

Undergraduate Individual Study Opportunity (Fall 2011)

Development of Testing Equipment for Heart Valve Prostheses

The objective of this individual study project is to design and build an experimental setup for testing the longevity of polymeric heart valves. This opportunity is a part of a research project to develop a polymeric heart valve that is durable and effective but does not require anticoagulation therapy or induce adverse patient reactions.

Working alongside other students, you will accomplish the following:

- a) design and build a closed-loop pulsatile flow system;
- b) evaluate effects such as the flow around the valve and measure the pressure gradient across the valve;
- c) analyze the relationship between the valve geometry and valve longevity; and
- d) prepare the final written report and oral presentation.

This project is a collaborative project with the UF Congenital Heart Center. The project challenges and breaks through the limitations of existing technologies, but it can only be successful through the determination and perseverance of all members of the project team. Accordingly, self-motivation is highly desired. If you are a senior undergraduate student, enjoy hands-on design projects, and are interested in being a part of this project, please contact me via e-mail with your resume. If you have any questions, please contact me.

Contact Information

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