

The 9th GCB Biomedical Science and Engineering Symposium

Dates

August 20 (Sat)-21 (Sun), 2022

Venue

Hybrid Event

Large Conference Room, Centennial Hall, School of Medicine,
Hokkaido University and Online

Organizers

Global Center for Biomedical Science and Engineering,
Faculty of Medicine, Hokkaido University
Department of Radiation Oncology, School of Medicine, Stanford University

Co-organizers

Clinical AI Human Resources Development Program (CLAP), Faculty of Medicine, Hokkaido University
Medical AI Education and Research, Research Center for Cooperative Projects, Faculty of Medicine, Hokkaido University
Medical AI Research and Development Center, Hokkaido University Hospital

Sessions

Day 1: August 20

Session I Clinical and Biomedical Physics
Session II-I H & N cancer and NTCP
Session II-II Updated Diagnosis-Specific Graded
Prognostic Assessment (GPA)

Day 2: August 21

Session III Radiation Biology
Session IV Diagnostic Imaging

Lectures presented by

Xuejun Gu (Stanford University)
Mehmet Burcin Unlu (Boğaziçi University)
Koichi Yasuda (Hokkaido University)
Anussara Prayongrat (Chulalongkorn University)
Kentaro Nishioka (Hokkaido University)

Paul W. Sperduto (Duke University Medical Center)
Kenji Hirata (Hokkaido University)
Greg Zaharchuk (Stanford University)
Jin-Min Nam (Kyoto University)
Mary Helen Barcellos-Hoff (University of California San Francisco)

URL <https://www.ec-pro.co.jp/the9thGCB/>



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As of 4 July

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Venue : <Hybrid Event> Large Conference Room, Centennial Hall, School of Medicine, Hokkaido University and Online

<DAY1>

August 20 (Sat)			August 19 (Fri)					
Starting Time		Ending Time	Starting Time		Ending Time	Session/Title	Presenter	
JST			PDT			Opening remarks		Online
9:00	~	9:10	17:00	~	17:10	From Stanford University	Dr. Quynh-Thu Le Professor and Chair, Department of Radiation Oncology School of Medicine, Stanford University	✓

9:10	~	10:55	17:10	~	18:55	Session I Clinical and Biomedical Physics		Online
						Chair: Dr. Kenneth Lee Sutherland (Assistant Professor, GCB, Hokkaido University)		
9:10	~	9:55	17:10	~	17:55	Advancing Multi-course multiple brain metastases radiosurgery: from automation to intelligence	Dr. Xuejun Gu Associate Professor of Radiation Oncology (Medical Physics) School of Medicine, Stanford University	✓
9:55	~	10:40	17:55	~	18:40	The Use of Optical Tweezers and Photoacoustic Microscopy in Radiation Oncology	Dr. Mehmet Burcin Unlu Professor, Department of Physics, Boğaziçi University <Discussants>	
10:40	~	10:55	18:40	~	18:55	Discussion	Dr. Paul W. Sperduto (Duke University Medical Center) Dr. Hidefumi Aoyama (Hokkaido University) Dr. Takahiro Kanehira (Hokkaido University) Dr. Taisuke Takavanagi (Hitachi, Ltd.)	

13:00	14:45	21:00	22:45	Session II-I H&N cancer and N TCP			Online
				Chair: Dr. Keiji Kobashi (Specially Appointed Associate Professor, Hokkaido University) and Dr. Koichi Yasuda (Assistant Professor, Hokkaido University)			
13:00	13:45	21:00	21:45	Radiotherapy Strategy for H&N cancer in Japan		Dr. Koichi Yasuda Assistant Professor, Department of Radiation Oncology, Faculty of Medicine, Hokkaido University	
13:45	14:30	21:45	22:30	Radiotherapy Strategy for H&N cancer in Thailand		Dr. Anussara Prayongrat Lecturer of Radiation Oncology, Department of Radiology, Faculty of Medicine, Chulalongkorn University	✓
14:30	14:45	22:30	22:45	Discussion		<Discussant> TBD	

15:00	~	17:00	23:00	~	1:00	Session II-II Updated Diagnosis-Specific Graded Prognostic Assessment (GPA) : Personalized treatment selection of brain metastases		Online
						Chair: Dr. Hidefumi Aoyama (Professor, Hokkaido University)		
15:00	~	15:30	23:00	~	23:30	Validation of the Lung-molGPA for Japanese NSCLC patients with brain metastases	Dr. Kentaro Nishioka Assistant Professor, Global Center for Biomedical Science and Engineering, Faculty of Medicine, Hokkaido University	
15:30	~	16:30	23:30	~	0:30	Keynote speech: An Update of the Diagnosis-Specific Graded Prognostic Assessment (GPA) for Patients with Brain Metastases: A Tool to Estimate Survival, Individualize Treatment and Stratify Clinical Trials.	Dr. Paul W. Sperduto Adjunct Professor, Duke University Medical Center Department of Radiation Oncology	
16:30	~	17:00	0:30	~	1:00	Discussion	<Discussant> TBD	

<DAY2>

August 21 (Sun)			August 20 (Sat)				
Starting Time	Ending Time		Starting Time	Ending Time	Session/Title	Presenter	
10:00	~ 11:45		18:00	~ 19:45	Session III Radiation Biology		Online
						Chair: Dr. Yasuhito Onodera (Associate Professor, GCB, Hokkaido University)	
10:00	~ 10:45		18:00	~ 18:45	Radiation-induced secretory factors for extracellular communication in tumor microenvironment	Dr. Jin-Min Nam Associate Professor, Graduate School of BIOSTUDIES, Kyoto University	
10:45	~ 11:30		18:45	~ 19:30	A Systems Approach to Multi-cellular Radiobiology Mediated by TGFβ	Dr. Mary Helen Barcellos-Hoff Professor, Department of Radiation Oncology, University of California San Francisco	✓
11:30	~ 11:45		19:30	~ 19:45	Discussion	<Discussant> TBD	

13:00	~	14:45	21:00	~	22:45	Session IV Diagnostic Imaging		Online
						Chair: Dr. Kohsuke Kudo (Professor, Hokkaido University)		
13:00	~	13:45	21:00	~	21:45	Cutting Edge AI Technologies in Diagnostic Imaging	Dr. Kenji Hirata Associate Professor, Department of Diagnostic Imaging, Faculty of Medicine, Hokkaido University	
13:45	~	14:30	21:45	~	22:30	How Artificial Intelligence Will Fundamentally Change the Practice of Radiology	Dr. Greg Zaharchuk Professor of Radiology (Neuroimaging and Neurointervention) School of Medicine, Stanford University	
14:30	~	14:45	22:30	~	22:45	Discussion	<Discussant> Dr. Toshiya Osanai (Assoc. Professor, Hokkaido University)	

					Closing remarks			Online
14:45	~	14:55	22:45	~	22:55	From Hokkaido University	<div>Dr. Yuji Kuge</div> <div>Professor, Vice-Director of the GCB, Faculty of Medicine, Hokkaido University</div>	