

ESTRO 2024 - Clinical Pre-meeting course

Embracing the AI revolution: A one-day dive into future-proof implementation

Friday, 3rd of May 2024, from 08:30 to 17:00

Course directors:

- Jennifer Dhont, Medical Physicist, Institut Jules Bordet (BE)
- Frank Hoebers, Radiation Oncologist, MAASTRO Clinic (NL)
- Stine Sofia Korreman, Medical Physicist, Aarhus University (DK)

Faculty:

- Danielle Bitterman, Radiation Oncologist, Harvard Medical School (US)
- Caitlin Gillan, Radiation Therapist (RTT), University Health Network (CA)
- Mark Gooding, Industry Research Scientist, Inpictura Ltd (UK)
- Vincent Grégoire, Radiation Oncologist, Centre Léon Bérard Lyon (FR)
- David Fuller, Radiation Oncologist, MD Anderson Cancer Center (US)
- Coen Hurkmans, Medical Physicist, Catharina Hospital Eindhoven/Technical university Eindhoven (NL)
- Rachelle Swart, Program manager Innovation Implementation, Maastrou (NL)
- Lise Bech Jellesmark Thorsen, Clinical Oncologist, Associate professor, Department of Oncology, Aarhus University Hospital, Department of Clinical Medicine, Aarhus University (DK)
- Lisanne van Dijk, Technical Physician, University Medical Center Groningen (NL)
- Harini Veeraraghavan, Computer Scientist, Memorial Sloan Kettering Cancer Center (US)
- Dirk Verellen, Medical Physicist, Iridium Kankernetwerk, University of Antwerp (BE)

Programme

Thursday 18th of April, 16:00-17:00 CEST - Online lecture: *"Welcome to the world of AI implementation: Promises and perimeters"* – D. Bitterman (US)

Time slot	Title	Teacher/Moderator
08:30 - 10:30	Theme: How far can we go with AI?	
08:30 - 08:55	Basic principles of supervised AI	J. Dhont (BE)
08:55 - 09:00	Taking the 'temperature' of the audience	S. Korreman (DK)

09:00 - 09:25	Full automation is feasible!	M. Gooding (UK)
09:25 - 09:50	Risks (or lack thereof) of automation	C. Hurkmans (NL)
09.50 - 10.05	Discussion	Moderator: S. Korreman (DK)
10.05 - 10.30	AI innovation pathways	R. Swart (NL)
10:30 - 11:00	<i>COFFEE BREAK</i>	
11:00 - 12.30	<i>Theme: Expert perspectives on AI implementation</i>	
11:00 - 11:20	The developer	H. Veeraraghavan (US)
11:20 - 11:40	The clinician	D. Fuller (US)
11:40 - 12:00	The RTT	C. Gillan (CA)
12:00 - 12:10	Discussion	Moderator: S. Korreman (DK)
12:10 - 12:30	What happened to prediction models?	L. van Dijk (NL)
12:30 - 14:00	<i>LUNCH BREAK</i>	
14.00 - 15.30	<i>Debate time!</i>	
14.00 - 14.10	Introduction to debate dilemmas	S. Korreman (DK)
14.10 - 14.30	Group preparation	
14.30 - 15.15	Point - counterpoint presentations	Participants
15.15 - 15.30	Discussion	Moderator: S. Korreman (DK)
15:30 - 16:00	<i>COFFEE BREAK</i>	
16.00 - 17.00	<i>Theme: Future of the AI powered clinic</i>	
16.00 - 16.25	Needs for training and education	L.B. Jellesmark Thorsen (DK)
16.25 - 16.55	The job descriptions of a Medical Physicist and a Radiation Oncologist in 2050	V. Gregoire (FR) & D. Verellen (BE)
16:55 - 17:00	End-of-the-day 'temperature' - has the AI fever subsided or intensified over the course of the day?	S. Korreman (DK)