There is no shortage of disease and related sequelae in the United States for our collective focus in research, teaching, and service roles in schools and colleges of pharmacy. The prevalence of cardiovascular disease, cancer, and infectious diseases require the expertise of physicians, pharmacists, and a myriad of health professionals for prevention and secondary and tertiary treatment. But as we graduate more of our students with future global responsibilities, consider infectious disease research opportunities, and contemplate worldwide interventions to stem patient noncompliance, I feel we should focus on disease epidemics and pandemics that contribute mightily to worldwide mortality.

Malaria is just such a disease. A global map highlighting the geographic distribution of malaria is available on the web site of the US Department of Health and Human Resources (http://www.cdc.gov/malaria/distribution_epi/distribution.htm). Malaria is endemic in well over 100 countries throughout the world. The malaria parasite is transmitted (via 4 species of the protozoan parasite Plasmodium) via various species of Anopheles mosquitoes which bite mainly between sunset and sunrise. The mortality associated with malaria, predominantly in Africa, is stark. For example, consider the following data from the US Centers for Disease Control and Prevention:

- There were over 1,300 cases of malaria in the United States in 2002, even though the disease was “eradicated” in the United States in the 1950s;
- 41% of the world’s population live in areas where malaria is transmitted;
- There is an estimated 700,000 to 2.7 million deaths per year (of which 75% are African children);
- In endemic areas, there are 2 deaths per minute.

In the 2004-2005 AACP Graduate Affairs Committee Report, reference is made to malaria being an orphan disease; and the fact that major pharmaceutical companies have shied away from investing in research for such diseases because of the lack of profit potential. Yet malaria is one of the simplest opportunistic infections to prevent and treat. Human immunodeficiency virus-1 (HIV-1) has been linked to an increase in the impact of malaria disease and death in South Africa between the 1980s and the present. Private foundations, primarily the Bill and Melinda Gates Foundation, have donated hundreds of millions of dollars to treat the malaria epidemic.

In my opinion the academy should emphasize in curricular, service, research, and clerkship efforts, the global prevention and treatment of malaria and similar epidemics. Such research has been conducted at the National Center for Natural Products Research at the University of Mississippi’s School of Pharmacy, and at the University of California’s School of Pharmacy in San Francisco, as well as others. In 2004, in the Journal, AACP’s Will Lang noted anti-malarial drug research as an example of academic personal leadership. Lang advocates other methods of improving the public’s health as well. The focus was on US needs and points of application.

I am suggesting that we as an Academy commit to a global perspective and presence to deal with public health issues that include impacts on malaria and similar endemic disease outbreaks. Please note that the endemics of diarrheal disease and/or visceral leishmaniasis could replace malaria as the topic of this editorial and just as many salient points could be made relative to their occurrence and worldwide impact. Many of our pharmacy colleagues practicing in institutional and ambulatory settings (retail pharmacies, university health clinics, local US travel clinics) provide counseling, services, pharmacotherapy, etc, for travelers journeying to malaria-infested areas. These domestic examples of pharmaceutical care emphasizing prevention and early treatment of malaria are exemplary points of how our academy has positively impacted a subset of our society. Can the models within which these practitioners work, and the protocols by which they so excellently provide for our domestic patients, be accomplished in international settings? Our volunteer preceptors, in these settings, for our clerkship students who do so much for so many of us have skills that can be used in international efforts to impact such diseases as malaria. More and more of our students are availing themselves of international clerkship and study abroad opportunities. We need to engage these students now in public health interventions and services globally while on such international programs. We can partner with our colleagues in medical, nursing, and public health colleges in such efforts in a multidisciplinary framework that has
many benefits, both direct and tangential. We live in an ever shrinking world that is dangerous, yet so full of opportunities for us to exercise a public health mission that is global and in need of pharmacy expertise, impacts, and outcome evaluations.

REFERENCES
1. US Department of Health and Human Services, US Centers for Disease Control and Prevention, National Center for Infectious Diseases, Division of Parasitic Diseases National Center for Infectious Diseases, Division of Parasitic Diseases, Malaria Facts, May, 2004.