

8 NOV

Advanced Course

Innovation and Development in SBRT: From Theory to Clinical Practice

Description

The advanced course on Innovation and development in SBRT intend to explore **new modalities and strategies for simulation, planning and treatment verification**, along with the development of skills and competences supported by a specialized conceptual basis, recommendations and best practices in Radiation Oncology.

The aims of this course are integrated in advanced practices qualification framework for Radiation Therapists, taking into perspective the technical and technological innovations, stimulated by the exchange of knowledge and sharing of experiences between Radiation Therapists and other professionals from Radiation Oncology community.

Attendance: Radiation Therapists, Radiation Oncologists, Medical Physicists, Students and others

Vacancies: 80 participants

Aims and Learning Objectives

Aims:

- Implement a SBRT programme on a safe and effective way
- Understand the clinical advantages and associated risks of SBRT
- Evaluate and recognise the application, feasibility and results of SBRT in different treatment sites
- Understand radiobiological aspects associated to extreme hypofractionation
- Recognise sources of error and uncertainties throughout patient workflow

Learning Objectives:

- Recognize the technical and physical requirements associated to SBRT in practice
- Ascertain devices for SBRT precision
- Optimize image acquisition for planning
- Define Volumes of Interest and safety margins
- Recognise and apply different modalities for treatment verification and motion control
- Appraise different approaches and decision making

Assessment:

Final assessment by multi choice web questionnaire

Course Directors:

Joana Barbosa, Jorge Faria & Yatman Tsang

Faculty:

Darby Ertler (CA)
Filipe Moura (PT)
João Marques (PT)
Jorge Faria (PT)
Luís Cunha (PT)
Miguel Palacios (NL)
Nuno Pimentel (PT)
Omar Bohoudi (NL)
Sandra Afonso (PT)
Robin Botman (NL)
Yatman Tsang (UK)

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8 November	
8.30	Introduction Course Directors: Joana Barbosa, Jorge Faria & Yatman Tsang
9.00	Session: SBRT overview <i>Extreme Hypofractionation in Radiotherapy: facts and myths</i> Nuno Pimentel (Fundação Champalimaud, PT)
9.45	<i>RTT advanced practice – SBRT treatment and beyond</i> Yatman Tsang (Mount Vernon Cancer Centre, UK)
10.30	Break
11.00	Communication Industry BLUESTREAM - ACCURAY Cyberknife: THE SBRT system Jean-Luc Coda-Forno
11.30	Session: Precision throughout the workflow <i>Image acquisition for planning and its optimization</i> João Marques (Fundação Champalimaud, PT)
12.00	<i>Breathing motion control: How to benefit from it</i> Luís Cunha (IPO Porto, PT)
12.30	<i>The Air We Breathe: Managing Respiratory Motion for the Safe Delivery of SBRT</i> Darby Erler (Sunnybrook Odette Cancer Centre , CA)
13.00	LUNCH
14.30	Session: Treatment Planning and Quality Assurance <i>OnLine plan adaptation in MR-guided radiation therapy</i> Omar Bohoudi (Amsterdam UMC, NL)
15.00	<i>Impact of calculation algorithms on delivered dose</i> Jorge Faria (CH Barreiro-Montijo, PT)
15.30	<i>DIR-based dose accumulation in (MR-guided) Radiotherapy</i> Miguel Palacios (Amsterdam UMC, NL)
16.00	Communication Industry AVANÇO – QFIX Encompass Frameless SRS Solution Tom Swayne
16.15	Session: Treatment Delivery and Verification SBRT Treatment Protocols: from positioning to verification and decision making Sandra Afonso (IPO Porto, PT)
16.45	4D-CBCT and optical surface detection for SBRT motion control Filipe Moura (CUF Descobertas, PT)
17.15	MRI guided SBRT Robin Botman (Amsterdam UMC, NL)
17.45	Web-based Assessment
18.00	Closing remarks