing Biological Discovery and Therapeutic Development

REGISTRATION

SCAN THE QR CODE TO REGISTER FOR EACH DAY

DAY 01 / 19 AUG (WED)



bit.ly/Hokkaido-Melbourne819

DAY 02 / 20 AUG (THU)



bit.ly/Hokkaido-Melbourne820

DAY 02

THURSDAY / 20 AUG

01 SPATIAL OMICS & CANCER BIOINFORMATICS

09:10-10:30 JST / 10:10-11:30 AEST
CHAIRS / S. Nakaoka · K. Hatanaka

09:10	S. Nakaoka	Application of an in silico perturbation method to lung cancer single-cell transcriptomics
09:30	H. Mai La	Dissecting the Tumour Microenvironment Using Spatial Transcriptomics
09:50	T. Mantamadiotis	Organisation and function of the perivascular niche in the brain tumour microenvironment
10:10	K. Hatanaka	Cancer genome analysis

02 PHOTODYNAMIC & PHOTOTHERMAL CANCER THERAPY

10:40-12:00 JST / 11:40-13:00 AEST
CHAIRS / M. Ogawa · M. Imajo

10:40	M. Ogawa	Cancer photo-immuno therapy
11:00	J. Hutchison	Lanthanide Nanoparticles for Biomedical Applications: Imaging and Temperature Sensing
11:20	S. Tang	Toward Imaging-Guided Phototherapy through Upconversion Nanoparticle Engineering
11:40	K. Kachurin	Computational Modeling and Thermodynamic Simulations of Nanomaterials and Nanothermometry for Cancer Photo-Thermal Therapy

03 TRANSLATIONAL & CLINICAL ONCOLOGY

13:30-14:50 JST / 14:30-15:50 AEST
CHAIRS / T. Abe · Y. Oda

13:30	M. Imajo	Matrix charge-sensing as a key regulator of intestinal stem cell plasticity
13:50	Y. Oda	Induction of cancer stemness using hydrogels
14:10	C. Saunders	Precision cancer surgery – intra-operative imaging advances making surgical outcomes better
14:30	T. Abe	Robot-assisted surgery

14:50-15:00 JST / 15:50-16:00 AEST

CLOSING REMARKS

Prof. Frederic Hollande / University of Melbourne

