

SPRC

# Stanford Prevention Research Center



The Stanford Prevention Research Center (SPRC)\* is dedicated to improving the health and functioning of individuals in communities and other populations. Our interest is in preventing disease and in advancing society's understanding of the determinants of health, such as regular exercise, healthy nutrition, weight control, etc.

Like other medical research, our work helps to advance the understanding of basic disease mechanisms. SPRC, however, is rare in the field of bio-behavioral medicine because we concurrently study practical interventions that help people immediately. SPRC research has made major contributions to public health by challenging conventional wisdom about disease prevention and health promotion in such areas as:

## What is public health?

During the 20th century, Americans' life expectancy increased by more than 28 years. A small percentage of this increase is attributable to increases in per capita income and the work of the medical care system. But the vast majority of the years gained are largely attributable to public health initiatives.

You may take for granted many of public health's proudest accomplishments because they seem so usual, so natural today: the eradication of infectious diseases such as polio and smallpox; the drop in infant mortality rates; the decrease in deaths from heart attacks and strokes; and even the increase in the use of cars' safety belts.

So what is public health, exactly? Public health emphasizes preventing disease rather than curing it, and it promotes health among populations and communities rather than individual patients. Health behaviors are socially patterned and reinforced by group behavior, so public health interventions are very effective. They improve the quality of life for broad sections of a population and reduce health care needs—and their spiraling costs.

- ▶ **Heart disease.** *At one of the first such focused clinics in the country, we helped to prove that cholesterol lowering is effective in preventing heart disease, and we led the only U.S. study to show that a combination of diet, exercise, and cholesterol-lowering medications could halt or reverse the build-up of plaque in the coronary arteries.*
- ▶ **Hormone therapy.** *We uncovered some of the first evidence that hormone therapy for postmenopausal women was not quite the panacea everyone thought, and we continue to lead studies to clarify the risks and benefits of hormones.*
- ▶ **Smoking.** *We pioneered the use of nicotine replacement in treating nicotine addiction. We are currently conducting the first study of smoking cessation in adolescents that uses medication.*
- ▶ **Youth obesity.** *We pioneered the development of school-based programs for preventing the development of heart disease and obesity risk factors in childhood and adolescence. Today we have one of the largest research programs on youth health promotion in the country.*
- ▶ **Social and cultural determinants of health.** *We have an unusual program that focuses on medically underserved populations in California, including Latino and other ethnic minority populations. We also strive to increase diversity in medicine through the mentoring of economically disadvantaged high school students in California.*

The SPRC is seeking to build a \$10 million endowment to ensure our continued vitality. Only an endowment can provide the continuing support needed to attract and retain the most talented investigators, fellows, and students and to sustain innovation and intellectual contributions. Any size gift is always welcome, and any gift can be designated to support specific components of the SPRC, such as youth studies, successful aging, diversity in medicine, or our fellowship program.

\* formerly the Stanford Center for Research in Disease Prevention

# Interview with Steve Fortmann



*Dr. Fortmann has been Director of SPRC since January 1998. He is the C.F. Rehnborg Professor of Preventive Medicine at Stanford University School of Medicine. Dr. Fortmann is a Fellow and past Chair of the American Heart Association Council on Epidemiology and Prevention, and he is a Fellow of the American College of Physicians, the American College of Epidemiology, and the Society for Behavioral Medicine.*

*Dr. Fortmann's principal research interest is the prevention and control of cardiovascular disease in populations and individuals. His other research interests include cardiovascular disease epidemiology, pharmacological interventions for smoking cessation, tobacco control policy, nutrition and nutrition education, blood pressure control, and lipid disorders.*

## **What will be the most pressing public health issues in the U.S. in the 21st century?**

The shocking increase in obesity that emerged in the past decade will continue, leading to increased prevalence of diabetes and heart disease. The latter, along with stroke, is currently one of the nation's leading causes of death and disability, despite advances in treatment. Another disturbing trend is that adolescents and young adults continue to take up smoking. There are also two major "big picture" factors that will increasingly impact public health, medical economics, and quality of life in the U.S.: the continued aging of the population, and an expensive medical care system that falls short at putting scientific progress into practice and denies access to a large fraction of Americans.

## **What key factors will drive public health policy this century?**

Community design and disease-promoting economic forces will be one of public health's greatest challenges yet. We live in communities that eliminate most opportunities for walking and force us into our cars. We increasingly turn to sedentary forms of entertainment, especially TV and computers. We are presented with "supersized" meals and snacks. By combating these forces, we can improve nutrition, physical activity, and tobacco use, which remain the most important factors causing the excess of obesity, diabetes, heart disease, stroke, and several cancers. We also need to create a more effective and less costly medical care system that focuses on chronic disease prevention and management.

## **What are the biggest challenges facing public health research today?**

We need better ways to inform and educate people about prevention and to provide them with the skills needed to cope with our increasingly toxic environment. We need to improve the quality and efficiency of preventive services in medical care and insure that research findings are translated into practice. We need to better understand the environmental and cultural factors that help to maintain the major diseases. We need to be very creative in developing policies that promote improved environments for exercise and healthy nutrition and address those economic forces that discourage such improvements. A critical step is to develop more effective methods for bridging the gap that separates research and application—for translating and disseminating proven methods into the real world.

## **What are the biggest challenges facing SPRC today?**

One of our biggest challenges is securing funding to sustain our success. The SPRC is a nearly unique program nationally, and it was unprecedented at Stanford when it was created in 1972. Now we're well-established, aided by research support from the NIH and increased recognition from the leadership in the School of Medicine. We would like to raise money to support the initial exploration of innovative research ideas, where our traditional funding channels stop short.

An endowment would help us to fund pilot studies powered by promisingly unconventional thinking. Our other challenge is to ensure our long-term success by obtaining endowment to provide permanent support for junior faculty development, dissemination and application of our findings in community and medical care settings, and continuation of our successful research fellowship program.

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## **In what direction will you be leading SPRC over the next few years?**

Primarily I want to sustain and improve the ability of our talented faculty to continue their innovative research programs addressing the interface between medicine and public health. I want to find ways to strengthen our programs for disseminating our research findings into the real world. It is also important for us to expand our role in teaching medical and undergraduate students. We must also address the stunning obesity epidemic by focusing on high-quality research on nutrition, exercise, and other factors throughout the life span.