



Nanotechnology: Small Matters!

ICAN Productions, Ltd.
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Science Foundation

Objectives

- Describe our goals
- Provide an over view of the project
- Describe our current thinking about the issues we will address

Goals for Small Matters

- To model and promote balanced consideration of the potential benefits and challenges presented by nanotechnologies
- To foster thoughtful discussion among specific stakeholders about the implications of nanotechnologies

Goals for Small Matters

- To inform the general public, including secondary and college age students, about the potential benefits and societal implications of nanotechnologies
- To motivate members of the target audience to continue their examination and deliberations about nanotechnologies beyond participation in project events

Target Audience

- Adults with a special emphasis on reaching opinion leaders and decision makers within key stakeholder groups
 - Business leaders
 - Government officials
 - Environmentalists
 - Science and technology journalists
 - Scientists

Project Overview

- *Nanotechnology: Small Matters*, a 3-hour series of Fred Friendly Seminars
- Outreach for public engagement
- Online resources
- Moderated online forums
- Radio spots
- Resource book

Nanotechnology: Small Matters

- Programs will utilize the well established Socratic format of the Fred Friendly Seminars to explore ethical, social, legal, environmental, and policy issues emerging from nanotechnologies
 - Intended for distribution through the PBS networks
 - Coupled with school and seminar discussion guides emphasizing the interaction of science and society

Nanotechnology: Small Matters

- Programs will be taped at 3 locations and accompanied by deliberative in-person and online moderated forums
 - Boston Museum of Science
 - University of California, Berkeley in partnership with Lawrence Hall of Science
 - South Carolina State Museum

Outreach for Public Engagement

- Developed and managed by AAAS's Office of Public Understanding of Science
- Working with regional science centers, individual sites will design a program specific to their area's interests and concerns

Outreach for Public Engagement

- Science Centers include the following:
 - New York Hall of Science
 - Durham Museum of Life and Science
 - Chicago Museum of Science and Industry
 - St. Louis Science Center
 - Denver Museum of Nature and Science
 - Seattle Pacific Science Center
 - California Science Center

Online resources and moderated forums

- Developed and managed by Lawrence Hall of Science at UC-Berkeley in collaboration with Earth & Sky Radio
- Focus will be on societal implications, ethical and legal issues
- Linked to NISE Net web resources for science content

Radio Spots

- Developed and distributed by Earth & Sky Radio
- Spots will be quick turn-around (5 to 7 days) and focus on issues of immediate interest

Resource Book

- Authored by George Whitesides and Felice Frankel and published by Harvard University Press
- Utilize Frankel's beautiful imagery and Whitesides' eloquent writing style to convey scientific concepts that underlie the issues addressed in other components

Potential Issues

- Program One: “Sensors in the Cereal (w.t.)”
 - Considers issues of privacy and security
 - Helps the audience consider the tradeoffs between guarding their privacy and taking advantage of all the monitoring and information processing capabilities that will come with enhanced sensing technologies

Potential Issues

- Program Two: “Bucky Balls in the Backyard (w.t.)”
 - Explores environmental and regulatory issues as nanomaterials and functional structures are developed and deployed
 - Helps the audience consider the difficult tradeoffs that come with technologies that promises to improve our health and environment while posing their own uncertainties

Potential Issues

- Program Three: “Be More Than You Can Be (w.t.)”
 - Explores issues raised by the biologic applications of nanotechnology
 - Helps the audience consider how far we should go from treatment and prevention to enhancement and beyond.