

Executive Summary Nanotechnology Model Legislation

Joint NGO NanoAction Group
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This model legislation aims to integrate existing law (the 21st Century Nanotechnology Research and Development Act of 2003) with amendments pending in Congress (the National Nanotechnology Initiative [NNI] Amendments Act of 2008), and with the suggestions of the NanoAction group. By incorporating these into a single document, all citizens have the opportunity to see the relevant public law and suggested changes to it in a coherent format. At present, only the highly specialized Congressional aides who compose legislative documents, the Members to whom these aides translate such documents, and well-funded interested parties, have a realistic chance of seeing the overall picture and appreciating the details of which it is comprised.

The development of model legislation speaks to a concern for citizen understanding, deliberation and input first recognized in the 2003 Act. Although Congress in 2003 required attention to social and environmental concerns, as well as participation that would help policy-makers understand perspectives in the general public on them, it declined to provide sufficient administrative status or budget for these activities to make them a significant part of the NNI. Nonetheless, diverse citizen voices in a variety of deliberative forums in the United States¹ and abroad² have consistently expressed interest in exploring and enabling the benefits of nanotechnology, in doing so with precaution, and in assuring that these developments are guided by informed citizen participation. These same voices have consistently expressed frustration with the meager effort to enable citizen deliberation and participation, and with the continuation of a business-as-usual approach that makes the NNI a pork-barrel project for businesses and universities.³

¹ Loka Institute Community Advisory Committee on Federal Nanotechnology Policy, "Nanotechnology: Getting the Public Involved," September 2004, at http://www.loka.org/Documents/nanotech_workshop.pdf; and National Citizens' Technology Forum, "Human Enhancement, Identity, and Biology", March 2008, at <http://www4.ncsu.edu/~pwhmds/>

² Involve, "Democratic Technologies? The Final Report of the Nanotechnologies Engagement Group", June 2007, at <http://www.involve.org.uk/negreport>

³ For example, the California Blue Ribbon Task Force on Nanotechnology, whose deliberations informed the first nanotechnology amendments bill introduced in Congress by Representative Mike Honda in August 2007, was comprised entirely of individuals with unambiguous financial and/or career interests in rapid commercialization (with one exception).

Amendments passed by the House seek to address these concerns by creating a Coordinator for Educational and Societal Dimensions of Nanotechnology in the Office of Science and Technology Policy. The two primary responsibilities attached to this position are to develop a plan for Environmental, Health and Safety research (Ethical, Legal and Societal Issues research centers were established by the 2003 Act); and to develop high school and undergraduate education programs to promote narrowly-construed nanotechnology education to these young audiences. Only the promotional activities have a budget; research in the other areas will be left to decisions in more than twenty federal agencies.

The model legislation seeks to demonstrate that a more balanced approach is possible. Some of the principal changes advocated are:

- With such disruptive technologies, research should be evenly divided between inquiries into citizen concerns about social and environmental dimensions and efforts to push the basic science and its commercial applications. Recognizing that scaling up to parity immediately would be very difficult, we call for a 40% floor for Environment, Health and Safety and Education and Societal Dimensions research and programs.
- Throughout the document, we suggest ways to assure that labor, environmental, public interest and citizen groups have the opportunity to learn about, reflect on, and voice their aspirations and concerns about nanotechnology.
- The model legislation defines nanotechnology broadly as a set of practices and activities affecting and affected by all of society, not a laboratory and business initiative that is subsequently taken up by the rest of society.
- Research should be as inclusive and participatory as possible.
- Research and policy should seek to understand and provide remedies to social disparities that are otherwise likely to accompany the vast changes wrought by the growth of nanotechnology.

The model legislation may be accessed at www.loka.org/Documents/nanolegislation