Andrew Althouse

Background

I began my graduate studies at Pitt by obtaining a Master's degree in the field of Applied Statistics. Along the way, I had a summer-long internship in Pitt’s Epidemiology Data Center, which introduced me to clinical research. This experience convinced me that Pitt’s Department of Epidemiology was the place to merge my statistical training with a newfound interest in medical research.

Areas of Interest

My dissertation research focuses on peripheral vascular disease, a condition found in many patients with cardiovascular disease and/or Type 2 diabetes. Peripheral vascular disease causes complications such as poor circulation, foot ulcers, and amputation. Unfortunately, peripheral vascular disease is often asymptomatic until it is very advanced; through my research, I hope to improve the detection and treatment of this common condition.

The Program

The Cardiovascular Epidemiology program provides a wealth of resources to guide students in their fledgling research careers. New students are given a “Skills Inventory” that helps evaluate one’s strengths and weaknesses, allowing each student to customize their training plan to meet their needs. All students participate in a bi-weekly workshop highlighting a special skill (manuscript writing, oral presentations, specialized analytic techniques), developing valuable tools for a successful research career. The monthly SCD journal club provides a venue for discussion of recent developments as well as a review of key principles of study design and analysis. The camaraderie of students in the program is undeniable, and research opportunities often materialize out of a spontaneous conversation with a professor or fellow trainee.

Future Plans

The training in Cardiovascular Epidemiology has pointed me towards a broad research interest for my career, namely, the development of non-invasive testing modalities to reduce the burden of chronic disease. Through my experience in the training program, I’m developing the necessary skills to be a successful research professor at a major university.

Advice to Prospective Students

I suggest that prospective students read and critically evaluate medical literature in their field of interest. Epidemiology is a fascinating discipline, requiring a quantitative background and the ability to think from a qualitative standpoint.
Proper study design is an oft-overlooked element of good research, and the sooner a student learns the principles of good study design, the better equipped they will be to launch their research career.

Prospective students should also seek out research opportunities and reach out to faculty members with a common research interest. The research base at Pitt is very strong, and a number of professors have data just waiting to be analyzed; prospective students, your funding opportunity might be just an email away.