



Call Code: ASS-RIC/06\_24\_PNRR

<b>Departmental Faculty</b>	Engineering
<b>Research theme</b>	Advancing Cardiac Amyloidosis Diagnosis: A Multi-Layered AI-Integrated Approach for Early Detection, Enhanced Theranostic Protocols, and Predictive Analysis
<b>Brief description of the research</b>	This project aims at improving health services for the management of rare disease of eye and heart (i.e., early detection, referral, triage and diagnosis) via application of artificial intelligence (AI) systems. The awardee will be responsible for identifying novel protocols combining point-of-care biosensing for blood and genetic biomarkers, developing theranostic nanoparticles for enhanced diagnosis and therapy, and AI integration for medical data analysis and disease progression prediction. The scientific results will inform the development of Diagnostic Therapeutic Paths for the Italian Health Service. The research will be carried out mainly at the Campus Bio-Medico University of Rome, in collaboration with the project partners ( <a href="https://www.unicampus.it/it/ucbm/early-detection-of-rare-inherited-retinal-dystrophies-and-cardiac-amyloidosis-enhanced-by-artificial-intelligence">https://www.unicampus.it/it/ucbm/early-detection-of-rare-inherited-retinal-dystrophies-and-cardiac-amyloidosis-enhanced-by-artificial-intelligence</a> ).
<b>Scientific Supervisor</b>	Prof. Leandro Pecchia
<b>Scientific Disciplinary Sector</b>	ING-INF/06 – Electronic and Informatics Bioengineering
<b>Admission qualifications</b>	5-year University Degree (old university organization) earned with the previous Italian legislation in Medical Engineering, Pharmaceutical Biotechnologies, Pharmacy, Industrial Chemistry, Chemical Engineering, Material Science, Biology or a Master's Degree achieved according to Ministerial Decree 3/11/1999, no. 509 and 22/11/2004, no. 270 in Biomedical Engineering (26/S, LM-21), Pharmaceutical, Veterinary and Medical Biotechnologies (9/S, LM-9), Pharmacy and Industrial Pharmacy (14/S, LM-13), Industrial Chemistry and related Technologies (81/S, LM-71), Chemical Engineering (27/S, LM-22), Materials Science and Engineering (61/S, LM-53), Biology (6/S, LM-6), or equivalent foreign qualification.
<b>Language knowledge and skills</b>	Written and spoken English minimum level B2
<b>Date of the interview</b>	<b>12<sup>th</sup> March 2024, at 11:00 a.m.</b> Remote candidates on Microsoft Teams platform