

## HISTORY OF SCIENCE

## Protesting Scientists

Audra J. Wolfe

At the opening plenary session for this year's annual meeting, outgoing AAAS president David Baltimore endorsed Science Debate 2008, a petition asking the American presidential candidates to debate their positions on science, technology, and the environment (*J*). Baltimore's call for a traditional political debate might at first seem a far cry from his days as a campus radical and antiwar protester. But hard as it is now to believe, only 50 years ago activist scientists couldn't even get the AAAS Council to affiliate with a Quaker group that called on scientists to participate in "constructive" research. In *Disrupting Science*, Kelly Moore attempts to explain how scientists' attitudes about the proper role of science and scientists in public life changed so dramatically within two generations.

In the years following World War II, U.S. scientists found themselves deeply enmeshed in military and government contracts. Security clearances and classified work became the norm, particularly for the physicists and chemists associated with nuclear energy. How some of these scientists attempted to limit the destructive powers of their inventions, largely through governmental advising, is a familiar story. Not as well known is the path of activism that less-prominent scientists took when the limits to the physicists' critiques became clear. Moore's well-researched account introduces the pacifists, petition writers, newsletter publishers, and protesters—scientists all—who doggedly drew attention to the ways that militarism was infiltrating the practice of science in the United States.

*Disrupting Science* asks not only why scientists engaged in such sustained self-examination but also how the different forms these actions took reflected changing notions about individual and collective responsibility, the nature of progress, and the structure of democracy. Moore focuses on three organizations that espoused very different approaches to social action: the Society for Social Responsibility in

Science, a Quaker fellowship that encouraged individual scientists to reject military contracts; the Committee for Nuclear Information (CNI),

a St. Louis-based group that pioneered information-based advocacy; and Science for the People, a decentralized radical collective that wanted a fundamental reorganization of American science. Given these groups' varied levels of success by traditional measures such as organizational survival and political influence, Moore is at pains to say that their direct impact misses the point. Ultimately, she argues, these movements were important

because they greatly expanded the range of options for scientists' political expression.

Moore has a second, more subtle point, perhaps best illustrated through her account of the development and growth of CNI. In the four years following the March 1954 Bravo test of the hydrogen bomb, the American public was presented with a number of competing claims about the dangers of atomic fallout. The Atomic Energy Commission issued several reports designed to allay public fears, claiming, for instance, that x-rays posed a greater threat to human health than atomic fallout. Meanwhile, geneticists such as Curt Stern, A. H. Sturtevant, and Hermann J. Muller publicly expressed concerns that contemporary radiation levels would lead to thousands of mutations in future generations. A fierce televised debate between Edward Teller and Linus Pauling on the scientific merits of a nuclear test ban only muddied the waters. Into this fray stepped Washington University biologist Barry Commoner with a plan to provide the public with more, rather than less, information. When CNI was created in the spring of 1958, its 182 founding members saw their mission as the provision of neutral information that would allow citizens to make their own informed decisions.

This information-provision model was wildly successful, inspiring a number of successor groups such as the Scientists' Institute

for Public Information, the Committee for Environmental Information, and the Union of Concerned Scientists. Even so, these groups' officially "nonpartisan and formally apolitical" approach fooled no one. In the case of CNI, it was common knowledge that the scientists involved opposed nuclear testing, and all the participants recognized that deciding what information to provide was, in itself, a political decision. At the same time that the authority of scientific knowledge became more enshrined in public consciousness, Moore argues, the authority of individual scientists to speak from beneath the cloak of objectivity was in decline.

Moore (a professor at the University of Cincinnati) is a sociologist rather than a historian, and the book's grounding in social movement theory is its greatest strength. She is particularly interested in countering a tendency in the social studies of science that considers sci-



**Scientists clashing.** In February 1958, San Francisco's KQED-TV hosted a heated debate on a nuclear test ban between Edward Teller (right) and Linus Pauling (left).

entists' public actions primarily through the lens of self-interested boundary work, and her examples serve as a welcome reminder that scientists are people, too, with moral and religious convictions that influence their political choices. By ending her account with a nod to the vibrant growth of such new subdisciplines as green chemistry and wildlife ecology that draw on an advocacy base, Moore has written a hopeful book. One could imagine an alternate ending in which she addressed the American scientific community's response (or lack thereof) to the United States's most recent round of military interventions. In choosing to skirt the issue, she leaves us to draw our own conclusions on the lasting legacy of postwar scientists' activism against a militaristic culture.

## Reference

1. [www.sciencedebate2008.com](http://www.sciencedebate2008.com).

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**Disrupting Science**  
Social Movements,  
American Scientists,  
and the Politics of the  
Military, 1945–1975

by Kelly Moore

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