



Rowena Ong
M.S. Vanderbilt University
Major: Biomedical Engineering

Faculty Advisor: Dr. Eduardo Urbina

Program: Research Alliance in Math and Science

Email: ongre@ornl.gov

Home: reong@southern.edu

Research Area: Computational Biology/Computational Science

As abdominal aortic aneurysms (AAAs) represent a major cause of death in the U.S., computational models of AAAs are being developed to better predict location and risk of rupture. The goal of my project this summer is to develop a computational model of an AAA that includes the iliac bifurcation. This will involve reconstructing AAA geometry from CT data, creating a high-quality finite element mesh, and using a finite element analysis application such as ADINA and/or ABAQUS to model the AAA.

Research Mentor:

Kara Kruse
Modeling and Simulation
Computational Sciences and Engineering Division
Oak Ridge National Laboratory
(865) 574-5154
krusekl@ornl.gov