PRINCIPAL INVESTIGATOR:  Sara Cogliati

PROJECT DESCRIPTION:  Uncovering the mitochondrial-related pathways of estradiol cardiac protection as a potential treatment for heart failure during menopause.

The overarching goal of our lab is to uncover the mechanisms mediating how males and females differ in metabolism and cardiovascular disease.

In particular, with this project, we want to understand the molecular mechanisms underlying estradiol cardiac protection with particular interest in the mitochondrial role.

Cardiovascular Disease (CD) is the leading cause of death in women worldwide, but the causes remain understudied and underrecognized. Post-menopausal women exhibit an exponential increase in heart failure (HF) compared with men at the same age suggesting a potential role of sexual hormonal changes, especially estradiol.

We will apply a unique synergy of in vivo imaging and intra-cardiomyocyte assays to measure Calcium handling, ROS production, and mitochondrial functions. Moreover, we will correlate the cardiac oxidative status with a new score that could be a potential tool for the diagnosis and prediction of HF severity.

We are searching for a research assistant, highly motivated, enthusiastic, and proactive and who wants to get involved in this cutting-edge project.

The trainee will learn state-of-the-art mitochondrial, cellular biology, and omics techniques along with experimental design, statistical analyses, writing, and presentation skills. We are a young and highly collaborative team and welcome scientists from diverse backgrounds regardless of race, religion, gender, or sexual orientation, promoting a safe and collaborative working environment.

DURATION:

2 years, Research assistant

REQUIREMENTS, EXPERIENCE AND ACADEMIC QUALIFICATIONS:

Have completed an Official University Master’s Degree in topics related to Biomedicine or Molecular and Cellular Biology. Previous experience in molecular and cellular biology and mouse models will be highly valued. Those interested should send, as soon as possible, their CV, a description of their research experience and, if possible, letters of reference.

CONTACT:
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DEADLINE:
31/04/2024