Call for a research position (one-year duration and possible renewal) on project founded by MUR (Progetto Dipartimenti di Eccellenza 2023-2027).

## **BANDO**:

D.R. n.1898 prot. n.87451 del 05/12/2023 Bando di concorso per il conferimento di n.14 assegni

per la collaborazione ad attività di ricerca **Published on:** 11 December 2023

**Deadline for application**: 11 January 2024

URL: https://www.unich.it/ateneo/concorsi-e-gare/assegni-di-ricerca

or

https://www.albo-pretorio.it/albo/archivio4 atto 0 519844 0 3.html

Possible project start date: March 1st or April 1st 2024.

**Research Project Title:** Analysis of the proteomic profile and extracellular signals in cardiomyocytes exposed to simulated lunar gravity. **Supervisor**: Prof. Maria A. Mariggiò

**Project description:** Human space exploration sees a growing number of space missions which, with the goal of colonizing the Moon and reaching Mars and other planets, requires new technological and biomedical knowledge. Numerous evidence showed how altered gravity can significantly influence the human organism, modifying its functions from the molecular to the organ level. Little is known about the mechanisms underlying the altered cardiac functions observed in astronauts. The objective of this project is to study the behavior of cardiomyocytes under simulated lunar gravity through an integrated approach by evaluating the proteomic profile and the cellular secretome. The data collected will be analyzed in an integrated way thanks to bioinformatic approaches in order to outline a picture, as complete as possible, of the molecular mediators that characterize the response of cardiomyocytes to hypogravity and lay the experimental foundations to establish a method of behavioral analysis.

We are looking for highly motivated candidates with experience in:

- skills in cell culture handling, molecular biology, and biochemical techniques
- cytofluorimetric and data analysis
- experience in bioinformatic analysis of the data.

Requirements: Master or equivalent degree in

Biology/Biotechnology/Medicine/Pharmacy/Psychology/Biochemical Engineering.

Contact for more information: Prof. Maria A Mariggiò (e-mail: <a href="maria.mariggio@unich.it">maria.mariggio@unich.it</a>), Dept. Neuroscience Imaging and Clinical Sciences, c/o Center for Advanced Studies and Technology (<a href="https://www.cast.unich.it/it">https://www.cast.unich.it/it</a>). "University G.d'Annunzio" Chieti-Pescara. Via L. Polacchi 11, 66100 Chieti