



## FIRST INTERNATIONAL NANOTECHNOLOGY CONFERENCE ON COMMUNICATION AND COOPERATION

### **Abstract**

Long-term View for Nanotechnology Research and Development

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The U.S. National Nanotechnology Initiative (NNI) is a long-term program announced in January 2000 that coordinates 23 federal departments and independent agencies with a total budget of about \$1.2 billion in fiscal year 2005. This lecture presents the genesis of NNI, its vision and long-term strategy, current status and likely evolution.

Nanotechnology has opened an era of scientific convergence and technological integration with the promise of broad societal implications. This makes it all the more critical that we strike a proper balance between the promised benefits, and the necessary measures to mitigate and prepare for possible undesirable secondary effects. The presentation will include an outline the investment in the areas of environmental, health and safety, as well as nanomanufacturing and development of academe-industry-government partnerships. For the next five years, new priorities are envisioned in exploratory research for nanomedicine, energy conversion, food and agriculture, realistic simulations at the nanoscale, molecular nanosystems, and improving human potential.