



Courtesy translation of D.R. n. 019/2025

For more details on the selection process, please refer to the Italian version of D.R. n. 019/2025 available at <http://www.hunimed.eu/it/lavora-con-noi/>

SELECTION PROCEDURE FOR RESEARCH FELLOWSHIP

Research Program Title	Identification of novel cardiokines regulating systemic diurnal metabolism in heart failure
Tutor	Prof.ssa Carolina Magdalen GRECO
Scientific Area	05 – Biological Sciences
Gross amount of the fellowship	28.000 Euro
Duration of the fellowship	24 months
Objectives of the research	<p>Heart failure, the ultimate outcome of many cardiovascular pathologies, is a leading cause of morbidity and mortality worldwide. Despite advances in cardiovascular research, prognosis for heart failure patients is still grim and mortality rates high. Tissue-tissue communication by endocrine factors is a central mechanism for the maintenance of homeostasis. While the mechanism</p> <p>by which one tissue can affect the metabolic status of distant tissues has been explored in a variety of physiological, it remains poorly characterized in the context of heart failure. The project aims at defining the secretome of a healthy and diseased heart and to investigate how these secreted molecules impact systemic circadian metabolism in heart failure. To this end, we will employ a cardiomyocyte-specific, in vivo labeling approach, allowing for the labeling, enrichment, and identification of proteins secreted by the heart during pathological cardiac hypertrophy. The identified cardiomyocyte-secreted factors will be functionally screened in vitro and then in vivo via AAV9 mediated cardiac-specific overexpression of selected candidates, followed by metabolic phenotyping.</p>

Activities to be carried out	<p>The work will include:</p> <ul style="list-style-type: none"> • experimental design; • experiment execution; • data analysis and interpretation of results; • Isolation and culture of primary cells; • Molecular biology techniques including Real-time; PCR, Western Blot, CHIP; • Use of confocal microscopy; • mouse handling and organ isolation; • histochemistry; • metabolic phenotyping
Work place	PIEVE EMANUELE - Milan
Mandatory requirements	<ul style="list-style-type: none"> • Master's degree in Medicine and Surgery, Biology, Molecular Biology, Chemistry and Pharmaceutical technologies or related fields; • Adequate scientific and professional background to carry out the research activity described in this call.
Selection process	<p>Application for admissions must be submitted at the following link:</p> <p style="text-align: center;">https://pica.cineca.it/humanitas</p> <p>No hard copy of the application must be sent by post.</p> <p>At first access, applicants need to register by clicking on “Register” and completing the requested data.</p> <p>If applicants already have LOGINMIUR credentials, they do not need to register again. They must access with their LOGINMIUR username and password in the relevant field LOGINMIUR.</p> <p>Applicants must enter all data necessary to produce the application and attach the required documents in PDF format.</p>
Selection criteria	<p>Selection criteria are predetermined by the Selection Committee. As part of the selection process, the Committee will evaluate the curriculum, titles and publications presented by the candidate and will consider, in particular:</p>

	<ul style="list-style-type: none">• preference given to applicants with a PhD in Biotechnologies, Biology, Molecular Biology, Biomedical Sciences or related fields;• publications presented by the candidate. <p>The committee will consider, in particular:</p> <ul style="list-style-type: none">• Experience in cell culture, animal models and molecular biology;• Excellent teamwork skills,• fluency in spoken and written English.
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FURTHER INFORMATION:

In the event of any conflict between Job Opening text and Italian D.R. text, the Italian version will prevail.

For more details on the selection process please refer to the **D.R. n. 019/2025** (<http://www.hunimed.eu/it/lavora-con-noi/>) or send an inquiry to ufficiodocenti@hunimed.eu or telephone +39 02.8224.5642/5421.