

San Jose State University Research Foundation

Position: Post Doctoral Research Associate

DEPARTMENT:	Biomedical Engineering Department
IMMEDIATE SUPERVISOR:	Project Director
POSTING DATE:	July 20, 2020
CLOSING DATE:	Open Until Filled
SALARY:	Depending on Qualifications/Experience
BENEFITS:	Exceptional benefits for employees and eligible dependents: Company subsidized CalPERS medical selections, 3 PPO's and 7 HMO's; company paid dental and vision insurance for employees and eligible dependents; Life, AD&D, and LTD coverage; paid federal and state holidays; a 403 (b) retirement option with a 7% employer retirement contribution following 1 year of benefited employment, with immediate vesting; vacation accruals and a stand-alone sick leave hours accumulation; and a subsidized post-retirement medical insurance plan for eligible employees.
EXEMPT STATUS:	Exempt, Full-Time

GENERAL NATURE OF POSITION:

A full-time postdoctoral research position in Biomedical Engineering is available starting Fall 2020 at San José State University under the guidance of Dr. Alessandro Bellofiore. This is a one-year appointment, renewable based on satisfactory job performance and the continued availability of funds. The starting date is September 2020 or later upon agreement.

Clinical guidelines for aortic valve replacement recommend mechanical heart valves (MHV) for younger patients (≤ 60 years old) and patients who cannot undergo multiple reoperations. To alleviate the need for these patients to take anticoagulants daily for the rest of their life, the design of MHVs must be innovated to improve hemodynamic performance, thus reducing their thrombogenicity. The successful candidate will work with the Project Director to develop a novel experimental platform that will allow for better understanding of MHV flow-induced blood clotting mechanisms and comprehensive testing of new design paradigms to achieve independence from anticoagulants.

Details of Dr. Bellofiore's research may be found at <https://www.sjsu.edu/people/alessandro.bellofiore/>

This position is funded under the NIH-SCORE program. Underrepresented minority and female candidates are strongly encouraged to apply.

ESSENTIAL DUTIES & RESPONSIBILITIES:

The successful candidate will apply a wide range of experimental techniques towards the preparation and testing of thrombotic mechanical heart valves (MHV) and perform experiments with our unique MHV thrombogenicity tester. In addition, the candidate will work closely with the Project Director to perform all of the fluid-mechanic experiments with our state-of-the-art particle image velocimetry (PIV) system. The successful candidate will supervise graduate (MS) students working on this project, and train them to run the thrombogenicity tester, perform immunoassays for platelet coagulation, use lab equipment such as a hematology analyzer, organize, analyze and interpret the data collected. They will work with the Project Director on the preparation and submission of manuscripts to peer-reviewed journals, present their findings at scientific conferences, and contribute to the writing of internal and extramural grant proposals.

INTERPERSONAL CONTACTS:

1. Reports to the Project Director.
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SUPERVISORY RESPONSIBILITIES

- No direct reports. However, the Post Doctoral Research Associate will supervise a number of graduate (MS) students working on several aspects of the project. They will provide training for the various experimental techniques involved, and mentoring to facilitate the successful completion of the students' graduate projects.
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QUALIFICATIONS:

1) Education and Experience

- Applicants must have a Ph.D. in Biomedical Engineering or a closely related field.

2) Knowledge, Skills, and Abilities Required

- Demonstrated experience in hematology and/or immunology.
 - Ideally, the applicant will have experience with experimental fluid mechanics, namely particle image velocimetry (PIV).
 - Ability to develop independent research projects as demonstrated through publication of peer-reviewed literature.
 - Proficient verbal and written communication skills to collaborate effectively in a team environment and present and explain technical information.
 - Ability to instruct and mentor graduate (MS) students.
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NOTE: This position description intends to describe the general nature and level of work being performed by people assigned to this job. It is not intended to include all duties and responsibilities. The order in which duties and responsibilities are listed is not significant.

BENEFITS:

The comprehensive benefit package includes:

- a) Ten Health Insurance Plans to choose from, under the umbrella of CalPERS
- b) Dental and vision coverages for employee and their eligible dependents at no cost to monthly cost to employee
- c) Paid Federal & State Holidays (13)

- d) Retirement Plan: features both a 403(b) Employee Deferred plan and a 403(b) employer-only contribution plan.
 - e) Separate vacation accruals and sick leave hours accumulations.
 - f) Paid Training and Conferences
 - g) Pay for Performance annual process featuring increases, as appropriate
- Please visit <https://www.sjsu.edu/researchfoundation/employees/benefits/index.php> for more details.
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APPLICATION PROCEDURE

To apply for this position, an applicant must submit a formal application for employment, as well as a resume and a cover letter. The applicant may do this via e-mail or by regular mail. The formal employment application is located at <https://www.sjsu.edu/researchfoundation/employees/recruitment/index.php>.

Due to the COVID-19 health crisis, all candidates must submit their application materials via E-mail at foundation-jobs@sjsu.edu. Please use job code **PostDoc RA Eng** in the subject line.

Informal inquiries about the position can be directed to Dr. Alessandro Bellofiore (alessandro.bellofiore@sjsu.edu)

Reasonable Accommodation

The San José State Research Foundation is committed to providing access, equal opportunity and reasonable accommodation for individuals with physical or mental disabilities in the employment, recruitment, examination, hiring and interviewing processes. If you are a job seeker with a physical or mental disability and require a reasonable accommodation to search, apply, or interview for a job opening or otherwise need a reasonable accommodation during the application and hiring process, please contact us at foundation-jobs@sjsu.edu. In the email message, please indicate your full name, phone number and the type of assistance required. You must not reveal the underlying medical reason for your needed reasonable accommodation or otherwise disclose confidential medical information.

Research Foundation employment is separate and distinct from San Jose State University or State of California employment. Research Foundation employees are not employees of either SJSU or of the state of California.

The San Jose State University Research Foundation (SJSURF) is a non-profit auxiliary of San Jose State University. SJSURF is totally self-supported. The majority of the organization's funding comes from the federal government, and other public and private entities. With annual revenues totaling over \$65 million, programs managed through SJSURF cover a rich diversity of applied research, public services, and educational related activities.

SAN JOSE STATE UNIVERSITY RESEARCH FOUNDATION is an Equal Opportunity Employer and does not discriminate on the basis of race, color, creed, gender, religion, marital status, registered domestic partner status, age, national origin, ancestry, physical or mental disability, medical condition, sex, genetic information, sexual orientation, military and veteran status or any other consideration made unlawful by federal, state, or local laws. It also prohibits unlawful discrimination based on the perception that anyone has any of those characteristics, or is associated with a person who has or is perceived as having any of those characteristics.

A background check (including a criminal records check) must be completed satisfactorily before any candidate can be offered a position with the SJSURF. Failure to satisfactorily complete the background

check may affect the application status of applicants or continued employment of current SJSURF employees who apply for the position.
