



President's Letter: 2006 Congress of Epidemiology



I am honored to have the opportunity to address the 2006 Congress of Epidemiology in my role as president of the American College of Epidemiology, or ACE. ACE is a relatively small society, just under 1200 members, but has a big portfolio, that includes continuing education and advocacy for epidemiologists in their efforts to promote public health. If you are wondering about the Greek words in the logo, they are Chronos, Topos, and Demos, or Time, Place, and Person, the epidemiologic triad.

Calendar of Events

November 4-6, 2006
APHA Meeting
Boston, MA

September 15-18, 2007
ACE Annual Meeting
Miami Beach, FL

Since 1979, ACE has worked to improve the practice of epidemiology, by promulgating ethics guidelines, and developing statements of principles on health data access, sharing, and confidentiality, as well as principles on conducting epidemiologic studies in minority populations. To promote professional development, ACE offers pre-meeting workshops prior to each ACE and SER annual meeting. At least one of these workshops is free. ACE has taken a leadership role in bringing epidemiologists' concerns about policies that impact the practice of epidemiology to the attention of policy makers. For example, ACE led a successful effort to maintain NIH study sections devoted to epidemiology, and is currently working to minimize the substantial impact HIPAA regulations have on the conduct of clinical research.

ACE was also the keystone for the very successful 2001 Congress of Epidemiology, the foundation on which this Second North American Congress of Epidemiology rests. While ACE president, Michael Bracken initiated discussions that led to the 2001 Congress and subsequently chaired the 2001 Congress program planning committee.

A current ACE goal is to characterize the epidemiology workforce, and to help identify professional development needs and opportunities. ACE is conducting a survey at the Congress to address this goal. The results of the survey will be made available to the epidemiologic community via the ACE website; I hope you will take a few moments to complete and return the survey to the ACE booth prior to leaving the Congress.

Epidemiologists currently face many professional challenges, most notably, attacks on peer review and the integrity of science, such as political interference with the selection of scientific advisory board members. Later today, at a meeting of the leadership of all epidemiology societies present at this meeting, ACE will propose the development of a joint policy committee with representatives from all participating epidemiology societies. A collective voice can only be more effective in advocating for the profession.

It will be a challenge, however, to find our collective voice. Epidemiology has become increasingly specialized and fragmented, although our numbers remain relatively small. While no real statistics are available, my best guess is that including the epidemiologists working in state and local health departments, government and industry and in training programs in the US, Canada and Mexico, there are no more than 10,000 epidemiologists in North America, yet there are at least 18 North America-based societies that have

epidemiology as their purview. Notably, none of these societies has as many as 4000 members. Further, many epidemiologists are members of multiple societies. If you are a member of three or more epidemiology societies, would you please raise your hand? Take note ACE colleagues: a survey of Congress participants will be biased toward individuals who can afford membership in multiple epidemiology societies.

Until fairly recently, I was unaware that there were so many epidemiology societies. In fact, many of them are fairly recent: While APHA-EPI and AES were formed in the late 1920s, and CSTE, and IEA in the 1950s, SER didn't appear until 1968, ACE in 1979 and SHEA in 1980. Epidemiology societies went into log phase of growth in the late 1980s and early 1990s with SPER, ISEE, CSEB, IGES, and SAAPHI, among others. And this doesn't include the epidemiology sections formed in ADA, AHA, AAPA and ASA.

In the last 100 years, we have experienced an evolution of epidemiology. Just as the many species of beetles evolved from a common origin, epidemiology evolved from a common origin in infectious diseases, to apply methods to cancer, chronic diseases, the environment, occupational health, pharmaceuticals and social issues.

Those interested in these areas naturally grouped together and evolved into their own subspecies; they are recognizable as epidemiologists, but have developed special characteristics, vocabulary, and, societies.

The phylogeny looks a bit different if we use the disciplines of our common ancestors rather than topic areas for classification. Our ancestors are from multiple disciplines. For example, John Snow was a physician-scientist, William Farr a statistician and Wade Hampton Frost began his career in the public health service.

We know that animals from different species often develop similar solutions to common problems; that is, evolution converges. For example, sharks and whales look very similar although whales are mammals and sharks are not. An example of convergent evolution in epidemiology is the measure that expresses the proportion of exposed cases for whom the disease is attributable to the exposure. Depending on your epidemiologic ancestors, or rather the school in which you trained, you might have learned this proportion as "attributable proportion", "etiologic fraction" or the "attributable risk percent." We all owe John Last our thanks for putting together the dictionary of epidemiology that facilitates communication among the convergent species of epidemiologists.

Your epidemiologic ancestors probably also were an important determinant of which epidemiology society you belong. In nature, like mixes with like, so although all the societies are epidemiologic in focus, there are a number of differences among them: for example, whether or not

Your mentor or boss is a member or

Your friends attend the meeting

There are other reasons too:

If your work is all in one substantive area, a section of a disease-based association might be desirable; membership in an international society does give a lovely excuse to travel.

Fortunately, the many epidemiology groups are not truly different species - or we are species in the same sense as bacteria, which exchange genetic material independent of reproduction. Bacteria divide to multiply, and exchange genetic material via horizontal gene transfer. Horizontal gene transfer takes place not only within but also between species; the box outlined in red show genetic exchange between bacteria of different species. This means that not only can epidemiologists converge to a solution making us appear externally similar, like sharks and whales, we can take material from other sources and make it part of our own genetic code.

Bacteria frequently live in multi-species communities in complex structures called biofilms. An example is the plaque growing on your teeth. A diagram of a biofilm is shown here.

Genetic exchange is easier in a biofilm, probably because of close proximity. Despite or perhaps because of the explosion of information rapidly available on the internet, and the increasing numbers of journals, it is difficult to keep up with knowledge from our own substantive area much less that from outside our own research area of interest. However, there is much we can learn from our fellow epidemiologists working in research areas far a field from our own. Idea exchange across the breadth of the field increases the speed of convergence. If we attend only specialty meetings and read only specialty journals, there are many

missed opportunities to learn from each other. Also missed is the ability to shape and define the discipline of epidemiology as a general entity rather than as a sub-set of some research area.

Over the next three days of the Congress, I hope you will take advantage of this intellectual biofilm of epidemiologists from multiple disciplines and societies and engage in some horizontal idea exchange. I also hope that you will work with your various societies to increase opportunities for future such exchanges. I am pleased to report that many of the societies participating in the 2006 Congress have already agreed, in principle, to participate in another Congress in 2011. But additional opportunities for cross specialty area exchange are desirable. Much of what we do is not unique to epidemiology; one possible future evolution is a separation of the science of epidemiology from the branch of public health practice. This would be a tragedy for both, as it is the focus on public health, which brings passion and urgency to the science, and advances in the science that ultimately lead to the protection of the public's health.

Top Stories – 2006 Congress Highlights

Nominating Committee

Election Results!

Elections for officers and directors of ACE were held in July. The new President-Elect of ACE is **Nancy Kreiger, MPH, PhD** (Senior Scientist and Director of Research in the Division of Preventive Oncology, Cancer Care Ontario, and Professor of Epidemiology, Departments of Public Health Sciences and Nutritional Sciences, University of Toronto). Nancy is currently the Secretary of the College and Chair of the Admissions Committee. She teaches epidemiology to a variety of graduate students, and her research encompasses both cancer epidemiology and the epidemiology of osteoporosis. Nancy will start her presidential year in September 2007 at the ACE Annual Meeting in Miami.

Newly elected to the Board of Directors were **Michael C.R. Alavanja, DrPH** (tenured Senior Investigator at the National Cancer Institute and a Captain in the USPHS), **Jonine Bernstein, PhD, MS** (Associate Attending Epidemiologist at the Memorial Sloan-Kettering Cancer Center, and an Adjunct Associate Professor in the both the Departments of Community & Preventive Medicine and the Department of Oncologic Sciences at Mount Sinai School of Medicine, New York City), and **Sandra I. Sulsky, MPH, PhD** (member of the Applied Epidemiology group of ENVIRON International Corporation, and Clinical Assistant Professor in the School of Public Health and Health Sciences at the University of Massachusetts, Amherst). **Faith Davis, PhD** (Professor of Epidemiology in the Division of Epidemiology and Biostatistics at the School of Public Health, University of Illinois at Chicago) was re-elected for another term on the Board.

Also elected to the ACE Board of Directors, by members of the Board, was **Melinda Aldrich, MPH** (UC Berkeley School of Public Health, Berkeley, CA). She is the second Associate Member of the ACE Board of Directors.

In closing, congratulations to the newly elected officers and directors! We also extend a sincere thank you to everyone on the 2006 ballot. We greatly appreciate your commitment and willingness to serve the College.

Photos from Congress

Photos published with permission



Attendees at meeting of epidemiology society leadership group meeting. They discussed Congress 2011, a joint gift from all epi societies to the Sir Richard Doll Fund & formation of a joint epidemiology society policy committee.



The 3 presidents – future (John Acquavella); present (Betsy Foxman); past (Martha Linet).



Robert McKeown and Stan Weiss, chairs of Congress Poster Committee and Awards Committee, respectively.



ACE member Trisha Hartge & her husband Alan. Trisha won one of the Congress Distinguished Epidemiology Awards



Eduardo Franco, who introduced Nubia Munoz, and Nubia Munoz, who also won one of the Congress Distinguished Epidemiology Awards.



Stan Weiss, Congress Awards Chair, Dan Schaid, who introduced Duncan Thomas, and Duncan Thomas, winner of the Congress Lilienfeld Award



Stan Weiss presenting Betsy Foxman with a plaque honoring the Congress. The text on the plaque reads "in recognition of your vision to unite the many North American epidemiologic organizations, culminating in this international conference, and your lifetime of leadership and excellence in the field of epidemiology."

In the News

Zuber Mulla, Ph.D., assistant professor of epidemiology at The University of Texas School of Public Health, was recently notified that he has been chosen by the University of Arizona Alumni Association (UAAA) to receive its Professional Achievement Award. The National Board of Directors of the UAAA voted to select Zuber in part for his epidemiologic research on the antibiotic treatment of necrotizing fasciitis caused by the "flesh-eating" bacterium, group A Streptococcus.

From the Board of Directors

The ACE broke with its decades'-long tradition nearly two years ago, and created a membership category for epidemiologists with masters' degrees only. As you may recall, the Members and Fellows of the College decided that it was time to include in our ranks the many highly skilled professional epidemiologists who haven't obtained doctoral degrees. There are many reasons why applying for membership in the College is good for these individuals. To name only a few, affiliation with the College offers: involvement in advancing the discipline through policy and educational initiatives; continuing education at the College's annual meetings; being afforded opportunities to mentor and to be mentored; easy access to the increasingly popular and well-rated *Annals of Epidemiology*; and, input into policies and practices that have an impact on the development of the profession.

The description of this new Member category is: "a masters' degree in epidemiology, and demonstrated and sustained experience and productivity in the practice of epidemiology." On the College website is a link to a page titled "Guidance to Applicants", which provides a few vignettes describing individuals who would be admissible under the new rules. If you have masters'-trained colleagues who might qualify for College admission, please call to their attention this opportunity to become part of a unique epidemiology organization

Committees

Communications Committee

Daniel Lackland, Committee Chair

The Communication Committee has developed goals proposed the identification of Committee Goals. The following are proposed for the Committee:

1. Publications of 3 newsletters per year. The Committee will continue to function in advisory and editorial roles for the editor, Dr. Burns, and will provide assistance as needed.
2. Updating of website. The Committee will continue to work with the ACE webmaster and assist her as needed. In addition, the Committee will make recommendations regarding the website and propose updates and modifications. As an immediate action, the website will be assessed to assure that the older webpages are removed from access.
3. Establishment of an Epidemiology "Salary Survey. The Committee will work with other ACE committees to plan, develop, implement and design a salary survey for epidemiologists. The pilot for the survey will be available at the Congress.

Commentary

By all accounts the 2006 Congress was a great success. I hope that you enjoy the picture gallery provided by Betsy Foxman. I look forward to your ideas and submissions for future newsletters. *Carol Burns, Editor* (cburns@dow.com).

ACE News is published by the American College of Epidemiology

Editor: Carol Burns, cburns@dow.com

For e-mail or other address changes, contact Angela Kite, akite@firstpointresources.com

Visit the ACE website at www.acepidemiology.org

ACE
1500 Sunday Drive, Suite 102, Raleigh, NC 27607
Phone (919) 861-5573, Fax (919) 787-4916