Brent M. Ardaugh

Personal Statement

UCLA School of Public Health

Degree Objective: MPH

I would like to be a leader in the field of epidemiology. I have worked toward this goal by co-authoring an epidemiology course manual with my former professor, publishing articles for both professional and public audiences, and completing advance coursework in epidemiology, statistics, and biology. Some of my objectives for graduate school are to collaborate with UCLA faculty on research projects and to publish information in professional journals as well as public-oriented media types. Moreover, I would like to continue producing classroom resources for epidemiology faculty and students.

Together with my former epidemiology professor, Dr. David R. Black, I co-authored a course manual that is currently being used by more than 50 undergraduate and graduate students at Purdue University-West Lafayette. This manual comprises over 650 PowerPoint slides and supplementary materials that introduce students to the basic concepts of epidemiology. Morbidity and mortality, screening tests, study designs, and causation are just a few of the topics discussed within the manual. Dr. Black and I intend to publish this manual for two reasons: to offer students a concise resource that they can use throughout their academic and professional careers and to provide faculty members with a complete "off-the-shelf" lecture series. I have attached sample excerpts from this manual to my application.

Writing is a population-based approach to preventing and controlling diseases. In the course of my studies, I published articles in the AMWA Journal, the official publication of the American Medical Writers Association (AMWA). Moreover, I wrote the medical writing resource for the Purdue University Online Writing Lab, a world-renowned instructional Web site for writers seeking consultation. One of my objectives for graduate school is to collaborate with the UCLA Office of Media Relations to publish articles on disease prevention and healthy living. In my articles, I would like to apply the knowledge from my UCLA epidemiology courses to provide readers with information that they can use to enhance their health and well-being. I would also enjoy opportunities to assist UCLA faculty in writing articles for professional journals and grant proposals for the National Institutes of Health (NIH). With my training in medical journalism and NIH grant writing from the AMWA, I believe that I can better serve the Los Angeles community and support the advancement of epidemiology research at UCLA.

Epidemiology research enhances existing perception of people and their environments, and this perception leads to more effective methods to prevent and control diseases. I would like to research infectious disease epidemiology under Dr. Scott P. Layne, an epidemiology professor in your program. I prepared for this research by pursuing experience in microbiology, which consisted of lab work and studying in the classroom the physiology of these pathogens:

*Mycobacterium tuberculosis, Bacillus anthracis, Bordetella pertussis, Vibrio cholerae, HIV,

*Escherichia coli** O157:H7, and Avian H5N1 Influenza. The above mentioned studying took place at the graduate level, where I was one of few undergraduate students. I will also be pursuing graduate level coursework in immunology, molecular biology, and genetics in spring 2009. I would like to apply the knowledge from these courses, in addition to the courses at UCLA, to develop strategies that protect populations from bioterrorism. Knowledge of how pathogens acquire virulent abilities, whether naturally or artificially induced, is necessary to ensure that preventative methods are adaptive to changes in pathogen evolution.

My second research interest is monitoring pathogens in human populations. Because of my curiosity, I was particularly impressed by a related research article by Dr. Layne entitled, "Human Influenza Surveillance: The Demand to Expand." This article was published in the *Emerging Infectious Diseases Journal* in 2006. In his article, Dr. Layne explained how a high-throughput laboratory network can provide faster vaccine-delivery methods and monitor changes in the epidemic Influenza strains. I would look forward to working with Dr. Layne because it is an opportunity to expand my knowledge of medically relevant pathogens. This type of research has the potential to improve the effectiveness of the existing Influenza protocol and to invest in the future health and well-being of the world's population.

I am requesting admission to UCLA's MPH program in epidemiology. My previous epidemiology experience, academic preparation, and personal qualities have prepared me for the expectations of your program. My objective for graduate school is to combine rigorous academic study with hands-on experience, and I believe that Los Angeles and UCLA offer extraordinary opportunities for these endeavors. Lastly, I believe that I can contribute to your program through research, publishing, and multidisciplinary collaboration. My goal is to utilize the intellectual richness and diversity of UCLA to enhance the quality of life of the world's people.