

## Arturo Chiti

### Short Biography:

Arturo Chiti is a professional in the field of Diagnostic Imaging and Radiotherapy. Currently serving as a Full Professor at the Vita-Salute University in Milan and Director of the Department of Nuclear Medicine at the San Raffaele Research Institute.

Prof. Chiti's journey began with his graduation in Medicine and Surgery from the University of Milan, followed by his specialization in Nuclear Medicine in 1993, paving the way for his career in this specialized field.

Shortly after, he assumed the role of Associate Chief at the National Cancer Institute in Milan in the same year. This opportunity marked the beginning of his clinical and scientific experience in Oncology, where he honed his expertise.

In 1997, Prof. Chiti achieved the European Board of Nuclear Medicine fellowship, further solidifying his knowledge and skills in the discipline. His dedication and expertise led him to be appointed as the head of the Nuclear Medicine Department at the Humanitas Research Hospital in Milan in June 2000. Subsequently, in 2015, he was appointed as Full Professor in Diagnostic Imaging and Radiotherapy at the Humanitas University.

In January 2023, Prof. Chiti embarked on a new chapter in his career by joining the Vita-Salute University and the San Raffaele Institute in Milan as full Professor in Diagnostic Imaging and Radiotherapy and Director of the Nuclear Medicine Department of the IRCCS San Raffaele.

Prof. Chiti's contributions extend beyond his clinical and academic roles. He has successfully obtained research grants in the field of imaging in oncology and is recognized as the author of several scientific papers. His expertise and reputation have made him a requested speaker at numerous international congresses and conferences.

Additionally, Prof. Chiti serves as the Editor in Chief of the European Journal of Nuclear Medicine and Molecular Imaging (EJNMMI) since 2019.

His influential presence in the field is exemplified by his tenure as President of the European Association of Nuclear Medicine (EANM) from 2015 to 2016, where he had been an active member for over a decade. Furthermore, he served as a board member of the European Cancer Organization (ECCO) from 2016 to 2019.

Prof. Chiti was awarded honorary membership in 2011 by the European Society for Therapeutic Radiology and Oncology (ESTRO), as a recognition to his outstanding achievements and dedication to the field.

Moreover, Prof. Chiti has collaborated as an expert consultant with the International Atomic Energy Agency (IAEA), further solidifying his global impact and influence.

Through his extensive academic and professional accomplishments, Arturo Chiti has established himself as a prominent figure in the field of Nuclear Medicine, continuously working towards advancements in medical science and patient care.

## **Abstract:**

The field of nuclear medicine and molecular imaging is rapidly advancing. New radiopharmaceuticals for diagnostic and therapeutic purposes are being developed, tested, and increasingly applied in clinical practice. Theranostics, in particular, is reshaping medical treatments in oncology, putting nuclear medicine at the forefront.

Optical imaging is transitioning from pre-clinical research to clinical applications. Various probes are being integrated into surgical procedures, enabling surgeons to minimize invasiveness. These probes follow the same tracer principles as radioactive probes and thus rightfully belong to the nuclear medicine world.

In positron emission tomography (PET), technology is evolving with the emergence of new large field-of-view scanners that are revolutionizing the field. These scanners are not only sensitive and fast but also allow the study of functional characteristics of multiple organs simultaneously, opening up a new era of discovery for relationships and connections within the living body.

The potential of all these groundbreaking advancements is further amplified by the application of artificial intelligence (AI). AI algorithms are being employed in various areas such as drug development, image analysis, pattern recognition, dosimetry, and big data analysis, greatly accelerating the progress and utility of nuclear medicine and molecular imaging.

The future of nuclear medicine looks promising, with AI playing a vital role in unlocking its full potential for the benefit of healthcare and patients.