

## 2. Introductory and Summary Comments

The NSF prepared a report entitled *Societal Implications of Nanoscience and Nanotechnology* in September 2000 and published it for broader public distribution in 2001 [9]. The proceedings were followed by various program solicitations and the assignment to the National Nanotechnology Coordination Office (NNCO) in 2001 of a monitoring role for potential unexpected societal implications. The NNCO also has the role of communicating with the public.

In 2003, a subgroup of the NSET Subcommittee, the Nanotechnology Environmental and Health Implications (NEHI) working group, was established to address environment, health, and safety (EHS) issues. Among those issues are identification and prioritization of EHS research needs and communication of information pertaining to the EHS aspects of nanomaterials to researchers and others who handle and use nanomaterials.

In another follow-up to the 2000 *Societal Implications* report, NSF has made support for social, ethical, and economic research studies a priority by (a) including this as a new theme in the NSF annual program solicitations since 2000; (b) requiring its nanotechnology research and education centers to address societal implications of the research performed in the respective center; and (c) conducting a study on the impact of technology and converging technologies from the nanoscale [10].

NSF has pursued the research and education themes “Nanoscale processes in the environment” and “Societal and Educational Implications of Nanotechnology” as part of its NNI programs since July 2000 (annual program solicitations NSF 00-119, 01-157, 02-148, 03-043, 03-044), and 100 examples of awards made in this area are posted on [www.nsf.gov/nano](http://www.nsf.gov/nano), listed under Solicitations and Outcomes. Examples of projects supporting societal implications are given in Table 2.3. EPA has had annual program announcements in the STAR program with focus on nanotechnology and

**Table 2.3**  
**Examples of NNI Projects Supporting Social Implications Research**

Project	Agency	Institution
Nanotechnology and its publics	NSF	Pennsylvania State University
Public information and deliberation in nanoscience and nanotechnology policy (SGER)	Interagency	North Carolina State University
Social and ethical research and education in agrifood nanotechnology (NIRT)	NSF	Michigan State University
From laboratory to society: developing an informed approach to nanoscale science and engineering (NIRT)	NSF	University of South Carolina
Database and innovation timeline for nanotechnology	NSF	UCLA
Social and ethical dimensions of nanotechnology	NSF	University of Virginia
Undergraduate exploration of nanoscience, applications and societal implications (NUE)	NSF	Michigan Technological University
Ethics and belief inside the development of nanotechnology (CAREER)	NSF	University of Virginia
All centers, NNIN and NCN have a societal implications components	NSF, DOE, DOD, and NIH	All nanotechnology centers and networks