

Specialised Course on Heavy Ion Therapy Research with a Focus on Clinical Aspects

Date: 3rd to 7th July 2023

Venue: Online via Zoom

(Times indicated are CEST i.e. UTC+2)

Monday 3rd July

Session 1 - Radiobiology

08:30-08:45 – Introductory remarks

08:45-09:45 - Radiobiology and General Introduction – Walter Tinganelli (GSI)

09:45-10:30 - RBE Models – Piero Fossati (Med Austron)

10:30 – *Opening Photo*

10:30-10:45 – *Coffee Break*

10:45-11:30 - Immunological Effects – Alexander Helm (GSI)

11:30-12:15 - Hypoxia – Piero Fossati (Med Austron)

12:15-13:15 - *Lunch Break*

Session 2 – Head and Neck

13:15-14:00 - Skull Base – Semi Harrabi (HIT)

14:00-14:45 – Central Nervous System – Semi Harrabi (HIT)

14:45-15:30 – Salivary Gland & Paranasal Sinuses – Ester Orlandi (CNAO)

15:30–15:45 – *Coffee Break*

15:45-16:30 – Melanoma – Maciej Pelack (Med Austron)

16:30 – 17:00 - Case Study – Salivary Gland – Maria Bonora (CNAO)

Tuesday 4th July

Session 4 – Prostate (Part 1)

08:30-09:15 – Prostate – Hitoshi Ishikawa (QST)

Session 3 - Sarcoma

09:15-10:00 – Osteosarcoma - Katharina Seidensaal (HIT)

10:00-10:45 - Soft Tissue – Reiko Imai (QST)

10:45-11:00 – *Coffee Break*

11:00-11:45 – Chordoma and Chondrosarcoma – Skull Base – Giulia Riva (CNAO)

11:45-12:30 – Chordoma and Chondrosarcoma – Sacrum and Spine - Maria Rosaria Fiore (CNAO)

12:30 – 13:15 – Ewing and Rhabdomyosarcoma - Carola Lütgendorf-Caucig (Med Austron)

13:15-14:15 - *Lunch Break*

14:15-15:00 – Case Study Sacral Chordoma – Piero Fossati (Med Austron)

Session 4 – Prostate (Part 2)

15:00-15:45 – State of the Art – Razvan Galalae (Klinikum Bremerhaven)

15:45–16:00 – *Coffee Break*

16:00-16:45 – Trial Design - Roberto Orecchia (IEO)

16:45-17:30 – Case Study Prostate – Razvan Galalae (Klinikum Bremerhaven)

17:30-18:00 – Demonstration of the installation of MatRad – Yiota Foka (GSI, SEEIIST), Niklas Wahl (DKFZ)

Wednesday 5th July

Session 5 – Liver and Pancreas

08:30-09:15 – Pancreas - Makoto Shinoto (QST)

09:15-10:00 – Liver – Masaru Wakatsuki (QST)

10:00-10:45 – Case study Hepatocellular Carcinoma - Masaru Wakatsuki (QST)

10:45-11:00 – *Coffee Break*

Session 6 – Organ Motion

11:00-11:45 – Lung –Shinichiro Mori (QST)

11:45-12:30 – Abdomen – Silvia Molinelli (CNAO)

12:30-13:15 – Examples of Practical Solutions - Piero Fossati – (Med Austron)

13:15-14:15 - *Lunch Break*

Session 7 – Treatment Planning

14:15 – 14:45 – Introduction to Treatment Planning – Joao Seco (DKFZ) 14:45–

16:15 – Treatment Planning with MatRad I – Joao Seco, Niklas Wahl (DKFZ) 16:15–

16:30 – *Coffee Break*

16:30–18:00 – Treatment Planning with MatRad II – Joao Seco, Niklas Wahl (DKFZ)

Thursday 6th July

Session 8 – Re-Irradiation

08:30-09:15 – Head and Neck – Barbara Vischioni (CNAO)

09:15-10:00 – Central Nervous System - Semi Harrabi (HIT)

10:00-10:45 – Pelvis – Shigeru Yamada (QST)

10:45-11:00 – *Coffee Break*

11:00-11:45 – Case Study – Pelvic/Rectum - Shigeru Yamada (QST)

11:45-12:30 – Case Study – Salivary Gland and Paranasal Sinus – Rossana Ingargiola (CNAO)

12:30-13:15 - *Lunch Break*

Session 9 – Innovative Methods



13:15-14:00 – Linear Energy Transfer Painting – Piero Fossati (Med Austron)
14:00-14:45 – Spatial Fractionation – Slavisa Tubin (Med Austron)
14:45-15:30 – Heavy Ion Therapy Integration with Immune and Target Drugs - Slavisa Tubin (Med Austron)
15:30-15:45 – *Coffee Break*

Session 10 – Gynae and Rare Indications (Part 1)

15:45-16:30 – Gynaecological Melanoma and Oligomet Ovarian Cancer – Amelia Barcellini (CNAO)
16:30-17:15 – Adenoid Cystic Carcinoma – Thomas Held (HIT)
17:15–18:00 - Paediatric - Semi Harrabi (HIT)

Friday 7th July

Session 10 – Gynae and Rare Indications (Part 2)

08:55-09:40 - Gynaecology - Tatsuya Ohno (GHMC)
09:40-10:00 - Kidney – Hitoshi Ishikawa (QST)
10:00-10:20 - Breast – Kazutoshi Murata (QST)
10:20–10:35 - *Coffee Break*

Session 11 – Methodologies – Present and Future Clinical Trials

10:35-11:05 - J-CROS Trial - Tatsuya Ohno (GHMC)
11:05-11:35 - The Heidelberg Approach - Semi Harrabi (HIT)
11:35-12:05 - The French Trial – Jacques Balosso (ARCHADE)
12:05-12:35 - CNAO Trials – Ester Orlandi (CNAO)

12:35-13:30 - *Lunch Break*

13:30-14:00 - Sacro Trial - Piero Fossati (Med Austron)
14:00-14:30 - Mayo Trial – Bradford Hoppe (Mayo)
14:30-15:00 - CIPHER Trial – Arnold Pompos (UTSW)
15:00-15:30 - SHIPP Trial – Mack Roach (UCSF)
15:30-15:45 - *Coffee Break*
15:45 - *Closing Photo*
15:45-16:30 – Round Table Clinical Trials – Semi Harrabi (HIT), Mack Roach (UCSF), Jacques Balosso (ARCHADE), Bradford Hoppe (Mayo), Piero Fossati (Med Austron), Arnold Pompos (UTSW), Tatsuya Ohno (GHMC), Ester Orlandi (CNAO)
16:30 – 17:00 - Knowledge Transfer in Heavy Ion Therapy Research - Manuela Cirilli (CERN)
17:00 – 17:30 - Closing Remarks

