Mission Possible: Evidence-Based Solutions

From the air we breathe to the neighborhoods we inhabit, the geographic places and social spaces we move among profoundly affect humanity, setting the stage for our health, as well as for chronic disease.

In this special, themed issue of Columbia Public Health, we detail how our natural, built, and cultural environments shape human health across the lifespan, document their role in chronic illness, and report on evidence-based interventions that can turn the tables on disease and promote well-being.

Scientists have already shown that 70 percent of a population’s health emerges from the exposures of daily living, precisely the focus of public health-led prevention and health promotion. Sometimes they affect our present health—as when air pollution triggers asthma attacks, or a safe and pedestrian-friendly neighborhood supports a person's efforts to manage diabetes. And sometimes these exposures alter our trajectory, as when contaminated drinking water sets the stage for heart disease or childhood stressors affect adult breast cancer risk.

A growing body of evidence suggests that in combination, as they so often appear in our modern environment, such exposures escalate our risks. And when they are curtailed, the corresponding health risks can likewise be attenuated. Protecting our health, then, requires collective agreement and action to control these hazards.

In the articles that follow, we highlight the power of Columbia Mailman scientists collaborating across disciplines, a 21st century approach vital to solving the complex and critical problems affecting our health.

A similar commitment to innovation motivated Jody Wolfe, Josh Mailman, and their mother, Phyllis Mailman, two decades ago, when the family set out to endow Columbia’s School of Public Health and honor the legacy of Joseph L. Mailman, the School’s eponym, with our current facility at 722 W. 168th St. By providing a dedicated physical space to serve as the School’s intellectual and social home base, the Mailman family has spurred the kinds of conversations and collaborations that emerge from sustained connections and regular contact—the kind of contact at the heart of team science.

As we look forward to the School’s centennial in 2020, we continue to seek opportunities to leverage all that’s been achieved in our first century and propel our pursuit of 21st century science for solutions.