



Courtesy translation of D.R. n. 032/2023

*For more details on the selection process, please refer to the Italian version of D.R. n. 032/20232 available at <http://www.hunimed.eu/it/lavora-con-noi/>*

**SELECTION PROCEDURE FOR RESEARCH FELLOWSHIP**

Research Program Title	<b>Mechanisms of Circadian Remodeling in the Pathogenesis of Heart Failure</b>
Tutor	Dr.ssa Carolina GRECO
Scientific Area	05 – Biological Sciences
Gross amount of the fellowship	20.000 Euro
Duration of the fellowship	12 months
Objectives of the research	Mammalian physiology is temporally coordinated by the circadian clock, a cell-autonomous system responsible for daily rhythms in behaviour, physiology and metabolism. Defects in circadian rhythms influence physiology with implications for numerous pathological conditions, including cardiovascular diseases. Heart failure (HF) - the ultimate outcome of many cardiovascular pathologies and a leading cause of morbidity and mortality – is characterized by widespread metabolic, epigenetic and transcriptional changes. The project aims at investigating the impact of ketone body to chromatin signaling on circadian rhythmicity in the failing heart. By integrating high throughput -omic approaches, we will characterize the circadian epigenetic and transcriptional state associated with ketone body metabolism
Activities to be carried out	The candidate will carry out: <ul style="list-style-type: none"> <li>- Isolation and culture of neonatal cardiomyocytes;</li> <li>- In vitro assays for the study of circadian rhythms;</li> <li>- Molecular biology techniques including Real-time PCR, Western Blot, ChIP;</li> <li>- Use of the Seahorse analyzer for metabolic analysis;</li> </ul>

	- Use of confocal microscopy
Work place	PIEVE EMANUELE - Milan
Mandatory requirements	- Master's degree in Chemistry and Pharmaceutical Technology or Biotechnology or equivalent
Selection process	<p>Application for admissions must be submitted at the following link:</p> <p><a href="https://pica.cineca.it/humanitas">https://pica.cineca.it/humanitas</a></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"> <li>- Scientific and professional CV suitable to the carrying out of the research activities outlines above.</li> <li>- Good knowledge of written and spoken English language</li> </ul>

**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. 032/2023** (<http://www.hunimed.eu/it/lavora-con-noi/>) or send an inquiry to [ufficiodocenti@hunimed.eu](mailto:ufficiodocenti@hunimed.eu) or telephone +39 02.8224.5642/5421.