A full-time postdoctoral research position in Biomedical Engineering is available starting immediately 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 2021 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.

SUPERVISORY RESPONSIBILITIES
- No direct reports. However, the postdoctoral 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.

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.

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 San José State University Research Foundation (SJSURF) provides an excellent benefits package to benefited employees. The comprehensive benefit package includes:
   a) Ten company subsidized CalPERS health insurance plans to choose from (employee contributions differ according to plan and level of coverage)
   b) Employer paid dental and vision for both employee and eligible dependents
   c) Life, AD&D, LTD with supplemental coverage opportunities
   d) 13 paid Federal & State Holidays
   e) Retirement Plan: 403 (b) employee contribution plan component and a 403 (b) employer Contribution component, which vests immediately
   f) Vacation hours accruals and separate sick hours accumulations.
   g) Employee Discounts
   h) Paid Training and Conferences

Please visit the Benefits & Compensation page on the SJSU Research Foundation website for more detailed information.

COVID-19 VACCINATION POLICY
As required by the CSU Vaccination Policy, all new hires must be fully vaccinated against COVID-19 starting on September 30, 2021. Fully vaccinated means it has been 14 days after the second dose of the Pfizer or Moderna vaccine has been given, or it has been 14 days after the one dose of the J&J vaccine has
been given. Proof of being fully vaccinated does not need to be disclosed until a job offer has been made, and proof must be submitted after the acceptance of the job offer. New hires may request a reasonable accommodation of the COVID-19 vaccination requirement based on medical or religious reasons. New hires must submit their request for an accommodation form after they accept the job offer, and before their scheduled start date. The reasonable accommodation provided to the employee, if any, will depend on the employee’s job and the applicable facts, but it may include weekly COVID-19 testing. New hires who do not submit, before their scheduled start date, proof of being fully vaccinated or a request for reasonable accommodation will have their job offer revoked.

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. The formal employment application is located on the SJSURF website on the Forms page. Due to the COVID-19 health crisis, all candidates must submit their application materials to foundation-jobs@sjsu.edu.

Please address your formal application, your resume and your letter of interest directly to:

San José State University Research Foundation
Attn: HR/Job Code: PostDoc RA Eng
E-mail: Foundation-jobs@sjsu.edu

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

REASONABLE ACCOMMODATION
The San José State University Research Foundation (SJSURF) 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.

ABOUT THE SJSU RESEARCH FOUNDATION
SJSURF employment is separate and distinct from San José State University or state of California employment. SJSURF employees are not employees of SJSU or of the state of California.

SJSURF is a non-profit auxiliary of San José 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.

SJSURF 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.