

Alta Scuola Politecnica 16th cycle - Winter School 2021

Digital Medicine: the revolution of our concept of health

Coordinator Filippo Molinari

The School will be centered along the **concept of digital medicine**, its applications, the associated technical needs and the most relevant challenges, some of which were underlined and somehow exacerbated by the recent pandemic emergency. **Revolutionary technologies**, mainly in the field of data processing and information extraction, are overtly impacting medicine and the associated services; moreover, this **technologically driven streamline** is changing our interface to healthcare services. With an outlook to recent success stories and by recalling previous limitations and pitfalls, the technological discussions will merge with **ethical and management interactions**, in order to present a comprehensive scenario of how digital medicine could and should impact the healthcare systems and revolutionize our concept of health.

The School will be structured by a blended set of pre-recorded presentations and collective discussions. Students will be made available the pre-recorded contributions for self-learning in asynchronous mode.

Pre-recorded lectures - self learning

- Medication adherence: how new digital technologies can help improving patient engagement; Prof. Enrico Caiani – PoliMI
- Medical smart sensors and intelligent techniques, Prof. Danilo Demarchi PoliTO
- How to develop innovative AI-based medical solutions and success stories, *Prof. Simona Ferrante PoliMI*
- Artificial Intelligence in Oncology: Radiomics and beyond, Prof. Luca Mainardi PoliMI
- A decision support system to support end-users in accessing regional healthcare services, *Prof. Silvia Chiusano PoliTO*
- The Deep Learning revolution in medicine: what's really going to change? *Prof. Filippo Molinari*, *PoliTO*
- Evaluation and sustainability of healthcare interventions Prof. Emidia Vagnoni, UniFE

Online meetings with discussants and students

Agenda

- <u>10/03/2021 10:00-12:00</u> Open Day
- <u>16/03/2021 17:00-19:00</u> Round Table 1: The cutting edge of digital medicine: an industrial point of view
- <u>23/03/2021 17:00-19:00</u> Round Table 2: How will clinicians face the digital medicine revolution?
- <u>30/03/2021 17:00-19:00</u> Round Table 3: Future of digital medicine in hospitals and territorial services

Round Table 1:

The cutting edge of digital medicine: an industrial point of view (<u>March 16th</u>) Moderator: Prof. Filippo Molinari

Discussants:

- Massimo Salvi AEQUIP Srl
- Jacopo Secco Omnidermal Srl
- Matteo Lai, Empatica Srl
- Giuseppe Recchia, daVinci Digital Therapeutics

Round Table 2:

How will clinicians face the digital medicine revolution? (<u>March 23rd</u>) Moderator: Prof. Emilio Paolucci Discussants:

- Discussants:
- Prof. Paolo Fonio, Radiology, Città della Salute e della Scienza, Torino
- Prof. Filippo Molinari, PoliTO
- Prof. Luca Mainardi, PoliMI
- Dr. Luca Molinaro, Pathology, Città della Salute e della Scienza, Torino

Round Table 3:

Future of digital medicine in hospitals and territorial services (<u>March 30th</u>) Moderator: Prof. Emilio Paolucci Discussants:

- Ing. Valeria Ingrosso, Humanitas
- Ing. Alice Ravizza, UseMed Srl
- Dr. Flavio Boraso, ASL AL (pre-recorded contribution)
- Dr. Giorgio Moretti, Dedalus

PhD programs related to digital medicine (tbd)

Discussants:

- Head of the Doctorate School of PoliMI
- Head of the Doctorate School of PoliTO
- Coordinators of PhD programs