

# Mario Campanacci, 1932-1999

Alberto Bazzocchi, MD, PhD<sup>1</sup>  Laura Campanacci, MD, PhD<sup>2</sup>

Maria Pilar Aparisi Gómez, MBChB, FRANZCR<sup>3,4</sup> Giuseppe Guglielmi, MD<sup>5</sup>

<sup>1</sup>Diagnostic and Interventional Radiology, IRCCS Istituto Ortopedico Rizzoli, Bologna, Italy

<sup>2</sup>Orthopaedic Unit, Musculoskeletal Oncology Department, IRCCS Istituto Ortopedico Rizzoli, Bologna, Italy

<sup>3</sup>Department of Radiology, Auckland City Hospital, Auckland, New Zealand

<sup>4</sup>Department of Radiology, IMSKE, Valencia, Spain

<sup>5</sup>Department of Clinical and Experimental Medicine, School of Medicine, Foggia University, Foggia, Italy

Address for correspondence Alberto Bazzocchi, MD, PhD, Radiologia Diagnostica e Interventistica, IRCCS Istituto Ortopedico Rizzoli; Via G. C. Pupilli 1, 40136 Bologna, Italy (e-mail: abazzo@inwind.it).

Semin Musculoskelet Radiol 2022;26:197–200.

## Abstract

This history page in the series “Leaders in Musculoskeletal Radiology” is dedicated to the memory and achievements of the Italian scientist Mario Campanacci, whose name is connected to the medical eponym Jaffe-Campanacci syndrome and to the field and progress of musculoskeletal oncology.

## Keywords

- ▶ soft tissue tumor
- ▶ musculoskeletal oncology
- ▶ osteofibrous dysplasia
- ▶ pathology

Mario Campanacci was born and grew up in Parma, Italy. He was the son of Domenico Campanacci, a master in the history of Italian medicine. Campanacci obtained his medical degree in 1956 from the University of Bologna and completed his orthopaedic training at the Rizzoli Institute in 1960. His first love for pathology lasted throughout his life. Mario Campanacci's first master was Italo Federico Goidanich, founder of the Scientific Center of Musculoskeletal Tumors at the Rizzoli Orthopaedic Institute in 1955. During his training, Campanacci spent a substantial amount of time working on surgical pathology and pathology of the musculoskeletal system, committing himself to the study and management of bone and soft tissue tumors. He began work at the Rizzoli as a junior associate in 1961 and dedicated his life to change the prognosis and life of patients with bone and soft tissue tumors.

To refine his training in this growing field, Campanacci spent some time with Dr. Manuel Lichtenstein at the Veterans Administration Hospital in San Francisco, and with Dr. Joseph Milgram at the Hospital for Joint Diseases in New York

in 1962–63. Upon his return to Italy in 1963, Campanacci was appointed head of the Musculoskeletal Oncology Unit of the Rizzoli.

From the beginning, Campanacci realized the importance of assessing radiologic features, together with histopathology, for the diagnosis of musculoskeletal lesions. He emphasized the value of accurate recording and filing of all clinical information. Campanacci reviewed several thousands of tumor cases filed at the Rizzoli Institute, which helped him to develop very solid knowledge and experience in this field. In the following years, he would fully understand the need for a multidisciplinary approach to sarcomas and was one of the pioneers of multimodal combined treatment and limb salvage surgery for osteosarcoma.<sup>1</sup>

In 1981, Campanacci described a rare type of fibrous dysplasia, known as osteofibrous dysplasia, that involves the tibia and fibula and is confined to the cortices, currently called ossifying fibroma or Campanacci's lesion. Two years later, he described the association of multiple nonossifying fibromas, giant cell granulomas of the jaw, and various



**Fig. 1** Mario Campanacci at the library of the Rizzoli Institute.

extraskeletal abnormalities, such as café-au-lait spots, mental retardation, hypogonadism or cryptorchidism, and ocular and cardiovascular malformations, that became known as the Jaffe-Campanacci syndrome.<sup>2</sup>

Mario Campanacci strongly believed in cooperation and international relationships. He developed lifelong close friendships with several acclaimed colleagues of his time and trained dozens of Italian and foreign physicians, understanding the value of a continuous exchange of ideas. The relationship with Bill Enneking from the University of Florida was particularly special to him, eventually leading to a combined musculoskeletal pathology course taught by both of them. Teaching was another passion for Campanacci, and he truly enjoyed spending time with students and answering questions.

Campanacci's attitude was calm and reflective, perhaps coming across as cold on a first impression. On the contrary, he was thoughtful and capable of transmitting real passion for musculoskeletal oncology. He mentored young clinicians and researchers committed to this field throughout his life.

He expected much from his fellows but even more from himself. He was an eclectic person who liked studying, literature, and the arts (►Fig. 1).

Despite following the path of orthopaedics, Campanacci became a *libero docente* (free lecturer) in pathology in 1962

and later a professor of orthopaedics in 1970 and a full professor in 1983.

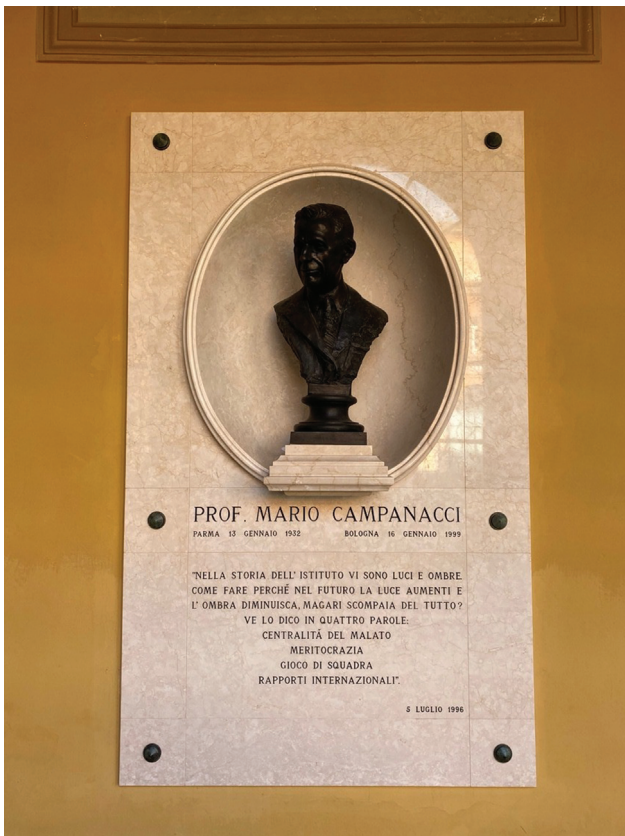
In the mid- to late 1980s, he promoted the expansion of the Department of Musculoskeletal Oncology to include research laboratories, understanding the need and future potential role of basic research and molecular biology.

In 1995 Campanacci became the chair of the Rizzoli Institute, devoting further energy and support to the institution (►Fig. 2). He was a member of 13 scientific societies. Among these, he was especially fond of the International Skeletal Society (ISS), which he joined in 1975.

Campanacci was one of the founding members of the European Musculo-Skeletal Oncology Society (EMSOS) and its first president. He was also a founding member of the International Society of Limb Salvage (ISOLS).

Campanacci's book *Bone and Soft Tissue Tumors*, edited by Springer, is a landmark reference in the international oncologic scientific literature.

Mario Campanacci died in 1999 after a heroic battle with cancer in a room of his department at the Rizzoli Institute, next to his patients. He left behind an incredible team of people devoted to the cure of musculoskeletal tumors. His leadership and drive is still missed today.



**Fig. 2** A tribute to Mario Campanacci at the monumental wing main corridor of the Rizzoli Institute. The sentence in the plaque, translated here into English, states, “In the history of the Institute there are lights and shadows. What to do so that in the future there is more light than shadow, or to eventually make the shadows disappear? I will tell you in four words: put the patient at the center, meritocracy, team play, and international relationships.” This sentence, summarizing Campanacci’s ideals for the medical profession, is considered his legacy.

**Conflict of Interest**  
None declared.

### References

- 1 Pluot E, Davies A, James S. Who was who in bone tumours. In: Davies AM, Sundaram M, James SLJ, eds. *Imaging of Bone Tumors and Tumor-Like Lesions: Techniques and Applications*. Berlin, Germany: Springer; 2009
- 2 Campanacci M, Laus M, Boriani S. Multiple non-ossifying fibromata with extraskeletal anomalies: a new syndrome? *J Bone Joint Surg Br* 1983;65(05):627–632