



**Call for applications for the assignment of 1 research fellowship grant for carrying out Category B research activities, as per Article 22 of Italian Law No. 240/2010, for the Scientific Disciplinary Sector of IINF-05/A - Information Processing Systems, at the facilities of the CIR - Integrated Research Centre and of the Departmental Faculty of Engineering of Università Campus Bio-Medico di Roma.**

Call Code: ASS-RIC/34\_24

<b>Departmental Faculty</b>	Engineering
<b>Research theme</b>	Artificial intelligence for personalized medicine in lung cancer
<b>Brief description of the research</b>	<p>Artificial intelligence (AI) can enable the development of advanced precision medicine tools in the treatment of lung cancer. However, such tools need to integrate multimodal data using AI methods, but such methodologies need further research in the field of intermediate fusion, a methodology that allows for the fusion of unimodal representations using deep learning and back-propagation.</p> <p>The researcher will develop such methods using data collected in the patient's diagnostic and prognostic pathway, integrated with generative AI techniques and digital twin tools.</p> <p>Applications are aimed at predicting prognosis scores in patients with non-small cell lung cancer, developing screening tools, and developing generative models for image-to-image translation between different medical imaging modalities.</p>
<b>Scientific Supervisor</b>	Prof. Paolo Soda
<b>Scientific Disciplinary Sector</b>	IINF-05/A - Information Processing Systems
<b>Language knowledge and skills</b>	English, B1
<b>Date of the interview</b>	<b>24 October 2024, at 10:30 a.m.</b> Remote candidates on Microsoft Teams platform