

## Program of 6th GCB Summer School for Molecular Biomedical Science and Diagnosis

On Site

As of 2023/8/19

Monday, August 21						
Chapter	Japan Standard Time		Title	Lecturer	Place	
-	8:30 AM	9:00 AM	Introduction	Prof. Yuji Kuge	EN5-205	
1	9:00 AM	9:45 AM	Emerging Trends for Radio-Immunotherapy in Solid Tumors	Dr. Rodney Cheng-En Hsieh		
15 min. break						
2	10:00 AM	10:45 AM	Artificial intelligence for clinical decision support: development and deployment	Dr. Michael Gensheimer		
15 min. break						
3	11:00 AM	11:45 AM	Recognition and destruction of cancer by the immune system: a brief history of success and failure	Dr. Anusha Kalbasi		
75 min. break						
4	1:00 PM	1:45 PM	Functional connectivity MRI and applications to preoperative brain mapping	Dr. Haris Sair		
15 min. break						
5	2:00 PM	2:45 PM	Hypofractionated RT coupled with advanced technologies and new concepts	Prof. Yong Chan Ahn	EN5-205	
15 min. break						
6	3:00 PM	3:45 PM	Overview of radiation therapy (Therapeutic Window in New Era)	Prof. Hidefumi Aoyama		
Tuesday, August 22						
Chapter	Japan Standard Time		Title	Lecturer		Place
7	9:00 AM	9:45 AM	Overview of Medical AI	Prof. Kohsuke Kudo		EN5-205
15 min. break						
8	10:00 AM	10:45 AM	Molecular imaging and molecular probes	Prof. Yuji Kuge		
15 min. break						
9	11:00 AM	11:45 AM	Clinical molecular imaging and image analysis	Prof. Chietsugu Katoh		
75 min. break						
10	1:00 PM	1:45 PM	How quantitative imaging and AI can shape diagnostic imaging practice	Dr. Khin Khin Tha		
15 min. break						
11	2:00 PM	2:45 PM	Basics of radiation biology	Dr. Yasuhito Onodera	EN5-205	
15 min. break						
12	3:00 PM	3:45 PM	Recent advances in cancer radiotherapy using molecular imaging and radioisotopes	Dr. Hironobu Yasui		
15 min. break						
13	4:00 PM	4:45 PM	Production of medical radioisotopes	Prof. Masayuki Aikawa		
Wednesday, August 23						
Chapter	Japan Standard Time		Title	Lecturer		Place
<b>14,15</b>	9:00 AM	10:30 AM	Hands-on Practical Training: MRI	Dr. Khin Khin Tha		EN5-205
30 min. break						
<b>16,17</b>	11:00 AM	12:30 PM	Hands-on Practical Training: Nuclear Medicine	Dr. Yuki Mizuno		
Thursday, August 24						
Chapter	Japan Standard Time		Title	Lecturer	Place	
18	1:00 PM	1:45 PM	AI in diagnostic Imaging	Dr. Hiroyuki Sugimori	EN5-205	
15 min. break						
19	2:00 PM	2:45 PM	Hands-on Practical Training: Biology I	Dr. Yasuhito Onodera		
15 min. break						
20	3:00 PM	3:45 PM	Introduction to AI with Keras	Dr. Kenneth Lee Sutherland		
15 min. break						
21	4:00 PM	4:45 PM	Hands-on Practical Training: Biology II	Dr. Yasuhito Onodera		
15 min. break						
22	5:00 PM	5:45 PM	Physics and Disease	Prof. Burcin Unlu	EN5-205	
15 min. break						
23	6:00 PM	6:45 PM	Facility Tour	Dr. Takahiro Kanehira		
Friday, August 25						
Chapter	Japan Standard Time		Title	Lecturer	Place	
24	9:00 AM	9:45 AM	Molecular mechanism of viral carcinogenesis	Dr. Motoaki Yasuda	EN5-205	
15 min. break						
25	10:00 AM	10:45 AM	Theranostics in Nuclear Medicine	Dr. Shiro Watanabe		
15 min. break						
26	11:00 AM	11:45 AM	Molecular radiation biology	Dr. Jin-Min Nam		
75 min. break						
<b>27,28</b>	1:00 PM	2:30 PM	Presentation by Summer School Participants	Prof. Yuji Kuge		
15 min. break						
29	2:45 PM	3:30 PM	Clinical and biological evaluation metrics and biomarker in silico in radiation oncology	Dr. Keiji Kobashi	EN5-205	
15 min. break						
30	3:45 PM	4:30 PM	Self-evaluation & Certificate	Prof. Yuji Kuge		

\* Schedule is subject to change.

  Joint lecture with Medical Physics

**[Place]** EN5-205 is on the fifth floor of the Northeast Research Building, School of Medicine