

SCIENTIFIC PROGRAMME

Pre-Course Recorded Lectures and Live Online Webinar

Before the in-person course in Turin, participants are asked to attend one live webinar and view seven pre-recorded lectures listed below. Topics covered by the lectures will be referenced during the live course. There will be a live Q&A session in the week before the in-person course.

Contributors

Wouter Crijns

Davide Cusumano

Coen Hurkmans

Matteo Maspero

Ana Barragan Montero

Eliana Vasquez Osorio

Lorenzo Placidi

Wednesday, 7th October – 14:00-14:30 CEST

Live Online Webinar; SOTA of AI in Radiation Oncology Overall – Lead-in to Course

List of pre-recorded lectures can be found below. The access to the lectures will be opened after the live webinar on October 7th. All the sessions will be approximately 30 minutes long.

Title	Lecturer
Introduction to Machine Learning	Jennifer Dhont
Introduction to Deep Learning	Eliana Vasquez Osorio
AI for Image Synthesis and Reconstruction	Matteo Maspero
AI for Autosegmentation	Coen Hurkmans
AI for Treatment Planning	Lorenzo Placidi
AI for QA	Wouter Crijns
AI for Response Prediction	Davide Cusumano

Friday, 30th October – 14:00 – 14:30 CET

Live Online Question and Answer Session

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In-Person Course 9 – 11 November – Turin, Italy

Course DirectorsJennifer Dhont
Stine Korreman**Faculty**Wouter Crijns
Wouter van Elmpt
Elizabeth Forde
Dave Fuller**Guest Lecturer**

Althea Boschetti

Ana Barragan Montero
Eliana Vasquez Osorio
Lise Thorsen

Day 1		
Time	Lecture	Lecturer
08:30 - 09:00	Welcome	S. Korreman & J. Dhont
09:00 - 09:30	Meet AI - Your future clinical partner	D. Fuller
09:30 - 10:00	Where are we today?	A. Barragan Montero
10:00 - 10:30	Coffee Break	
10:30 - 11:00	Preparation for practical exercises	J. Dhont & S. Korreman
11:00 - 12:00	Hands-on: AI Literacy	All faculty
12:00 - 13:00	Lunch	
13:00 - 14:00	FAIR Data – Smart AI	J. Dhont
14:00 - 15:00	Hands-on: FAIR Data	J. Dhont & D. Fuller
15:00 - 15:30	Coffee Break	
15:30 - 16:00	Guidelines, regulations and governance	W. van Elmpt
16:00 - 17:00	The Big Shift: GenAI and agents	E. Vasquez Osorio
17:00 - 17:15	Wrap up of the day	S. Korreman & J. Dhont

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Day 2		
Time	Lecture	Lecturer
08:30 - 09:30	Metrics, measures and model selection	A. Barragan Montero
09:30 - 10:00	Commissioning and QA of AI	W. Crijns
10:00 - 10:30	<i>Coffee Break</i>	
10:30 - 11:30	Hands-on: Segmentation and planning	A. Barragan Montero & W. van Elmpt & E. Forde
11:30 - 12:00	Monitoring and risk analysis	W. van Elmpt
12:00 - 13:00	<i>Lunch</i>	
13:00 - 14:00	Implementation and evaluation	E. Ford
14:00 - 15:00	Hands-on: Model Card	A. Barragan Montero & W. Crijns
15:00 - 15:30	<i>Coffee Break</i>	
15:30 - 16:00	Company presentations	
16:00 - 17:00	Behind the algorithm: XAI	S. Korreman
17:00 - 17:15	Wrap up of the day	S. Korreman & J. Dhont

Day 3		
Time	Lecture	Lecturer
08:30 - 09:30	From voxels to predictions: Radiomics and dosiomics	D. Fuller
09:30 - 10:30	Hands-on: Omics	D. Fuller & E. Vasquez Osorio
10:30 - 11:00	<i>Coffee Break</i>	
11:00 - 12:00	Our changing professional roles	W. Crijns & L. Thorsen & E. Forde & E. Vasquez Osorio
12:00 - 13:00	<i>Lunch</i>	
13:00 - 14:00	Training for the AI-ready clinic	L. Thorsen
14:00 - 15:00	Hands-On: Training Programme	L. Thorsen & E. Forde
15:00 - 15:30	<i>Coffee Break</i>	
15:30 - 16:30	AI for adaptive radiotherapy	A. Boschetti
16:30 - 16:50	Wrap Up and Evaluation	S. Korreman & J. Dhont