



## DISTINGUISHED ALUMNUS

### Peter Greenwald, MD, DrPH Class of 1961

**Peter Greenwald, MD, DrPH** currently is Associate Director for Prevention, Office of the Director, National Cancer Institute (NCI), National Institutes of Health (NIH). In this position he assesses cancer prevention and early detection research all across NCI. His major research interests include basic and pre-clinical studies through first-in-human to phase III clinical trials, nutritional science, biomarker discovery and validation, biometry, and systems approaches to cancer prevention. In March, 2011, he retired as Director of the NCI Division of Cancer Prevention, which he established and led for 30 years to take this new position. When he retired, he was Assistant Surgeon General (Rear Admiral) in the U.S. Public Health Service.

Peter's first hands-on exposure to public health came during a summer fellowship, between his third and fourth year in medical school. He was the sole "doctor" in a small village in Iran. Paul F. Wehrle, an infectious disease expert at the Upstate Medical Center, helped make the arrangements. The first person Peter saw at the rural Iranian clinic had been stung by a scorpion.

Then there were many patients who were loaded with intestinal parasites, and one lady with cutaneous anthrax. The next year, Paul Wehrle took the position as chair of pediatrics at the University of Southern California and Los Angeles County General Hospital — at the same time Peter became an intern at that hospital.

There was a physician draft at that time, and Peter was about to sign up with the Air Force, when in March 1961, Paul was consulting with the Communicable Disease Center (CDC — now called the Center for Disease Control and Prevention) and suggested that Peter join the Epidemic Intelligence Service (EIS) after internship, in lieu of the required military draft. He did, and was assigned to the Ohio Department of Health in Columbus. Berton Roueche, a writer of true medical detective stories, made famous Peter's best-known EIS investigation, when he wrote "A man named Hoffman" in the April 24, 1965 issue of *The New Yorker*. Hoffman was an installer of insulation, who died of anthrax after working on a remodeling job in a hospital near Cincinnati. The Ohio Department of Health laboratory confirmed the diagnosis, and Peter tracked the source of anthrax to one particular batch of the insulation material used by Hoffman.

Soon after the anthrax probe, Peter had the good fortune to join three other EIS physicians to test a newly developed, foot-powered, jet injector gun and smallpox vaccine in the tropical Pacific island nation of Tonga. This vanguard study, designed and overseen by DA Henderson, advanced the case for a world smallpox eradication program. The clinical trial showed that a freeze-dried vaccine could be reconstituted and could efficiently provide immunity using the jet injector gun or specialized two-prong needle to scratch the vaccine into the skin.

As an EIS Office in Ohio, Peter conducted many short, vigorous investigations, including tracking down Sabin vaccine-associated polio, surveying horses and horse-handlers at a race track to see if the Venezuelan equine influenza

could spread to people, characterizing an epidemic of erythema infectiosum (*J Dis Child* 1964; 107:30-4), and finding that in 1963, that the influenza vaccine failed to protect against clinical disease (*NEJM* 1964; 270:870-4).

Following medical residency at Boston City Hospital, Peter earned master and doctoral degrees in epidemiology at the Harvard School of Public Health. At that time, he also was an assistant in medicine at Peter Bent Brigham hospital. From Harvard, he joined the New York State Department of Health in Albany, first as Director of Cancer Control, then as head of the Epidemiology Division. Examples of work there included confirmation of vaginal cancer after maternal treatment with the synthetic estrogen, DES (*NEJM* 1971;285:390-2), studies of a Hodgkin's Disease cluster among Albany High School students, and overseeing the Love Canal investigation of health effects of environmental contamination, conducted by a young physician under Peter's general supervision.

In 1981, the director of NCI recruited Peter to lead a division that he changed, establishing what is now NCI's Division of Cancer Prevention. Complementing the analytical epidemiology research in place at NCI, Peter built a nationwide program of clinical and public health research and interventions to lower the incidence of cancer. In public health, he started the "American Stop Smoking Intervention Trial" — a broad collaborative effort for tobacco control — and "Five A Day for better health", aimed at improving eating behavior all across the United States. Both have largely been taken up by CDC and the voluntary and private sectors as public health initiatives. His division sponsored large-scale clinical trials that have demonstrated that about half of post-menopausal breast cancer and one quarter of prostate cancers are preventable, using drugs that have some side effects, but are low in toxicity. They provide an option for people at moderate to high risk of these cancers and establish that medical approaches to cancer



prevention are possible. Under his leadership, other studies were aimed to learn how to lower risk of several different cancers, prevent adverse outcomes from therapy, and make clinical trials more efficient. Peter has received numerous awards and is author or co-author of about 300 scientific papers.

Finally, Peter notes the central role of his wonderful family in these achievements. Harriet and Peter married in 1968, just before moving to Albany. At NIH, Harriet became Executive Director of the NIH Alumni Association. They have three children — Rebecca, Laura, and Daniel — and nine grandchildren who now are ages one to eight.

