



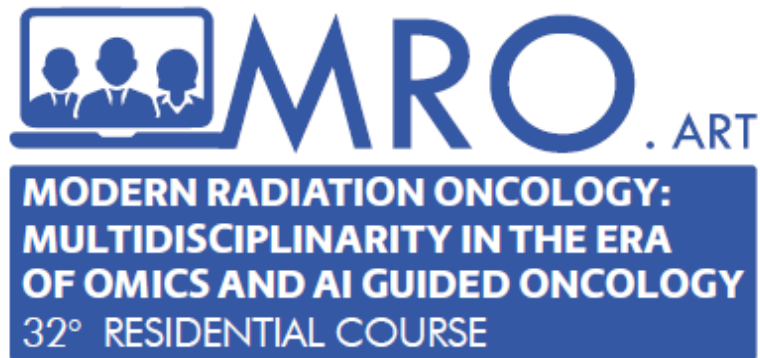
UNIVERSITÀ
CATTOLICA
del Sacro Cuore

Gemelli



Fondazione Policlinico Universitario Agostino Gemelli IRCCS
Università Cattolica del Sacro Cuore

ART
Advanced Radiation
Therapy



17 - 18 - 19 October, 2022

Aula Brasca

Fondazione Policlinico Universitario A. Gemelli IRCCS

Largo A. Gemelli, 8 - Roma

Scientific Coordinators: V. Valentini, M.A. Gambacorta, L. Indovina

Honorary Presidents: C.A. Perez, N. Cellini

Temporary Program



Associazione Italiana
Radioterapia e Oncologia clinica

Endorsed by
ESTRO

17 October 2022 ONSITE and LIVE STREAMING

08.00- 08.45 ONSITE REGISTRATION COURSE OPENING

08.45- 09.15 **Authorities greetings** Preside Facoltà, G. Scambia (I), C.A. Perez (USA), N. Cellini (I)
09.15- 09.30 **Course tips and trick** V. Valentini, M.A. Gambacorta, L. Indovina (I)

COURSE AIM LECTURE

Moderators: D. Genovesi, M.E. Rosetto, (I)
09.30- 09.45 **Multidisciplinary approach in the omics and AI era** M.A. Gambacorta (I)

OPENING LECTURE

Moderators: A.G. Morganti, F. Valvo, (I)
09.45- 10.15 **Bioprinting to modelize response to Radiation Oncology** F. Paris (F)

SESSION 1 Metrics: omics science in modern oncology: What reliable support for clinical decisions?

Moderators: L. Livi, F. Deodato, (I)
10.15 -10.30 Omics applied in modern oncology: methods and general applications G. Tortora (I)
10.30- 10.45 Radiomics: methods and general applications E. Sala (I)
10.45- 11.00 Dosomics: methods and general applications L.Placidi (I)
11.00- 11.15 Omics applied to CAR T-cells technology: methods and general applications R. De Maria Marchiano (I)
11.15- 11.30 Q&A discussant: G. Macchia (I)

11.30- 12.00 **Break**

SESSION 2 Metrics: AI applications in modern oncology: What reliable support for clinical decisions?

Moderators: C. Aristei , S. Pergolizzi, (I)
12.00- 12.15 AI in modern Imaging R. Beets-Tan (NL)
12.15- 12.30 AI in modern Surgery S. Alfieri (I)
12.30- 12.45 AI in modern Pathology I. Nagtegaal (NL)
12.45- 13.00 Omics and AI to novel trial address D. Lorusso (I)
13.00- 13.15 Q&A discussant: G. Chiloiro (I)

LECTURE 1

Moderators: S. Magrini (I), F. Paiar
13.15- 13.45 **Personalized oncology: dream or reality?** P. Lambin (NL)

13.45- 14.30 **Light lunch**

SESSION 3 Metrics: AI applications in modern oncology: What reliable support for clinical decisions?

Moderators: M.F. Osti, M. Buglione di Monale e Bastia(I)
14.30- 14.45 AI in Medical Oncology L. Licitra (I)
14.45- 15.00 AI in modern Radiation Oncology J.E. Bibault (F)
15.00- 15.15 AI in modern Physics G.J. Meijer (NL)
15.15- 15.30 AI applications for Data management A. Dekker (NL)
15.30- 15.45 Q&A discussant: N. Dinapoli (I)

15.45- 16.15 **Break**

16.15- 17.45 Lab 1 small group Medical Radiology Health Technicians
Lab 2 small group Medical Physicists
Lab 3 small group Radiation Oncologists

LECTURE 2

Moderator: M. Elefanti (I)
17.45- 18.15 **AI and omics science impact on Health Systems** Y. Lievens (B)

18 October 2022 ONSITE and LIVE STREAMING

FoCUS oN

Moderators:

S. Ramella, V. Tombolini, (I)

08.40- 09.00 **TKI inhibitors and new drugs in lung cancer: omics driven prescription and combination with radiation oncology**

C. Le Pechoux (F)

LECTURE 3

Moderators:

G Sanguineti, A. Fiorentino,(I)

09.00- 09.30 **How are Omics and AI changing radiotherapy practice? The ESTRO Perspective**

A. Kirby (UK)

SESSION 4 Actions: AI and omics current applications: practice impact and next steps

Moderators:

M. Mangoni, G.C. Mattiucci, (I)

09.30- 09.45 AI to drive clinical trials

S. Kyriazakos (DK)

09.45- 10.00 Omics to drive clinical trials

E. Fokas (D)

10.00- 10.15 Omics and AI from trial to practice

K. Haustermans (B)

10.15- 10.30 Omics and AI what patient perceives?

L. Dinapoli (I)

10.30- 10.45 Q&A Discussant

E. Meldolesi (I)

10.45- 11.15 **Break**

11.15- 12.45 Lab 1 small group Medical Radiology Health Technicians

Lab 2 small group Medical Physicists

Lab 3 small group Radiation Oncologists

LECTURE 4

Moderators:

M. Scorsetti, E. Russi, (I)

12.45-13.15 **Omics and AI driven radiation oncology in Oligometastatic patients**

M. Guckenberger (CH)

13.15-14.15 **Light symposium: G-STEP**

SESSION 5 Actions: Selection beyond the standard: practice impact and next steps

Moderators:

F. Alongi, L. Indovina, (I)

14.15- 14.30 Omics and AI for MRLINAC

S. Corradini (D)

14.30- 14.45 Omics and AI for PROTON

A. Hoffman (D)

14.45- 15.00 Omics and AI for FLASH

J. Bourhis (CH)

15.00- 15.15 Q&A Discussant:

L. Boldrini (I)

15.15- 15.45 **Break**

SESSION 6 OMICS and AI in ENT

Moderators:

G.Paludetti, A. Cassano, (I)

15.45- 16.00 Omics driven radiotherapy approaches

V. Grégoire (F)

16.00- 16.15 AI planning approaches

N. Jornet (E)

16.15- 16.30 Omics driven systemic treatments

P.L. Bonomo (I)

16.30- 16.45 AI driven surgery

J. Galli (I)

16.45- 17.00 Q&A Discussant:

F. Miccichè (I)

SESSION 7 OMICS and AI in lung cancer

Moderators:

S. Margaritora,R.M. D'Angelillo,(I)

17.00- 17.15 Omics driven radiotherapy approaches

E. Troost (D)

17.15- 17.30 AI planning approaches

G. Gagliardi (SW)

17.30- 17.45 Omics driven systemic treatments

E. Bria (I)

17.45- 18.00 AI driven surgery

F. Lococo (I)

18.00- 18.15 Q&A Discussant:

M. Massacesi (I)

19 October 2022 ONSITE and LIVE STREAMING

LECTURE 5

Moderators:

M.A. Gambacorta, M. Santarelli, (I)

08.30- 09.00 **Omics and AI from the patient perspective**

A. Scafì (UK)

SESSION 8 OMICS and AI in PROSTATE CANCER

Moderators:

V. Donato S. Arcangeli (I)

09.00- 09.15 Omics driven radiotherapy approaches

P. Hoskin (UK)

09.15- 09.30 AI approaches in interventional radiotherapy

G. Kovacs (D)

09.30- 09.45 Omics driven systemic treatments

R. Iacovelli (I)

09.45- 10.00 Omics and AI driven approaches in recurrent diseases

B. Jerezek (I)

10.00- 10.15 Q&A Discussant:

F. Cellini (I)

LECTURE 6

Moderators:

M. Krengli, G. Mantello, (I)

10.15- 10.45 **How innovation in radiation oncology changes educational models**

J. Eriksen (DK)

10.45- 11.15 **Break**

SESSION 9 OMICS and AI in BREAST

Moderators:

R. Masetti, F. Marazzi (I)

11.15- 11.30 Omics driven radiotherapy approaches

P. Poortmans (B)

11.30- 11.45 AI planning approaches

S. Cilla (I)

11.45- 12.00 Omics driven systemic treatments

Fabi/A. Orlandi, (I)/ TBC

12.00- 12.15 AI driven surgery

TBD

12.15- 12.30 Q&A Discussant:

V. Masiello (I)

LECTURE 7

Moderators:

C. Iotti, R. Pacelli, (I)

12.30- 13.00 AI guided olistic approach to cure by art

V. Valentini (I)

13.00- 14.00 **Light lunch**

SESSION 10 OMICS and AI in PEDIATRICS

Moderators:

F. Locatelli, U. Ricardi, (I)

14.00-14.15 Omics driven radiotherapy approaches

S. Vennarini (I)

14.15-14.30 Omics perspective for pediatric patients: physical challenges

D. Verellen (B)

14.30-14.45 Omics driven systemic treatments

A. Mastronuzzi (I)

14.45-15.00 AI driven distraction techniques in pediatric patients

E. Marconi/Tozzi, (I)

15.00-15.15 Q&A discussant

S. Chiesa (I)

LECTURE 8

Moderators:

P.C. Gentile, D. Musio, (I)

15.15- 15.45 **Microbiota: what reliable support for clinical decisions?**

A. Gasbarrini (I)

15.45- 16.00 **CLOSING REMARKS**

V. Valentini, M.A. Gambacorta, L. Indovina, (I)

16.00- 16.30 **EVALUATION & QUESTIONNAIRES**



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Provider 2463 Università Cattolica del Sacro Cuore
e-mail: raffaella.empler@unicatt.it

The course is accredited for: Radiation Oncologists, Medical Physicists, Medical Radiology Health Technicians.

Information: www.gemelliart.it - Phone +39 0630155226

For registration to the event: [link](#)

Registration Fee 250 euro - Registration 150 euro for AIRO, ESTRO members, person in training

CME Training Objective no. 18: Technical professional contents (knowledge and skills) specific to each profession, each specialisation and each ultra-specialist activity, including rare diseases and gender medicine

The exhibition hall is open from 17 -19 October 2022, all day, with the exception of lesson time.

Scientific Advisory Board 2022: M. Balducci, F. Cellini, F. Deodato, G.C. Mattiucci, A.G. Morganti, G. Macchia, A. Fiorentino

Scientific Secretariat 2022: L. Boldrini, F. Micciché, L. Tagliaferri



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