

## Postdoctoral Position

A postdoctoral position is available at the Fert-Bober's lab, Cedars Sinai, Smidt Heart Institute. The candidate will investigate molecular **mechanisms of cardiovascular development, regeneration and cardiac fibrosis** using mass spectrometric-based proteomics methods for the study of proteins and their roles in cellular signaling events.

We also develop and apply the technology to the search for **post-translational modified proteins**, including **citrullination**. Dysregulated citrullination is a key element that drives the production and maintenance of antibodies to citrullinated proteins, a hallmark in rheumatoid arthritis.

The long-term goal is to determine whether **citrullinated proteins or antibody to citrullinated proteins** can be used as **biomarkers** for the early detection of many diseases, including rheumatoid arthritis, cancer and Alzheimer disease.

## JOB REQUIREMENTS:

Working independently but in close consultation with the Principal Investigator and other Research Scientists, you will perform routine and complex laboratory procedures throughout the training period, and may develop, adapt, and implement new research techniques and protocols while analyzing and interpreting data. You will participate in publications and presentations as author or co-author and may assist in the preparation of grant proposals but are not responsible for generating grant funds.

The successful applicant will hold a Ph.D. and/or M.D. with less than 2 years of postdoctoral experience with expertise in the following:

- A basic understanding of cardiovascular development, regeneration and cardiac fibrosis is required.
- Skills in isolation and characterization of different cardiac cell types from mouse hearts. Also, skills in culture and maintenance of mammalian cell lines.
- Skills in cardiac tissue histology and proficiency in microscopy.
- Experience in cell manipulation, flow cytometry and cell sorting, cell tracking, and advanced cell imaging tools.
- Experience in standard molecular biology techniques (eg. Cloning, qRT-PCR).
- Computational processing and analysis of genome scale data including RNA-seq, or proteomics is highly desired.
- Ability to multitask and complete work on time. Ability to contribute and work in a cross-functional, multi-disciplinary team environment.
- Good verbal and written communication skills in English.
- Well organized, able to plan work appropriately. Attention to detail. Strong problem-solving skills.

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