

September 21, 2026, Roma orto botanico

Workshop

Non-invasive diagnostics and artificial intelligence in medicine: focus on dermatology

Rational

The project explores the potential of non-invasive diagnostics in medicine, with particular reference to dermatology to improve the accuracy and efficiency of diagnoses. Technology is revolutionizing the way dermatologists evaluate and monitor skin diseases, especially in oncology, offering increasingly precise and less invasive tools than traditional techniques, even in real time without invasive procedures. The integration of these technologies with artificial intelligence opens up new perspectives, allowing automated image analysis and clinical decision support, increasing diagnostic accuracy and reducing time. The aim is to discuss among professionals how these innovative technologies can revolutionize traditional methods, reducing risks and improving the quality of care. However, the adoption of AI systems in the medical field raises important ethical questions, related to patient privacy, accountability in case of errors and transparency of algorithms. In addition, the economic aspects, such as implementation costs and sustainability, and legal challenges will be analyzed, promoting a more conscious use and compliant with current laws, in order to contribute to a more conscious and responsible use of non-invasive diagnostic technologies, promoting a balance between innovation and protection of patients' rights, privacy integrity, data integrity with special interest even in the dual use. It contributes to disseminating the latest innovations and best practices, improving the training of healthcare professionals and encouraging the adoption of safer and more effective techniques. From the engineering point of view, the workshop encourages the exchange of knowledge between professionals, fostering the development of advanced technological solutions and the most reliable. Finally, from the economic point of view, facilitates the understanding of the investment opportunities and the sustainability of new technologies, helping to create an environment conducive to innovation and growth in the industry, considering cyber security aspects too. The project has a great potential for interdisciplinarity, the virtuous models already existing in our university will be described, this variety of areas will favor the creation of synergies between different structures of the University, stimulating collaborations between departments, research centers and different faculties allowing to activate international collaboration networks, that integrate skills and resources from several sectors, strengthening the University's ability to face complex challenges with innovative and shared solutions, increasing its visibility and reputation in the global scientific landscape. It will be a unique opportunity for professionals and students to discuss the latest innovations, share experiences and discover new prospects for development in the health sector aimed at simplifying the processes at the service and not as a replacement for health personnel through virtual experience too.

Scientific program

8.30-9.00 Registration

Opening and greetings

Greeting of the Sapienza Magnificent Rector Prof. ssa Polimeni A.

Sapienza Dean of the Faculty of Medicine and Dentistry Prof. Alvaro D.

Sapienza Vice Rector Prof. Lucidi F.

Director of Department of Medical and Cardiovascular Sciences Prof. Miraldi F.

UOC Director of Dermatology Prof. Pellacani G.

Director of the school of specialization in dermatology Prof. Nisticò S. P.

Testimony Alessandro Preziosi e Igor Righetti

Chairs: Alvaro D., Miraldi F., Pellacani G., Cantisani C.

9.00-9.15 Tracing the evolution from clinical observation to AI-Driven gastroenterological evaluation Prof. D. Alvaro (SAPIENZA-ROME)

9.15-9.30 From the dermatoscope to deep learning: a historical journey through non invasive diagnostics in dermatology Prof. Pellacani G. (SAPIENZA-ROME)

9.30-9.45 Ex vivo confocal microscopy Prof. Longo C. (UNIV-MODENA)

9.45-10.00 LC-OCT in melanocytic lesions Prof. Pérez-Anker J. (SPAIN)

10.00-10.15 Non-invasive diagnostics in the definition of margins and thickness of skin tumors Prof. Ardigo M. (HUMANITAS, MILAN)

10.15-10.30 Magnified dermoscopy Prof. Cinotti E. (UNIV-SIENA)

Discussant: Di Stefani A. (Cattolica University), Ricci F.(IDI-ROME),

10.30-10.45 Coffee break

Chairs: Cantisani C. (SAPIENZA-ROME), Cigna E. (PISA) Di Stefani A.(Cattolica University),

Panebianco V(SAPIENZA-ROME), Pignatelli P. (SAPIENZA-ROME)

10.45-11.00 Where are we now and where are we going Prof. Argenziano G. (UNIV-NAPLES)

11.00-11.15 Women and technology focusing on optical coherence tomography Prof. Cantisani C. (SAPIENZA-ROME)

11.15-11.30 Large language models in Dermatology Prof. Kiss N. (HUNGARIA)

11.30-11.45 AI application in Hungary Prof. Banvolgyi A. (HUNGARIA)

11.45-12.00 Artificial intelligence in dermatology Prof. Suppa M. (BRUXELLES)

12.00-12.15 AI enhanced ultrasound in dentistry Prof. Romeo U. (SAPIENZA-ROME)

12.15-12.30 Non invasive diagnostic imaging and telediagnosis in rheumatology Prof. Alessandri C. (SAPIENZA-ROME)

12.30-12.45 Automatic monitoring of skin lesions Prof. Suriani V. (SAPIENZA-ROME)

12.45-13.00 AI-enhanced ultrasound in dermatology: from promising performance to clinical practice Valenti A. (IFO)

Discussant: Dr. Astorino S. (Celio Hospital), Fania L. (IDI, Rome)

13-14.15 Lunch

Chairs: Cantisani V., Cinque L., Grippaudo F., Porpora M.G.(SAPIENZA-ROME)

14.15 - 14.30 Computer models and smart vision Prof. Cinque L. (SAPIENZA-ROME)

14.30 - 14.45 Predicting longevity through functional assessment and artificial intelligence: toward personalized preventive medicine Prof. Bernardi M. (SAPIENZA-ROME)

14.45-15.00 Technological innovation and health responsibility: forensic medicine in front of artificial intelligence Dr Bacco P. (ROME)

15.00-15.15 Medical responsibility in the use of artificial intelligence Prof. Di Donna L. (SAPIENZA-ROME)

15.15 - 15.30 Ethical implications Marciano di Scala C. M. (AI faculty University of Peace Rome)

15.30-15.45 Public law implications and administrative aspects in the use of artificial intelligence in healthcare Prof. Tarullo S. (VANVITELLI, NAPLES)

15.45-16.00 Artificial intelligence in medical practice: economic sustainability, work organization and employment law challenge Prof. Liquori G. (SIGAP-ROME)

16.00-16.15 AI Act biomedical device: cyber security aspect avv. Comini A. (ROME)

16.15-16.30 The hidden cost of algorithmic decisions. Dir. Macchia L. (MELEAM, ROME)

Discussant: Cangemi R. (SAPIENZA-ROME), Proietti I. (SAPIENZA POLO-PONTINO)

16.30-16.45 Discussion and goodbye