

Program of GI-CoRE Summer School for Medical Physics 2016

As of 27 June, 2016

Monday, August 22					
Chapter	Time		Title	Lecturer	Place
1	1:00 PM	1:10 PM	Introduction		OIA Room #112
	1:10 PM	2:10 PM	Overview of Radiation Therapy	Prof. Hiroki Shirato	
2	2:10 PM	2:20 PM	Refreshment Break		
	2:20 PM	3:20 PM	Interaction of Therapeutic Radiations with Matter	Prof. Naruhiro Matsufuji	
3	3:20 PM	3:30 PM	Refreshment Break		
	3:30 PM	4:30 PM	Treatment Planning for Radiation Therapy	Prof. Lei Xing	
4	4:30 PM	5:30 PM	Monte Carlo Simulation in particle therapy applications	Dr. Toshiyuki Toshito	
6:00 pm - 8:00 pm Dinner Informal Evening Session with Lecturers					

Tuesday, August 23					
Chapter	Time		Title	Lecturer	Place
5	10:00 AM	11:00 AM	Optimization of Dose Fractionation based on Three-dimensional Dose Distribution	Prof. Mizuta and Prof. Date	OIA Room #112
	11:00 AM	11:20 AM	Refreshment Break		
6	11:20 AM	12:20 PM	Introduction to Big Data and Radiomics	Dr. Yi Cui	
	12:20 PM	1:20 PM	Lunch		
7	1:20 PM	2:20 PM	Monte Carlo Simulation in photon therapy applications	Dr. Youming Yang	
8	2:20 PM	2:50 PM	Quality Assurance of External Beam Therapy	Dr. Naoki Miyamoto	
	2:50 PM	3:10 PM	Refreshment Break		
9 (optional)	3:10 PM	4:10 PM	Practical Training-1: Treatment Planning (X-ray) [Group A] IGRT QA (X-ray) [Group B]	[Treatment planning] Dr. Shinichi Shimizu Dr. Masaya Tamura	RI center/ PTC 3F
	4:10 PM	4:20 PM	Refreshment Break		
10 (optional)	4:20 PM	5:20 PM	Practical Training-2: Treatment Planning (X-ray) [Group B] IGRT QA (X-ray) [Group A]	[IGRT QA] Dr. Ryusuke Suzuki Dr. Naoki Miyamoto	

Wednesday, August 24					
Chapter	Time		Title	Lecturer	Place
11	9:00 AM	9:30 AM	Introduction of Particle Therapy	Dr. Yuka Matsuzaki	OIA Room #112
12	9:30 AM	10:00 AM	Treatment Machines for Particle Therapy	Dr. Takahiro Yamada	
13	10:00 AM	10:30 AM	Treatment Planning for Proton Beam Therapy	Dr. Shusuke Hirayama	
	10:30 AM	10:40 AM	Refreshment Break		
14	10:40 AM	11:10 AM	Treatment Planning System for Spot Scanning Proton Therapy	Dr. Yusuke Fujii	
15	11:10 AM	11:40 AM	Quality Assurance in Particle Therapy	Dr. Seishin Takao	
	11:40 AM	1:00 PM	Lunch		
16	1:00 PM	2:00 PM	Practical Training-3: Treatment Planning (Proton)	Dr. Taeko Matsuura	PTC
17	2:00 PM	3:00 PM	Practical Training-4: Machine QA (Proton)	Dr. Takaaki Fujii	
	3:00 PM	3:30 PM	Refreshment Break		
18	3:30 PM	4:30 PM	Practical Training-5: Patient QA (Proton)	Dr. Takaaki Fujii	

Thursday, August 25					
Chapter	Time		Title	Lecturer	Place
19	1:00 PM	2:00 PM	SBRT and IGRT	Prof. Masayori Ishikawa	OIA Room #112
20	2:00 PM	3:00 PM	Four-dimensional radiation oncology and IEC protocols	Dr. Shinichi Shimizu	
	3:00 PM	3:10 PM	Refreshment Break		
21	3:10 PM	4:10 PM	Proton Treatment System in Hokkaido University	Prof. Kikuo Umegaki	PTC
22	4:10 PM	4:40 PM	Faculty Tour of Proton Site	Prof. Kikuo Umegaki	
		4:40 PM	4:50 PM	Refreshment Break	
23	4:50 PM	5:20 PM	Closing Remarks	Prof. Kikuo Umegaki	OIA Room #112

Friday, August 26					
Chapter	Time		Title	Lecturer	Place
24 (optional)	9:00 AM	12:00 PM	University Tour (Science and Engineering)		

[Note] Office of International Affairs (OIA), Proton Therapy Center (PTC)