

JESSICA BLAIR

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- I am a fifth year Biomedical Engineering Research Student seeking employment opportunities after graduation in May 2021. I plan to utilize my leadership skills and image processing knowledge to contribute to a medical device industry that promotes patient health. I am motivated and a quick learner with two years of research experience.

EDUCATION

- B.S., Biomedical Engineering from California State University, Long Beach (CSULB)
- *Current GPA:* 3.51 *Academic Achievement:* President Honor's List Spring 2018-Fall 2020

SKILLS

- **Expert:** CT/MRI reading, ITK-SNAP, ParaView, SimVascular, MS Office
- **Proficient:** Python, MATLAB, SolidWorks, OpenSim, LATEX
- **Familiar:** Arduino

PROFESSIONAL EXPERIENCE

Undergraduate Research Student (CSULB) mentored by Dr. Ga-Young Kelly Suh

August 2019-Present

- Began as club member, then was awarded 2020 Summer Research Student Assistantship through CSULB to continue research, before attaining internship position at CSULB under Dr. Suh.
- The goal of the project is to use simulation software to create computational patient-specific models to analyze hemodynamic parameters effects for 10 cardiac frames on aortic valve replacement patients.
- Utilized CT images of patients who had either received Edwards Lifesciences' Carpentier-Edwards Magna Pericardial Aortic Bioprosthesis or St. Jude Medical's Trifecta GT Aortic Valve.
- Conducted research on wall shear stress, leaflet degeneration, energy loss, aortic valve deformation, flow oscillation in aorta and left ventricle, and movement of coronary arteries, aorta, and left ventricle.
- These results are hypothesized to contribute to a more beneficial valve in patients.

Instructional Student Assistant, Biomedical Engineer (CSULB)

August 2020-Present

- Organized activities and course content for Introduction to Biomedical Engineering, taught by Dr. Siavash Ahrar
- Graded assigned projects and papers, further assisting students via email and office hours

PUBLICATIONS

- **Jessica Blair**, Nia Sanchez, Seung Hyun Lee, Ga-Young Suh, *Computational Modeling of Patient-Specific Aorta after Aortic Valve Replacement*, E-Poster abstract at A Biomedical Research Conference for Minority Students (November 2020)
- **Jessica Blair**, Nia Sanchez, Seung Hyun Lee, Ga-Young Suh, *Analysis of Deformation and Hemodynamics in Artificial Aortic Valve*, E-Poster abstract at CSU Annual Biotechnology Symposium (January 2021)

EXTRACURRICULAR ACTIVITIES

- Campus Lead for Multidisciplinary Project (August 2020-Present)
 - Three campuses are working together to create a brace that assists elderly patients in their sit-to-stand motion
- Volunteer Youth Soccer Coach (2020 to future)
- Member of The National Society of Leadership and Success, NSLS (September 2018-Present)
- Member of Engineering in Medicine and Biology Society, EMBS (September 2017-Present)
- Event Manager, Event Sales Specialist, and Party Host, Sky Zone Westminster (May 2016-September 2020)