

GENEWATCH

MARCH 2001 VOLUME 14, NO. 2



MONITORING THE
SOCIAL IMPACT OF
BIOTECHNOLOGY

A BULLETIN OF THE COUNCIL FOR RESPONSIBLE GENETICS

Australian Mouse Study Confirms CRG Warning

BY STUART A. NEWMAN

A recent news item ("Australians Create a Deadly Mouse Virus," *New York Times*, January 23, 2001) provides an apt occasion to reflect on the origin of the Council for Responsible Genetics (CRG) and to note the lag that may occur between judicious warnings about adverse consequences of biotechnology and their eventual realization.

During the late 1970s the specter of novel pathogens arising by accident or on purpose through use of the recently developed gene splicing technologies led to what has been termed the "recombinant DNA debate." Robert Pollack, a virologist at the Cold Spring Harbor Laboratory, was the first to bring these concerns to his colleagues, and this led to a letter of warning in *Science* magazine from a group of scientists central to the field in 1974. This group included the Nobel laureate James Watson, the future Nobelists Paul Berg, David Baltimore and Daniel Nathans, and the bacterial geneticist Stanley N. Cohen. This letter was followed by a conference in

CRG has been issuing warnings on all troublesome aspects of biotechnology during the more than two decades of its existence.

Asilomar, California, in 1975, where a set of guidelines for the conduct of recombinant DNA research was promulgated under a precautionary framework. Robert Sinsheimer, a microbial geneticist at Caltech, characterized the precautionary principle in

a 1977 forum at the National Academy of Sciences, "In the broadest sense we are here, through the creation of wholly new gene combinations, intervening profoundly in the evolutionary process...we should take every possible precaution to keep these creations out of our biosphere."

Although a version of the Asilomar guidelines was adopted in 1976 by the National Institutes of Health (NIH), the major U.S. public funder of biomedical research, by 1978 a new view had taken hold in the scientific establishment under the leadership of several of the signers of the 1974 *Science* letter and their allies. This view entirely abandoned the precautionary approach. In a 1977 *New Republic* article, for example, James Watson asserted that the Asilomar conference was "an exercise in the theater of the absurd" and that the effort to assess and control genetic engineering was "a massive miscalculation in which we cried wolf without having seen or even heard one." This shift led to the weakening of the NIH Guidelines and to attempts to dismantle them entirely. A detailed history of this policy rever-

continued on page 15

INSIDE

Still Eating GE Food?	2
FDA Policy Revisions	3
Frankentrees	4
CRG Internship Program	4
SPECIAL SECTION	
Adrienne Asch	5
Bonnie Steinbock	8
Marsha Saxton	10