

**Workshop Experimental Radiobiology: Physics meets Biology and Medicine 5-6 March 2020**

Day 1 (Mar 5th)			
		Title	Speaker
08:45	09:05	Registration	
09:05	09:15	Welcome words and an introduction to the first day of the workshop	I Espinoza/B Sánchez/C Glowa
09:15	10:15	An introduction to clinical radiobiology (teleconference)	Christian P. Karger
10:15	11:00	Clinical radiobiology as a bridge towards Precision Radiation Oncology	Pablo Muñoz
11:00	11:30	Coffee break	
11:30	12:15	Biological effects of low-energy X-rays and very high doses per fraction	Carsten Herskind
12:15	12:45	Vascular senescence is involved in aggressiveness of glioblastoma relapse	Francois Paris
12:45	14:45	Lunch	
14:45	15:30	In vivo methods for heavy ion research in tumors and normal tissue	Christin Glowa
15:30	16:00	Cancer stem cells and tumor heterogeneity and their role in radioresistance	Ina Kurth
16:00	16:30	Low-dose hyper-radiosensitivity: a window of opportunities	Katherin Marcelain
16:30	17:30	Get together	
Day 2 (Mar 6th)			
		Title	Speaker
09:00	09:10	An introduction to the second day of the workshop	Ignacio Espinoza
09:10	09:40	Towards experimental validation of a mathematical tumor oxygenation model with an ultra-microscope	Alexander Neuholz
09:40	10:10	Computer Simulation of the Radiation Response of Hypoxic Tumors	Isabela Paredes-Cisneros
10:10	10:40	Coffee break	
10:40	11:25	Radiobiological modelling of novel radiotherapy techniques: dose painting by numbers and hypofractionated radiotherapy	Araceli Gago-Arias
11:25	12:00	Modelling Tumor regression to different radiotherapy protocols by cellular automaton	Francois Paris
12:00	12:30	Cancer induction models	Beatriz Sánchez/Ignacio Espinoza
12:30	14:30	Lunch	
14:30	15:00	Radiation equipment and models for modern radiobiology	Ina Kurth
15:00	15:45	Practical considerations in commissioning an XRAD-320 cabinet biological irradiator and designing robust biological experiments	Yannick Poirier
15:45	16:30	Modeling kilovoltage x-ray sources for computational dose simulations and validation using EPID dosimetry	Yannick Poirier
16:30	16:45	Final discussion	I Espinoza/B Sánchez/C Glowa