

Bright ideas, right partners, insightful solutions

Vaccines for diseases such as polio and smallpox, fluoridation of drinking water, prenatal care and use of vitamin A to prevent blindness all are public health innovations. So are seat belt laws, clean drinking water, modern sanitation requirements and campaigns against abuse of drugs, alcohol and tobacco.

In this century, public health researchers could discover more advances—preventives for cancers, new ways to heal and protect the environment, effective means to prevent obesity and more efficient ways to provide health care for all.

“Innovation in public health brings hope to all humankind—hope that our children and our children’s children will live healthier, higher-quality lives without much of the suffering that seems so prevalent in our world today,” says Dennis Gillings, CBE, PhD, chair and chief executive officer of Quintiles and chair of the School’s Advisory Council.

Innovation is fundamental at the UNC Gillings School of Global Public Health. This issue of *Carolina Public Health* is dedicated to the outstanding efforts of faculty, students, staff and alumni who are searching for more

effective vaccines for tougher diseases (see page 10), finding better ways to provide clean water throughout the world (see page 17), waging war against obesity (see page 6), and fighting pollution, cancer and infectious diseases.

In January 2010, members of the UNC-Chapel Hill Chancellor’s Innovation Circle visited the School to hear about some of our researchers’ innovative solutions to water problems facing the world. The circle is an advisory council of respected UNC alumni and friends charged with helping to develop a roadmap for a culture of systematic innovation and entrepreneurship at Carolina. It is chaired by Lowry Caudill, PhD, a 1979 UNC graduate and co-founder of Magellan Laboratories Inc. After

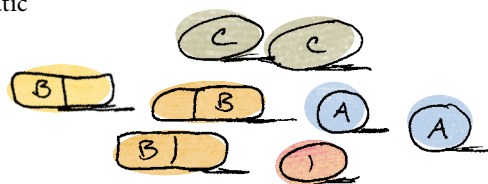


the visit, Caudill said he and other circle members were impressed with research being done at the School.

“Chancellor Thorp’s vision is to transform new knowledge in the university for maximum societal benefit,” Caudill said. “The (Gillings) School of (Global) Public Health is doing this already and doing it really, really well. I made the point later in the afternoon to the whole group that as we look for best practices at other schools like Stanford and MIT, we need to look in our own backyard at the School of Public Health.”

So what *is* innovation?

“Innovation is all about creating things,” said Don Holzworth, chair of Futures Group International and the School’s Gillings Executive in Residence. “It’s about joining ideas that haven’t been joined before, which



ultimately leads to a breakthrough or a more efficient way of delivering something we already know about.”

Innovation often comes when people with different perspectives join forces to solve a problem.

“The ‘outsider’s perspective’ can stimulate new ideas,” Holzworth said. “It’s disruptive thinking, but it’s constructive disruption.”

The UNC Gillings School of Global Public Health is partnering with different departments, universities, government agencies (domestic and foreign), nongovernmental organizations, companies and individuals. For example, UNC biostatistics researchers now work with researchers at Duke and N.C. State universities to find ways to design more powerful clinical trials for cancer treatments. Their work is funded through a \$12.5 million grant from the National Cancer Institute (see page 26). UNC public health researchers also have teamed up with officials and academicians in the United Arab Emirates and with Rand Corporation and others to assess environmental and public health risks accelerated by development and to establish a national strategy for addressing those risks (see page 14).

“Because everyone’s resources are so limited, it’s more important now than ever before to be creative and work with partners we’ve never worked with before,” said Leah Devlin, DDS, Gillings Visiting Professor and



former North Carolina state health director.

Devlin lauds the School’s efforts, especially through the N.C. Institute for Public Health (NCIPH), to work with the state’s Department of Health and Human Services and with local health departments throughout North Carolina.

“We are the only state in the country that requires accreditation of our health departments to establish consistent standards,” she said.

Jane Smith Patterson, executive director of e-NC Authority and member of the School’s Advisory Council, echoes Devlin’s enthusiasm for how the state and the university can enhance each other’s work.

“By matching public health needs with the knowledge of university public health researchers and public health practitioners,

better than their predecessors, cost more and caused more side effects,” she said.

“This comparative effectiveness research is essential. We must know when newer is not better.”

Innovations are more than inventions, Rimer said.

“We care about innovations because in public health, and especially in our School, we aim to solve some of the world’s greatest problems. We must be willing to look at how we have done things before and ask whether there are other, better ways to do a thing. We want to create the ideas, programs, tests and tools that make the world better. Those are public health products, and they are happening right here, at our School.”

And they’re making a difference.

“Public health investment and dedication

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there is an amazing opportunity to develop innovative programs and practices that can be...taken to scale in close to real time,” she said.

But not every innovation is an improvement, cautions Barbara K. Rimer, DrPH, dean and Alumni Distinguished Professor at the School.

“In 2005, for example, biostatistics professor Ed Davis, PhD, and others found that new medicines to treat schizophrenia were not

by our university are making the difference and will continue to do so,” Gillings said.

“Moreover, prevention promises huge breakthroughs, particularly if we can impact selective behavior patterns in cost-effective ways. I am excited about our opportunity and applaud our dedicated researchers for their motivation and devotion to improving the health of us all.”

—Ramona DuBose

