



Call for Applications for the Award of No. 1 Research Position pursuant to Article 22-ter of Law No. 240/2010, Scientific-Disciplinary Group 06/MEDS-02 – Experimental Medicine, Pathophysiology and Clinical Pathology, Scientific-Disciplinary Sector MEDS-02/A – Experimental Medicine and Pathophysiology, at the facilities of the Research Unit in Molecular medicine and biotechnology and the Departmental Faculty of Medicine, Surgery and Dentistry of the University Campus Bio-Medico of Rome (selection code: IR/04_26).

Competition code: IR/04_26

Research positions available	1
Contract duration (at least one year)	1 year
Departmental Faculty/Research Unit of affiliation	Faculty of Medicine, Surgery and Dentistry/ Unit in in Molecular medicine and biotechnology
Place where the activities will be carried out	UCBM
Scientific Disciplinary Group	06/MEDS-02 – Experimental Medicine, Pathophysiology and Clinical Pathology
Scientific-Disciplinary Sector	MEDS-02/A – Experimental Medicine and Pathophysiology
Subject of the contract (title of the research program)	Uncovering the epigenetic and transcriptional control of innate immunity in leukemogenesis.
Brief description of the research program to which the position is linked	<p>The project seeks to elucidate how transcriptional and epigenetic programs sustain immune (dys)regulation across myeloid leukemogenesis. It will systematically characterize the chromatin states of innate myeloid cells and their progenitors within the evolving bone marrow niche in AML, aiming to uncover mechanistic insights and identify regulatory nodes with therapeutic potential. Epigenetic drugs will be tested through pre-clinical trials using disease-relevant mouse models. Methodologically, the project will integrate a range of molecular and cellular approaches, including:</p> <ul style="list-style-type: none">• single-cell multi-omics analyses of hematopoietic and immune cells isolated from preclinical models of AML;• chromatin profiling of immune cell populations;• functional perturbation strategies, such as RNA interference and CRISPR-based genome editing, to dissect epigenetic regulatory networks. <p>The ideal candidate should have a strong background in molecular and cellular biology. Prior experience in the study of gene regulation, with a focus on RNA-chromatin regulatory assemblies is highly desirable. The candidate should be familiar with experimental strategies to investigate transcriptional programs and their functional modulation in relevant cellular systems.</p> <p>Priority will be given to candidates with demonstrated experience in:</p> <ul style="list-style-type: none">• handling and culture of primary mouse and human



	<p>cells;</p> <ul style="list-style-type: none"> • molecular biology and biochemical techniques, including cloning and luciferase assays, as well as western blotting and immunoprecipitation; • chromatin-focused assays, such as chromatin immunoprecipitation (ChIP); • functional perturbation approaches, including RNA interference and/or CRISPR-based genome editing; • preparation and analysis of samples for immunofluorescence and RNA FISH; • analysis and interpretation of gene expression and epigenetic datasets. • In vivo studies using preclinical (murine) models of disease <p>The candidate is expected to demonstrate scientific independence, critical thinking, and the ability to integrate multidisciplinary data.</p> <p>Formal assessment for the handling of laboratory mice will be considered a plus.</p>
Research Supervisor/Tutor	Dott. Andrea Marra
Maximum number of publications	5
Language knowledge and skills	English
Any additional qualifications subject to evaluation	Phd English at C1 level or above
Date and time of the interview	6th July 2026, at 8:30 a.m. Remote candidates on Microsoft Teams platform
Funding body	Ministry of University and Research
Funding Programme / Call for Proposals	Project “DeCODing myElloid programs that regulate immunity in Acute Myeloid Leukemia - DECODE-AML”, Avviso FIS 3 (Decreto Direttoriale n. 1802 del 21 novembre 2024) - tipologia Starting Grant, principal investigator Università Campus Bio-Medico di Roma dott. Andrea Marra
CUP	C53C25000990001