Connecting Individual Health with Public Health

Bringing Together the Science and Practice of Social Work, Public Health, and Medicine to Tackle Pressing Health Problems

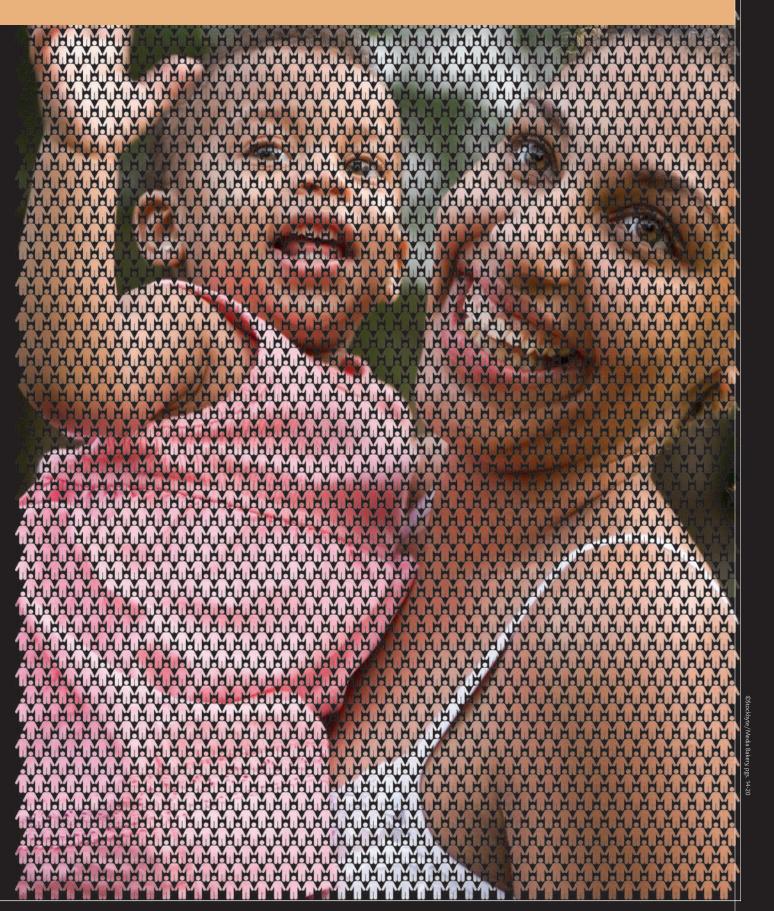
By Judy H. Watts



ascades of biomedical discoveries in recent years promise to transform the way we think about our individual and collective health needs. Yet despite this progress, the national health care landscape is clouded. In addition to universally feared afflictions such as cancer and neurodegenerative disease, obesity is epidemic. Twenty-one million people in the United States suffer from diabetes and its complications such as heart disease and stroke. Other concerns range from the high incidence of cigarette smoking among teens to widespread anxiety and depression among adults and youth.

The fruits of research and new knowledge "haven't necessarily been translated to the community level," says Robert Freund, chief executive officer of the St. Louis Regional Health Commission. "Today, many of the top killers—diabetes, heart disease, lung cancer—and the high health care costs that accompany them are driven by behavior choices. Increasingly, we have to understand how people behave and how to alter that behavior."

David Abrams, director of the Office of Behavioral and Social Sciences Research at the National Institutes of Health, frames it this way: "a huge chasm exists between biology and molecular and genetic mechanisms and any impact on public health—on all of society. I believe social work is somewhere in the middle of that, as a bridge." With its emphasis on evidence-based research, "social work is ideally positioned knowledge to potentially bridge individual behavior to population behavior and norms and culture."

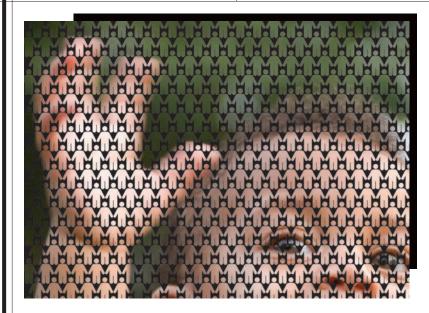


Noting that Washington University is part of a major national initiative designed to speed translational research (taking the fruits of research from bench to bedside to community), Edward Lawlor, dean of the Brown School, sees in the moment an imperative. The times require "bringing together both in science and in practice the worlds of medicine, public health, and social work," says Lawlor.

"As the benefits of science and prevention are increasingly brought to communities, public health and social work will have increasingly greater roles in that enterprise."

Comparing Cousins: Social Work and Public Health

ocial work and public health have more commonalities than differences.



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Both professions emerged from the social reform movement of the late 19th and early 20th centuries, the era of the settlement house movement. In fact, membership of the American Public Health Association, which was founded in 1872, included large numbers of social workers in the first several decades.

The two disciplines also share a strong commitment to social justice, advocacy, and political action, and a holistic approach to health outcomes—which encompass assessing individuals' physical health and the behavioral and social factors that affect it. And many of the federal and state social policy programs over the past century have had significant impact on the two fields.

Both professions are committed to involving consumers and community members in policy development, and in planning, delivering, and evaluating interventions. Each discipline places a premium on wide-ranging course work, evidence-based interventions, and field-based practical experience under the guidance of seasoned practitioners.

Career paths are converging as well. Graduates of the Brown School, like graduates from social work schools across the country, are entering public health settings in greater numbers than ever. They are involved in the health delivery system, including administration, and are interested in a population-based assessment of its effects. New roles in the health sector include participating in health policy from local to international levels. Similarly, public-health graduates are moving into policy and social work settings, according to Lawlor.

Vincent Mor, professor and chair of the Department of Community Health at the Brown University School of Medicine, sees an opportunity for the two professions to forge stronger ties. "The need for interdisciplinary con-



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nectivity between social work and public health is clearly an area of overlapping potential. It is something that should happen, for example, in a community-intervention program."

The Emerging Biopsycho-social Approach

he public health and social work disciplines are not only connected on a professional level, but on a scientific one as well.

NIH division chief David Abrams is emphatic that social scientists such as social workers and public health professionals, along with psychologists, sociologists, and more, must collaborate with one another and with medical and biological scientists in order to drive change at all levels.

"Findings suggest so clearly that in utero- and early-childhood adversity

such as poverty, violence, unpredictability in the household—areas in which social workers are exquisitely interested and have done groundbreaking research—are stressors that actually change protein and gene expression in the brain," Abrams says. "Permanent structural changes result, so that people are hypersensitive to stress and prone to depression, poor impulse control, addictions, and poor adjustment to adult living. Basic science in the future will have to include integrative research within social work, population science, sociology, and psychology."

This type of integrative science is what will drive change at all levels, Abrams says. "It's not enough to only treat patients one by one in a

clinic," he continues. "That's important but doesn't allow the critical mass of absolute numbers of change to shift population curves. That requires moving from the clinic to the community, to policy that cuts across and enhances everybody's life—not just a few high-risk individuals who happen to go to a medical clinic. After all, if people are in a good environ-

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ment, their vulnerable genes never need to be expressed and never need to cause disease."

In other words, social and behavioral scientists working in concert must take their places with biomedical researchers as equal contributors to improving population health, Abrams says. "And just as the genetics revolution has transformed biology, the informatics revolution means exciting possibilities for social work and the social and behavioral sciences."

Challenges for Universities

Preparing students for interdisciplinary careers that will increasingly encompass social work and public health will represent a major change in orientation, curriculum, and the knowledge base, according to Larry Shapiro, executive vice chancel-

lor for medical affairs, dean of Washington University School of Medicine, and the Spencer T. and Ann W. Olin Distinguished Professor of Pediatrics. "I would submit that one can't have any sort of deep or meaningful understanding about public health without a whole biological perspective to understand the impact of genetic variation, the determinants of health."

All of which argues in the Brown School's case, he says, for partnership with the School of Medicine for curriculum development.

Lawlor agrees, citing his own recent Institute of Medicine report on the intersection of social work, public health, nursing, and allied health fields. "Public health traditionally places greater emphasis on epidemiology and biostatistics, whereas social work has been more involved in understanding

the determinants of human behavior in a social environment."

Working with the University's new Institute for Public Health (see sidebar), which launched in July, this partnership is already under way. Lawlor says he and his University colleagues will be putting together the elements for an accredited Master of Public Health degree, components of which could be offered to social work graduate students as early as fall 2009.

"From our school's perspective, we're going to emphasize four particular areas within public health: community, health behavior, policy, and international health," Lawlor says. "These are all areas of great strength within our School, and there will be a great deal of compatibility between these and where we're heading on the public health side.

"We have two great opportunities as a School and as a university right in front of

Washington University Plans Institute for Public Health

IN MARCH, CHANCELLOR MARK S. WRIGHTON announced plans for a University-wide Institute for Public Health. The Institute, which holds its inaugural event in September, capitalizes on and integrates the University's extensive existing public health work in biostatistics, community health, environmental health, epidemiology, genomics, health policy, and international health. Led by founding director and Brown School Dean Edward F. Lawlor, the Institute also will be a catalyst for producing new forms of public health teaching and research, and translating medical, social, and physical science discoveries into interventions that improve health. Graham Colditz, MD, DrPH, the Niess-Gain Professor and associate director of prevention and control at the School of Medicine's and Barnes-Jewish Hospital's Siteman Cancer Center, will serve as the Institute's deputy director.

"In the initial planning for public health at Washington University, we estimate that approximately 70 faculty across the University have significant public health training, teaching, and/or funded research projects," explains Lawlor. "And many schools and programs have programs or aspirations in areas of public health research and training as well. Momentum for these efforts is growing, and through the Institute we look forward to tackling issues of public health in innovative ways and responding in new ways to the dramatic need for improving health status in the St. Louis region."

To request information about the Institute, e-mail publichealthinstitute@wustl.edu. To receive information about the Brown School's new MPH program, e-mail mph@wustl.edu.



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us," Lawlor continues. "One is to systematically address the health status here in the St. Louis region, where many of the health indicators are appalling; the other is to tackle the very big problems of social development and health internationally."

Robert Freund agrees that the University can make a significant impact in this area.

"Washington University should match its many strengths to the nature of the health care sector itself. That sector is a combination of a heavily regulatory and legal environment; some of the most complex business arrangements known to man; medical research and medical care delivery; plus an existing health infrastructure. The University's strengths match up very well."

But he provides an important caveat: "If academic firepower is applied to the issue of improving health outcomes without the community sitting at the table as an equal partner, changes won't stick. Such extreme distrust exists in areas of communities where health outcomes are very bad that people like Dean Lawlor, who straddle both worlds, can have key roles in shaping improvement. Social work, after all, has a tradition of weaving community voices into policy making."



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BROWN SCHOOL WELCOMES NEW PUBLIC HEALTH FACULTY

Public health has emerged as an area of focus for the Brown School's long-range strategic plan. To support this effort, Brown welcomed seven new public health faculty this summer. All joined the School from Saint Louis University School of Public Health. Read the briefings below to learn about their areas of expertise. Visit gwbweb.wustl.edu to read full bios and to download copies of their CVs.

Ross C. Brownson, PhD, Professor. A leading expert in chronic disease prevention and an expert in the area of applied epidemiology, Brownson has helped define and champion the field of evidencebased public health. His research focuses on chronic disease epidemiology, promotion of physical activity, tobacco use prevention, and evaluation of community-level interventions. Brownson, who holds a joint appointment with Washington University's School of Medicine, is the co-director of the Prevention Research Center—a major, CDCfunded institution that develops approaches to chronic disease prevention in high-risk communities.

Debra Haire-Joshu, PhD, Professor. Haire-Joshu, a health behavior and health policy expert, develops interventions to reduce obesity and prevent diabetes, particularly among underserved youth. She holds a secondary appointment with Washington University's School of

Medicine and serves as associate director of the Medical School's Diabetes Research and Prevention Center. Her current research is supported by a number of National Institutes of Health agencies. Haire-Joshu also has recently served as a health policy fellow in the Office of Senator Barack Obama, and a Robert Wood Johnson Health Policy Fellow for the Health, Education, Labor and Pensions Committee of Senator Edward Kennedy.

Matthew W. Kreuter, PhD, Professor. Kreuter, author of Tailoring Health Messages, is a national health communication expert. He is the founder and director of an innovative health communication research laboratory that develops targeted communications strategies to culturally diverse groups with the goal of increasing cancer screenings and other positive health behaviors. Kreuter, who also holds a joint appointment with the School of Medicine, holds a National Cancer Institute Center of Excellence in Cancer Communication research grant. Other funders have included the National Institute for Child Health and Human Development, National Institute of Nursing Research, U.S. Centers for Disease Control and Prevention, the office of Disease Prevention and Health Promotion, and the Susan G. Komen Breast Cancer Foundation.

Douglas A. Luke, PhD, Professor. A top biostatistician and social science methodologist, Luke has made significant contributions to the evaluation of public health programs, tobacco control and prevention policies, and the application of new methods to community

health interventions. He has expanded the repertoire of statistical methods, particularly the use of social network analysis, in the field of public health. He directs the Center for Tobacco Policy Research and has served on the key community health behavior study at National Institutes of Health. He is active in the American Statistical Association, the International Network of Social Network Analysts, and the Society for Community Research and Action.

Timothy McBride, PhD, Professor. An influential health policy analyst and leading health economist, McBride is shaping the national agenda in rural health care, Medicare policy, health insurance, and access to health care. He has been active in testifying before Congress and consulting with important policy constituents in Medicare and rural health policy. He is a member of the Rural Policy Research Institute Rural Health Panel that provides expert advice on rural health issues to the U.S. Congress and other policymakers.

Vetta L. Sanders Thompson, PhD, Associate Professor. Sanders Thompson researches issues of racial identity, psychosocial implications of race and ethnicity in health communications and access to health services, and determinants of health and mental health disparities. She has built a unique record of research that blends a sophisticated social science understanding of racial identity with rigorous measurement and community-based participatory research. She is also a licensed clinical psychologist with 15 years of licensed practice. Active

in numerous professional associations including the American Psychological Association, Missouri Psychological Association, and the Midwest Sociological Society, Sanders Thompson serves as an associate editor for the journal, Contemporary Psychology.

William True, PhD, Research Professor. True's work focuses on the psychiatric genetics of drug and alcohol abuse, traumatic stress, and various affective disorders. He has looked at twins to research his main areas of interest, as well as familial transmission of mental health issues through environmental and genetic pathways. The Veterans Administration, National Institute on Drug Abuse, and National Institute on Alcohol Abuse and Alcoholism have funded his work. True also has a growing interest in global health practice, having been engaged in projects in Peru, Costa Rica, Dominican Republic, and Chile. He is a member of American Anthropological Association, American College of Epidemiology, American Public Health Association, and Society for Epidemiologic Research. In addition to his role at the Brown School, True will serve as the director of health services research and development at the Saint Louis Veterans Administration.



More faculty appointments to be announced in upcoming issues and on gwbweb.wustl.edu.