The Work of David Rosner

David Rosner uses history to help people and doesn’t shy away from testifying in court to do so. He is the 2014 recipient of Sigma Xi’s John P. McGovern Science and Society Award, which is given to those whose work transcends their career as a researcher. Rosner has been involved with lawsuits to hold industries accountable for harm they’ve caused by exposing people to toxins such as silica sand, lead, and asbestos. His books include Lead Wars: The Politics of Science and the Fate of America’s Children, which he coauthored with Gerald Markowitz. Rosner works at Columbia University’s Mailman School of Public Health, where he is the Ronald H. Lauterstein Professor of Sociomedical Sciences. He is also a professor of history and co-director of the Mailman School’s Center for the History and Ethics of Public Health. He became a Sigma Xi member in 1977. He is also an elected member of the Institute of Medicine.

What drew you to public health?

Of course, I’m a child of the ‘60s, meaning that I entered college thinking that science was inherently a force for good. By the end of the ‘60s, our image of what chemistry was, and what technology could do, were sullied by our experiences in Vietnam. I actually flirted briefly with becoming a chemistry major and remember all too well when my flirtation ended. As a junior at City College of New York when entering my introductory chemistry lecture, I was confronted by a picket line and a friend of mine carrying a picket sign. The sign had a question mark after DuPont’s famous slogan, “Better Living Through Chemistry,” and a picture of a village burning, ostensibly from a napalm attack.

It was then that I became deeply concerned with the “ethics” and the history of science. I became a psychology major, thinking that this major combined a scientific methodology with deeply humanistic concerns. By the time I graduated, I came to believe that the issues of public health and psychology were intimately connected after working in a research unit with the New York State Department of Mental Hygiene. So many of the children were suffering from issues that were not solely “psychological,” as I then understood them, but from basic public health problems.

Public health seemed to be a field that could combine good science, great public service, and incredible humanity when properly applied. I became interested in health and society, how disease is a product not just of “natural” process but of the worlds we build and the inequities that are all too often the root of the problems our people face.

There are few fields where you can see such immediate and important outcomes to your technical and scientific work. The field is so rewarding for it is so broad in its approach, whether it be its concrete role in providing pure milk to children, developing systems for the distribution of pure water, or the social science research needed to properly help communities develop strategies to empower themselves to protect themselves from disease. I went back to graduate school at Harvard where my professors encouraged me to try to join history of science and public health and that’s been my goal since.

Your first case in court was to testify on behalf of a migrant worker who had silicosis after working with silica sand. What was it like for you to expand your role as a historian to one of a “public expert?”

I’ll never forget the experience of meeting the family of a very sick Mexican worker who had worked in the oil fields near Odessa, Texas. He had been hired to clean out the huge storage tanks. He had been sent into the tanks with sandblasting equipment but virtually no personal protection or proper ventilation to blast the tank to clean off old oil residue. I had recently co-authored, with Gerald Markowitz, Deadly Dust and was waiting to testify in a trial in which I was going to tell of the long history of knowledge about silica’s dangers. It was my first time testifying.

In the area outside the courtroom, the worker’s wife and children gathered around me, thanking me for testifying for her husband and their father. It was heartbreaking, for it was going to be a hard case to win, as the exposure was so long before (probably 25 years by that point) and the companies had an extremely well-financed set of lawyers. Further, the jury was almost completely Anglo in an area where migrant workers were not very welcomed. I had recently co-authored, with Gerald Markowitz, Deadly Dust and was waiting to testify in a trial in which I was going to tell of the long history of knowledge about silica’s dangers. It was my first time testifying.
It was then that I knew I was willing to enter court and to share my knowledge and expertise if asked. It seemed to be my social and professional responsibility to diseased workers, poisoned communities, and future generations of children. Since then Jerry and I studied other industries, such as the plastics (Deceit and Denial) and lead industries (Lead Wars), and these books too have led to participation in various court cases. I have been particularly proud of my and Jerry’s role in a recent California court decision. The court has ordered the lead pigment industry to put $1.15 billion into a fund to pay for removing lead paint from the walls of tens of thousands of California homes. I’m so proud of the role my historical work played.

What have you learned about effective research communication?
Scientists and scholars have to realize that they are a deeply human social resource, a resource for all of our citizens, and that honestly explaining what scientists do is more than just a sideline of their work. We know that without public support, we won’t have the funds to do our jobs. But more importantly, we have to understand how much we owe to our communities and how much we have to give back for their faith in our work. When we truly understand this responsibility, we will undoubtedly find it within ourselves to communicate its importance to our fellow citizens, through our written, oral, and personal actions.

How does history shed light on the question of who should be held responsible for occupational disease—public health agencies, government, labor, or industry?
We have been in a centuries-old debate over the responsibilities for risk and danger in American society. In earlier times, we asked, should the “master” be responsible for taking care of “their” servants, whether they be serfs or slaves? Thank goodness we “settled” that debate by the end of the nineteenth century with the ending of slavery and serfdom in most of Europe. With the development of market capitalism, we seemed to settle on the idea that with freedom came the “assumption of risk” by those who were employed. And with industrialization, we began to understand that workers could not “assume” the risks of a job when they lacked both the information and technology to do so. There was a responsibility that extended to the employer because it was the employer that controlled the pace of work, the type of work, the equipment that workers had to work with. Our experience with silicosis, in part because of its long latency, help frame the questions we now face about environmental and occupational chronic conditions. How do we apportion responsibility for chronic diseases in the new industrial worlds we have created? We have questions that resonate with the issues we now confront regarding cancer, heart disease, stroke, and other conditions that are killing us today.

What do you think most people would be surprised to learn about the history of occupational disease?
I think most people would be surprised by how many people have sacrificed so much for our long experiment with industrial production. Undoubtedly, our 150-year-long experience with industrial production has provided enormous benefits and gains for us as a society. But, we owe a lot to the millions of workers and their families who have sacrificed so much in life and limb. I think the study of this experience may humble most.

What is your current research project?
I’m writing a history of disease that puts the human decisions front and center. I’m playing around with two titles: Building the Worlds that Kill Us is one. The second title is The Un-Natural History of Disease. Both capture the goal of the book, which is to emphasize that our decisions on how we construct our societies—both physically and intellectually—determine in great measure what diseases and disabilities we will die from. It will look at disease as emblematic of the worlds we build. For example, how did we create urban conditions that made cholera, tuberculosis, and other infectious diseases “emblematic” of nineteenth-century American life? How did our experience with the new industrial age feed a new set of diseases and concerns? Or, what is it about our new synthetic worlds that may lead to new problems, from endocrine disruptions and epigenetic conditions not yet identified?

Sigma Xi encourages its members to use their skills to support human rights. What advice do you have for researchers who want to get involved with human rights issues?
Oh my. It is hard to miss the opportunities we have. So many of our concerns from global warming through the impact of poverty on the health and well-being of people around the world are, or should be, the obligation of all Sigma Xi members to address.

Read the full interview with David Rosner at http://www.sigmaxi.org.