

# **BRACCO FELLOWSHIPS EDUCATION IN RESEARCH ENROLMENT FORM**

**Name of Institution: IRCCS Ospedale Galeazzi- Sant’Ambrogio**

**City and Country of Institution: Milano, Italy**

## **RESEARCH GROUP**

Brief description of the research group and of its mission: The research group is composed by five young, yet experienced researchers devoted to research on different topics in musculoskeletal radiology. In particular, the group has significant expertise in MSK tumors, MSK diagnostic and interventional ultrasound, and osteoporosis. Also, a relevant working group is devoted to artificial intelligence applications.

## **TITLE OF PROPOSED RESEARCH PROJECT**

**AI-based diagnosis of bone and soft tissue tumors**

**OBJECTIVES:** This project aims to construct radiomics-based machine learning models for characterization of bone and soft-tissue sarcomas and validate these models in a multi-center setting in comparison with expert physicians. After validation, these models may be immediately transferred to clinical practice, reducing the need of unnecessary biopsies and maximizing the performance of current methods for diagnosis of musculoskeletal sarcomas.

## **APPLICANT’S DUTIES**

- Retrieve and analyze radiological images of bone and soft tissue tumors
- Help coordinating study activities
- Interact with AI specialists

## **APPLICANT’S BENEFITS**

- Participation on scientific outcomes of the project i.e. presentations to congresses and publications of papers
- Participation to research meetings within the Department
- Project Leader: Luca Maria Sconfienza, MD PhD
- Members: Salvatore Gitto, MD PhD; Domenico Albano, MD PhD; Carmelo Messina, MD