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Analysis of NNI

Upon visiting the National Nanotechnology Initiative (NNI) website you find yourself staring at a colorful, well organized website. The site is flowing with little tidbits and one-liners of the wonders of nanotechnology. This website clearly has a bias towards pro-nanotechnology. The NNI's mission statement as stated right on the homepage is: "...to ensure U.S. leadership in nanotechnology that will be essential to improve human health, economic well being and national security."<sup>1</sup> The NNI is the government's official response to the nanotechnology boom. It was created in 2001 as part of the National Science and Technology Council. This council is directed by the president and is his principal means of coordinating science, space, and technology research. The NNI is comprised of 23 different agencies including the National Science Foundation, Department of Defense, and Department of Energy. Each agency receives funding from the government to advance the study of nanotechnology. Since its inception in 2001 the funding the government has provided increased 175%. For example, the National Science Foundation (NSF) received \$150 million in 2001 and is proposing \$373 million in 2007. That is a 149% increase in funds. Another example would be the Department of Defense. It received \$125 million in 2001 and proposed \$345 million for 2007. That is almost triple the funding and a 176% increase in funds. In total, \$464 million was spent on nanotech research and the President has proposed \$1,277 million for 2007.<sup>2</sup>

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<sup>1</sup> [www.nano.gov](http://www.nano.gov)

<sup>2</sup> NNI's Research and Development Funding in the President's 2007 Budget

This is not to say that the NNI completely ignores the social and health implications of nanotechnology. On the homepage of the NNI, there is a 120 page article from the NSF and the Subcommittee on Nanoscale Science, Engineering and Technology titled, Nanotechnology: Societal Implications—Maximizing Benefits for Humanity. You can also find that, although not as obvious, the NNI funds research for the social and health implication of nanotechnology. The President’s 2007 Budget for the NNI states that aside from advancing the study of nanotechnology the NNI also, “supports activities aimed at addressing the societal implications of nanotechnology, including ethical, legal, human and environmental health, and workforce related issues.” This goal of the NNI is not as easy to find as the goal stating the importance of advancing nanotechnology. Even if you look at the goals of the NNI the closest goal that resembles this statement is: “Support responsible development of nanotechnology”.<sup>3</sup> To back this statement up the NNI gave \$5 million to the Environmental Protection Agency in 2001 and proposed \$9 million in 2007. This may prove that the NNI is looking into the health and societal issues, but one can not help but notice the lack of funds the EPA received compared to the NSF and DOD. It is like the NNI funds the EPA just to be able to say that it is doing something about the societal implications. It is more like a PR thing than anything else.

The NNI website is pretty easy to get to and has a vast amount of information. The fact that its web address is [www.nano.gov](http://www.nano.gov) shows that it is trying to be user-friendly to everyone. People do not remember long complicated web addresses. There is also a section that educates people. There are resources for teachers and kids alike. The kids section is so colorfully made that is attractive to all kids. They even have made up super heroes named NanoKids. The intended audience for the NNI’s website seems to be pretty

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<sup>3</sup> [http://nano.gov/html/about/home\\_about.html](http://nano.gov/html/about/home_about.html)

much everyone. They have detailed material for scientists and nanotech enthusiasts and also material for kids and the general public who does not know that much about nanotechnology. However there is one thing missing from the website: little to no information regarding the negative side of nanotech. The website is filled with the wonderful prospects of nanotechnology and how great it will be for our lives but it says barely anything about the negative side. Yes, one could argue that the NNI funds research to look into the societal implications of nanotechnology but when taking a look at the funding distribution of the NNI, the funding is very skewed.