

## Research Position at University of Genova from 1<sup>st</sup> February 2024

**One research position for 1 year** will be soon available at the **Department of Experimental Medicine (DIMES), University of Genova (Genova, Italy)** in the group of **Prof. Sveva Bollini** (Scopus ID: 22933852600; <https://orcid.org/0000-0003-1076-0823>), starting from **1<sup>st</sup> February 2024**.

We are looking for a Candidate willing to work on a project recently funded by the MUR program **PRIN 2022 Prot. N. 2022YS87H7**, entitled: **“Design and validation of an advanced delivery system for miRNAs and stem cell-derived extracellular vesicles for direct cardiac reprogramming through a mechanically-stimulated human cardiac scar model - DESIRE”**. The project focuses on enhancing microRNA-based direct reprogramming (DR) of human cardiac fibroblasts into functional cardiomyocytes by priming them with perinatal stem cell-derived extracellular vesicles (EVs). DESIRE will design an advanced DR approach for post-infarct cardiac regeneration based on in situ delivery of specific microRNAs, combined to human stem cell-EVs, and it will be validated in a novel human cardiac scar on a chip in vitro model. This interdisciplinary project combines stem cell biology, paracrine effects, tissue engineering and biomedical engineering and it will be developed in close collaboration with the main Partners from Politecnico Torino and Politecnico Milano, Italy. The Candidate will benefit from the dynamic environment of the labs of the Experimental Biology Unit at the Department of Experimental Medicine, School of Medicine of the University of Genova, located within IRCCS Ospedale Policlinico San Martino area in central Genova. The research group has access to state-of-the-art equipment including cell culture, imaging, flow cytometry and NGS facilities.

**Minimal requirement for any Candidate to apply is to have a Master Degree in Biotechnology or Biology (*Laurea Specialistica della classe 9/S Biotechnologie Mediche, Veterinarie e Farmaceutiche; Laurea Magistrale della classe LM-9 Biotechnologie Mediche, Veterinarie e Farmaceutiche; Laurea Specialistica della classe 6/S Biologia; Laurea Magistrale della classe LM-6 Biologia*)** and some previous experience in the field of translational research in cell biology for regenerative medicine. PhD degree in a relevant biomedical field would be especially valued. Expertise in stem cell-EV biology, inter-cellular paracrine communication and in vitro models of cardiac injury will be appreciated. Critical thinking, problem solving skills and team-work attitude are highly important. The candidate should possess good time management and communication skills for collaborating with the project partners. Technical skills required include cell culture and isolation of primary cultures from tissue, biochemical and molecular assays.



English communication skills are also mandatory. The position is a one-year contract to start with, with the possibility of renewal, contingent upon acceptable job performance.

**The application process is now open at:**

**<https://unige.it/concorsi/assricerca> (Bando DR 5332 del 8.11.2023: PROGRAMMA DI RICERCA N. 27, at page 35 of the pdf file) with deadline to apply by 23.11.23 at noon.**

**The interview for the selected Candidates will be on December 7<sup>th</sup> 2023 at 14:00 at the Dipartimento di Medicina Sperimentale (DIMES) Sezione Biologia, 2<sup>nd</sup> floor, Via Pastore 3, 16132 Genova.**

Interested Candidates can contact Prof. Bollini for further information at: [sveva.bollini@unige.it](mailto:sveva.bollini@unige.it)

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