As the chairman of the Department of Public Health at Weill Cornell, Alvin Mushlin, MD, ScM, the Nanette Laitman Distinguished Professor of Public Health, oversees a department with three dozen full-time faculty and another sixty with secondary appointments. The department comprises six divisions: Biostatistics and Epidemiology (Chief: Madhu Mazumdar, PhD, MA, MS), which serves as an academic home for those fields, conducts methodologic studies, and supports research; Community and Public Health Programs (Interim Chief: Ann Beeder, MD), which organizes community outreach programs and operates clinics for the treatment and research of substance abuse and commonly co-occurring medical conditions such as HIV and hepatitis C; Health Policy (Chief: Bruce Schackman, PhD), which studies health-care financing and reimbursement, technology assessment, incentives for implementation of evidence-based practice, and treatment disparities; Medical Ethics (Chief: Joseph Fins, MD, FACP), which studies and provides guidance to clinicians, researchers, and policy makers on ethical issues such as end-of-life care, health-care technology, treatment of brain-injured patients, and research ethics; Outcomes and Effectiveness Research (Chief: Lawrence Casalino, MD, PhD), which evaluates the quality and outcomes of clinical care by identifying how well medical interventions and systems for the delivery of care work in the real world and how they can be improved; and Prevention and Health Behavior (Chief: Gilbert Botvin, PhD), which promotes health and disease prevention, including school-based substance abuse programs.

Weill Cornell Medicine: The country has been concerned about a potential swine flu pandemic. What do you think of the public health response?

Alvin Mushlin: At least so far, the information coming out from the CDC and the New York State and City departments of health has been really good, particularly when we consider the small size of the public health infrastructure compared to the medical care establishment.

WCM: Do you think that infrastructure should be expanded?

AM: I would be the first to argue that we need to increase its size...
and its resources. Have we allocated enough resources in the eight years since 9/11? I don’t think so. We haven’t made the investments that I think are important, including investments in prevention and preparedness research.

WCM: Why is public health an especially relevant field today?

AM: In many ways, the public health problems of today are tougher to deal with than they were a century ago. Then, the problems were solved mostly by improving housing and the water supply, dealing with food safety and environmental pollution. Today, chronic illness has become the major public health problem—heart disease, cancer, diabetes, hypertension, and so forth are the pressing issues. Mounting solutions to those problems involves a partnership between the public health establishment and the medical sector. The areas that we’re emphasizing will lead to insights, tools, and approaches that are going to make our attacks on these problems more effective. And if we’re going to figure out how to make our health-care system work better, we’re going to need the kind of expertise we have in the Department.

WCM: How were the Department’s areas of concentration established?

AM: We thought a lot about and tried to carefully identify those aspects of public health that are most important in assisting and improving what hospitals, doctors, and medical practices do. The first unifying theme is to help make medical care more effective and efficient in conquering the common and important diseases. The other thing that unifies us is that we’re all scientists, but not lab scientists in the way you usually think about medical research. We’re population, public health, and social scientists—trained in disciplines such as biostatistics, epidemiology, health economics, medical sociology, medical ethics, and anthropology.

We’re convinced that the missing element in academic medicine has been the public health point of view and approach. We have a chance here at Weill Cornell to demonstrate the value of incorporating the public health perspective and its academic disciplines into the College’s teaching and research agendas. We have an opportunity to add expertise and value to our own academic medical center and, in doing so, to demonstrate the contributions public health can bring to academic medicine generally.

WCM: How has technology opened up opportunities in the field?

AM: In many ways. For example, in our Division of Outcomes and Effectiveness Research we have an ongoing collaboration between Dr. Nathaniel Hupert and Professor Jack Muckstadt at the Engineering college in Ithaca, using computer simulation models to improve the response to public health disasters. [See “In the Event of an Emergency,” Spring 2009.] Also, an important new group affiliated with our department is doing fundamental research on the potential for computers and medical informatics to improve the quality and efficacy of health care.

The public health problems of today are tougher to deal with than they were a century ago. Mounting solutions involves a partnership between the public health establishment and the medical sector.

WCM: How is the study of medical ethics becoming more important?

AM: It’s the missing currency in health policy. We know how to evaluate the efficacy of a new drug or device, and we are getting a better handle at how to look at the cost. So we have those two parameters, but I don’t think we’ve got nearly as good a handle on the ethical component as a third element in clinical decision-making and medical policy. For example, how should we be incorporating the fact that a person is in the late stages of life? How should we be engaging family members? How should we be putting into place policies that enable us to make sure that people’s wishes are known? The right to care and distributive justice is another major ethics concern in medicine. This includes addressing disparities among underserved populations as well as ensuring that resources are distributed equitably so that proper treatments are provided to all patients who need them. For historically neglected patients such as those with brain injury, the right to care also includes the right for attention and advocacy.

WCM: What are some examples of ways in which the Department’s educational programs contribute to the enhancement of public health?

AM: We teach in all years of the Medical College curriculum. Our primary aim is to give students an appreciation of contributions that the field of public health makes and how important future medical practice is as a crucial link to improving the public’s health. Faculty also teach courses in public health issues and methodological research techniques in the Graduate School, for the Master’s in Clinical Investigation program, and to faculty, staff, and students throughout the NewYork-Presbyterian Hospital system. We also sponsor two fellowship programs that train physicians to be independent investigators in public health research. In Qatar, the public health curriculum in the pre-medical and medical school not only matches what is taught in New York but emphasizes cross-cultural medicine—it reflects and builds on the cultural milieu while encouraging independent thought and value identification.

WCM: How has the establishment of the Qatar branch informed public health at Weill Cornell?

AM: What we’re doing for that part of the world is a feather in our cap, but I think it’s also advantageous to us. We’re able to work on some topics we wouldn’t necessarily be able to study, like the differences in the ethics of clinical decisions in that culture versus our own. It has also given us some spectacular research opportunities. For example, we’re currently doing a study of diabetes as a risk factor for heart attacks and strokes in Doha. Dr. Ron Crystal and I are going to follow up those studies with gene analysis to try to figure out whether there are special genetic predispositions to diabetic complications like heart attacks and strokes in the Qatari population. So it has allowed us to do good in an important part of the world. It also bears mentioning that in addition to Qatar, the Department collaborates in global research, clinical, and educational programs in countries including Haiti, Peru, India, Panama, and Tanzania.

— Beth Saulnier