NON-COMMUNICABLE DISEASES:
Finding the Path to Prevention

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UC IRVINE Growing Healthy
Integrative Health and Disease Prevention Initiative
Chronic diseases – conditions such as obesity, heart disease, stroke, cancer, diabetes and arthritis – are among the most common and most costly health problems in the U.S., accounting for 70 percent of all deaths. Ironically, they are also among the most preventable.

Much of the illness, suffering and early death related to chronic disease can be prevented through physical activity, proper nutrition, and by reducing or eliminating tobacco use and alcohol consumption.

The CDC reports that more than one-third of U.S. adults and 17 percent of U.S. children are obese, a condition that can be modified through better nutrition and more physical activity. In 2008, overall medical costs for these obese adults were $1,429 higher per person than costs for people of normal body weight. The additional costs are not surprising, given that obesity increases the risk for coronary heart disease, stroke, high blood pressure, type 2 diabetes, certain cancers and more.

Although much is known about how to prevent chronic disease, that knowledge does not always translate into lives saved. Research is needed to support a rapidly changing healthcare system through specific prevention approaches, effective community programs and models for cost-effective care. As one of the nation’s top academic health centers, University of California, Irvine has the resources and network to tackle these challenges. Our task is to identify a prominent nutritional epidemiologist to lead the charge.
Epidemiology is one of UC Irvine’s oldest and most successful research departments. Over the past 20 years, the department and our prevention board have helped to build and promote several outstanding research and community programs in Orange County, California and the nation. Our impressive track record is evidence of our ability to resolve the complex question of how to prevent chronic non-communicable diseases. Here are a few achievements for which the department of epidemiology is known:

- Development of the Cancer Surveillance Program of Orange County, which was established in 1983 and provides scientists, clinicians, and other health-care providers the basis for cancer prevention.
- Established the Genetic Epidemiology Research Institute (GERI), which includes more than 50 internationally recognized scientists working together and with the community to better protect the health of our children, families and friends. Over the past five years, GERI has received 179 research awards totaling nearly $50 million from the NIH and other federal agencies.
- Houses the largest fully annotated research biorepository of population-based samples for research and development and the discovery of biomarkers for prevention and early detection of chronic diseases.
- Serves as a vital member of the Athena Breast Health Network a multi-campus, multi-disciplinary collaboration that brings UC Irvine basic sciences, population sciences, and clinical faculty together with University of California medical centers at Davis, Los Angeles, San Diego and San Francisco, and the Graduate School of Public Health at UC Berkeley. The network is dedicated to saving lives by transforming healthcare delivery today, learning from patients, creating life-changing science, and improving prevention and treatment options tomorrow.
- Produces ground-breaking epidemiological research such as the finding that exposure to quasi-ultrafine particles and combustion-related pollutants, predominantly from traffic, not only increase the risk of systemic inflammation and increased blood pressure, they can also lead to myocardial ischemia.
This record of diverse accomplishments illustrates our capacity to address the multi-faceted question of how to prevent chronic diseases.

UC Irvine’s Genetic Epidemiology Research Institute (GERI), in the Epidemiology Department, illustrates the team’s mastery of interdisciplinary research. Epidemiologists collaborate across many disciplines including developmental and cell biology, molecular biology and biochemistry, evolutionary biology, genetics, immunology, statistics, bioinformatics, pathology, radiology, oncology, environmental and behavioral sciences, economics, and business administration.

- Offers one of the best graduate education programs for master’s and doctorate degrees in Epidemiology to prepare the next generation of scientists qualified to solve population health problems and to effectively prevent non-communicable chronic diseases.

- The faculty in the department of epidemiology represents multiple disciplines with an impressive track record in obtaining significant extramural funding and conducting prevention research. To review epidemiology faculty accomplishments and current research, visit the Department of Epidemiology website: www.epi.uci.edu
Although our team is prolific, we need a nutritional epidemiologist of national prominence to draw attention to the issue of chronic disease prevention through physical activity and nutritional sciences; someone who is immersed in groundbreaking research.

You can help us bring this scientist to UC Irvine so that we can contribute to a greater understanding of how to save lives in Orange County and beyond through chronic disease screening and prevention.

The individual we identify to enhance our team will have strong training and skills in nutritional sciences and, in particular, the nutritional epidemiology of non-communicable diseases (NCDs) such as cancer, cardiovascular disease, diabetes and obesity. This person must have a track record in conducting epidemiologic studies in populations and communities.

We will look to this individual to establish an independent research program which explores the role of nutrition in chronic disease risk assessment, early detection and prevention, with a focus on prevention. He or she is expected to demonstrate future promise for establishing and maintaining vibrant, independent and extramurally-funded research and training programs.

Department of Epidemiology faculty members are accustomed to conducting multidisciplinary research that encompasses a wide spectrum of non-infectious diseases in genetic epidemiology, environmental epidemiology and biostatistics. Similarly, this individual will be expected to establish the research agenda in nutritional epidemiology and build academic linkages with other departments and centers throughout the university and within the community. It is essential that this individual have a publication track record and prior National Institutes of Health funding success in nutritional epidemiology and NCDs.

The expert we seek will hold a doctorate degree, preferably in Nutritional Epidemiology or a related field such as Public Health and Epidemiology. He or she will have a minimum of five years’ work experience in an academic setting, with success obtaining extramural research funding in the nutritional epidemiology of NCDs.

You can help us to understand how to save lives in Orange County and beyond through chronic disease screening and prevention.
What we need is to produce epidemiological research in the area of prevention of non-communicable diseases that can change and save lives in our community, the nation and the world.

This requires the vision and leadership of a nationally recognized nutritional epidemiologist. An individual of this caliber is likely to figure prominently in the institution with which he or she is currently affiliated. In order to capture this person’s interest in UC Irvine, we will need to offer an opportunity that can compete with any other that he or she may receive.

Here’s How You Can Help

- **Opportunity**: Provide support for a named endowed chair in nutritional epidemiology.
  
  **Goal**: $2 million

- **Opportunity**: Provide start-up funds to help recruit a world-class nutritional epidemiologist to UC Irvine.
  
  **Goal**: $500,000

Every gift, regardless of size, will help us implement the Growing Healthy program.
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