

## SCIENTIFIC PROGRAMME

### DAY 1 – SATURDAY 10 SEPTEMBER

Time	Lecture	Speaker
09.00 - 09.20	Introduction to the course	M. Joiner
09.20 - 10.00	1.1 Importance of radiobiology in the clinic	V. Grégoire
10.00 - 10.30	1.2 Hallmarks of cancer	M. Koritzinsky
10.30 - 11.00	<i>Coffee break</i>	
11.00 - 11.45	1.3 Molecular basis of cell death	M. Koritzinsky
11.45 - 12.30	1.4 Cell survival – tumor growth and response to irradiation	K. Haustermans
12.30 - 13.00	<b>General discussion</b>	
13.00 - 14.00	<i>Lunch</i>	
14.00 - 14.45	1.5 Models of radiation cell killing	M. Joiner
14.45 - 15.30	1.6 Pathogenesis of normal tissue side effects	R. Coppes
15.30 - 16.00	<i>Coffee break</i>	
16.00 - 17.00	1.7 Normal tissues: radiosensitivity, fractionation, overall treatment time	R. Coppes

### DAY 2 – SUNDAY 11 SEPTEMBER

Time	Lecture	Speaker
09.00 - 09.45	2.1 The linear-quadratic approach to fractionation	M. Joiner
09.45 - 10.30	2.2 Molecular basis of radiation response: DNA repair, checkpoints	M. Koritzinsky
10.30 - 11.00	<i>Coffee break</i>	
11.00 - 12.00	2.3 Stem cells in radiotherapy	R. Coppes
12.00 - 12.30	<b>General discussion</b>	
12.30 - 13.30	<i>Lunch</i>	
13.30 - 14.30	2.4 Modified fractionation in radiotherapy	V. Grégoire
14.30 - 15.15	2.5a The LQ-model in practice – introduction to calculations	M. Joiner
15.15 - 15.45	<i>Coffee break</i>	
15.45 - 16.30	2.5b The LQ-model in practice – examples of calculations	K. Haustermans / M. Joiner

## SCIENTIFIC PROGRAMME

### DAY 3 – MONDAY 12 SEPTEMBER

Time	Lecture	Speaker
09.00 - 09.45	3.1 LET and RBE	L. Marignol
09.45 - 10.45	3.2 The oxygen effect, hypoxia and the tumor microenvironment	M. Koritzinsky
10.45 - 11.15	<i>Coffee break</i>	
11.15 - 12.00	3.3 Clinical efforts to modify tumor hypoxia	K. Haustermans
12.00 - 13.00	<b>General discussion</b>	
13.00 - 14.00	<i>Lunch</i>	
14.00 - 14.45	3.4 Biological modifiers of normal tissue effects	R. Coppes
14.45 - 15.30	3.5 Combined radiotherapy and chemotherapy	L. Marignol
15.30 - 16.00	<i>Coffee break</i>	
16.00 - 17.30	3.6 Clinical examples – Lower GU	K. Haustermans / V. Grégoire

### DAY 4 – TUESDAY 13 SEPTEMBER

Time	Lecture	Speaker
09.00 - 09.45	4.1 Dose-response relationships in radiotherapy	L. Marignol
09.45 - 10.30	4.2 Biological response modifiers in tumors – preclinical	M. Koritzinsky
10.30 - 11.00	<i>Coffee break</i>	
11.00 - 11.45	4.3 Biological response modifiers in tumors – clinical	K. Haustermans
11.45 - 12.30	4.4 Retreatment tolerance of normal tissue	L. Marignol
12.30 - 13.00	<b>General discussion</b>	
13.00 - 14.00	<i>Lunch</i>	
14.00 - 14.45	4.5 The volume effect in radiotherapy	R. Coppes
14.45 - 15.30	4.6 Biological image guided radiotherapy	V. Grégoire
15.30 - 16.00	<i>Coffee break</i>	
16.00 - 17.30	4.7 Clinical examples – Head & Neck and Lung	V. Grégoire / K. Haustermans

### DAY 5 – WEDNESDAY 14 SEPTEMBER

Time	Lecture	Speaker
09.00 - 09.45	5.1 Clinical side effects and their quantification	K. Haustermans
09.45 - 10.30	5.2 The dose-rate effect	L. Marignol
10.30 - 11.00	<i>Coffee break</i>	
11.00 - 11.45	5.3 Particles in radiotherapy	V. Grégoire
11.45 - 12.30	5.4 Radiation-induced malignancies	M. Joiner
12.30 - 13.00	<b>Informal closure of the course</b>	