

Program of The 6th GI-CoRE Summer School for Medical Physics 2019

As of 2019/8/8

Monday, August 19					
Chapter	Time	Title	Lecturer	Place	
1	1:00 PM - 2:30 PM	Introduction	Prof. Hiroki Shirato	Lecture Room III, Clinical Medical Lecture Building	
		Overview of Radiation Therapy			
2	2:30 PM - 4:15 PM	Refreshment Break	Prof. Amato Giaccia		
		Important Concepts in Radiobiology that Impact Radiotherapy			
3	4:15 PM - 6:00 PM	Refreshment Break	Prof. Naruhiro Matsufuji		
		Interaction of Therapeutic Radiations with Matter			

Tuesday, August 20					
Chapter	Time	Title	Lecturer	Place	
4	8:45 AM - 10:15 AM	Treatment Planning for Radiation Therapy	Prof. Lei Xing	Lecture Room III, Clinical Medical Lecture Building	
		Refreshment Break			
5	10:30 AM - 12:00 PM	Recent advances in cancer radiotherapy using molecular imaging and radioisotopes	Dr. Hironobu Yasui		
		Lunch			
6	1:00 PM - 2:30 PM	SBRT and IGRT	Prof. Masayori Ishikawa		
7	2:45 PM - 4:15 PM	Four-dimensional Radiation Oncology, Real-time-image Guided Radiation therapy	Prof. Shinichi Shimizu		

Wednesday, August 21					
Chapter	Time	Title	Lecturer	Place	
8	8:45 AM - 10:15 PM	Treatment Machines for Particle Therapy	Dr. Yuto Nakashima	Lecture Room III, Clinical Medical Lecture Building	
		Treatment Planning System for Spot Scanning Proton Therapy	Dr. Shusuke Hirayama		
		Dose Calculation Algorithms for Spot Scanning Proton Therapy	Dr. Taeko Matsuura		
9	10:15 AM - 12:00 PM	Refreshment Break	Dr. Toshiyuki Toshito		
		Monte Carlo Simulation in particle therapy applications			
10	1:00 PM - 2:30 PM	Quality Assurance of Four-dimensional Radiation Therapy System	Dr. Naoki Miyamoto		
		Patient Setup and Image Guidance Technique in Proton Therapy	Dr. Seishin Takao		
		Refreshment Break (Move to PBTC)			
11	2:45 PM - 4:15 PM	Group A → Practical Training : QA (Proton) Group B → Practical Training : Treatment Planning (Proton)	Dr. Seishin Takao Dr. Sodai Tanaka Dr. Taeko Matsuura Dr. Shusuke Hirayama Dr. Koichi Miyazaki	PBTC	

Thursday, August 22					
Chapter	Time	Title	Lecturer	Place	
12	2:45 PM - 4:15 PM	Presentation by Summer School Participants	Dr. Jeff Wang	Lecture Room III, Clinical Medical Lecture Building	
		Refreshment Break (Move to PBTC)			
13	4:30 PM - 6:00 PM	Group A → Practical Training : Treatment Planning (Proton) Group B → Practical Training : QA (Proton)	Dr. Seishin Takao Dr. Sodai Tanaka Dr. Taeko Matsuura Dr. Koichi Miyazaki	PBTC	

Friday, August 23					
Chapter	Time	Title	Lecturer	Place	
14	8:45 AM - 10:15 AM	Proton Treatment System in Hokkaido University	Prof. Kikuo Umeqaki	Lecture Room III, Clinical Medical Lecture Building and PBTC	
		Refreshment Break			
15	10:30 AM - 12:00 PM	Final discussion and closing remarks	Prof. Kikuo Umeqaki		

[Note] Proton Beam Therapy Center (PBTC)

Joint lectures with GI-CoRE Summer School for Radiation Biology