Workshop Goals & Objectives:
Scope, Agenda, and Charge to Participants

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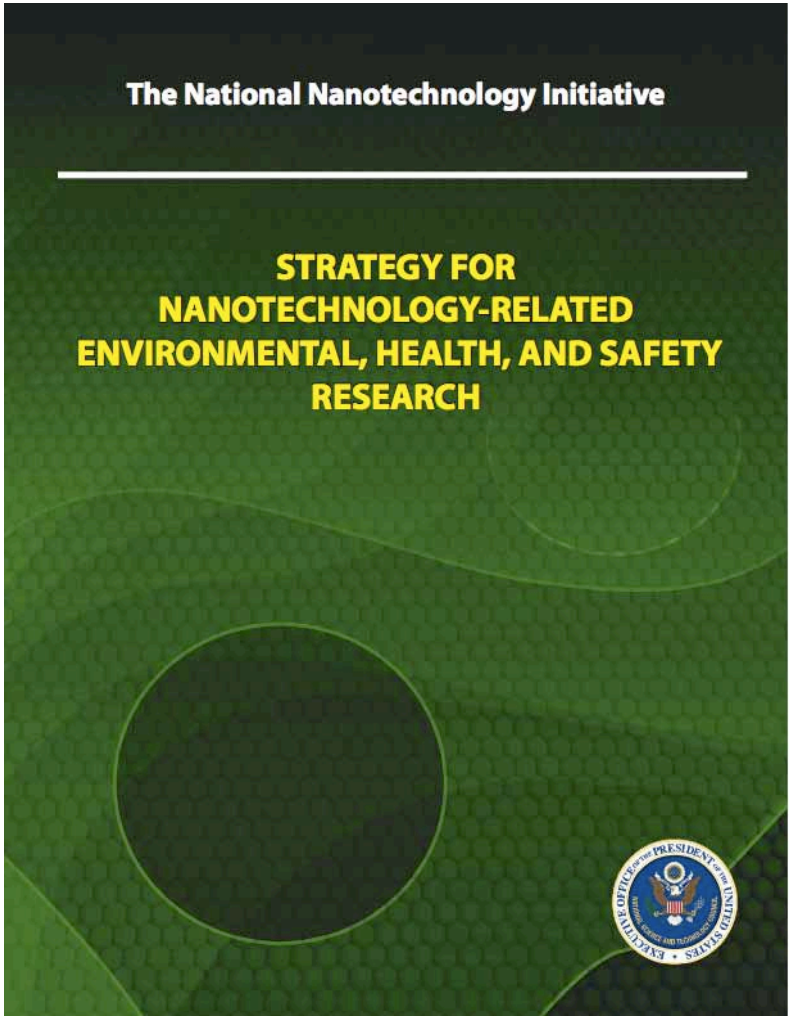
Workshop Questions

Overarching Questions

- How can we make sure the NNI EHS Research Strategy communicates the status and research needs for effective Risk Management Methods to all stakeholders (e.g. public, federal government, regulated industry, academia)?
- How can we ensure ELSI considerations are taken into the next generation of the NNI EHS research strategy?
- What additional information should the Federal Government take into consideration when it updates its EHS Research Strategy?

2008 EHS Research Strategy Document



- Common framework for ongoing dialogue, collaboration, and co-funding.
- Foundation from which agencies can build or modify their implementation plans.
- Near to long term perspective with an internal adaptive management process.

Background for RMM, ELSI Meeting Topics

2008 Strategy for Nanotechnology-Related EHS Research

- 2006 Analysis of Government Research (snapshot)
- Multiple Agencies Participation
  - DOD, DOE, EPA, NIH, NIOSH, NIST, NSF, USDA
- Evaluation of Research Projects
- 5 Research Categories Identified
  - Instrumentation, Metrology, Analytical Methods
  - Nanomaterials and Human Health
  - Nanomaterials and the Environment
  - Environmental Exposure
  - Risk Management Methods

For Current Meeting, New Topic-ELSI

Risk Management Method Topic

2008 RMM Research Categories

- Workplace practices, process, and environmental exposure control
- Product or material life cycle to inform risk reduction decisions
- Develop risk characterization-classify physical, chemical characteristics of nanomaterials
- Develop nanomaterial use, safety incident, trend information. Focus on risk management efforts.
- Develop 2-way risk communication approaches and materials

Risk Management Method Topic Cont.

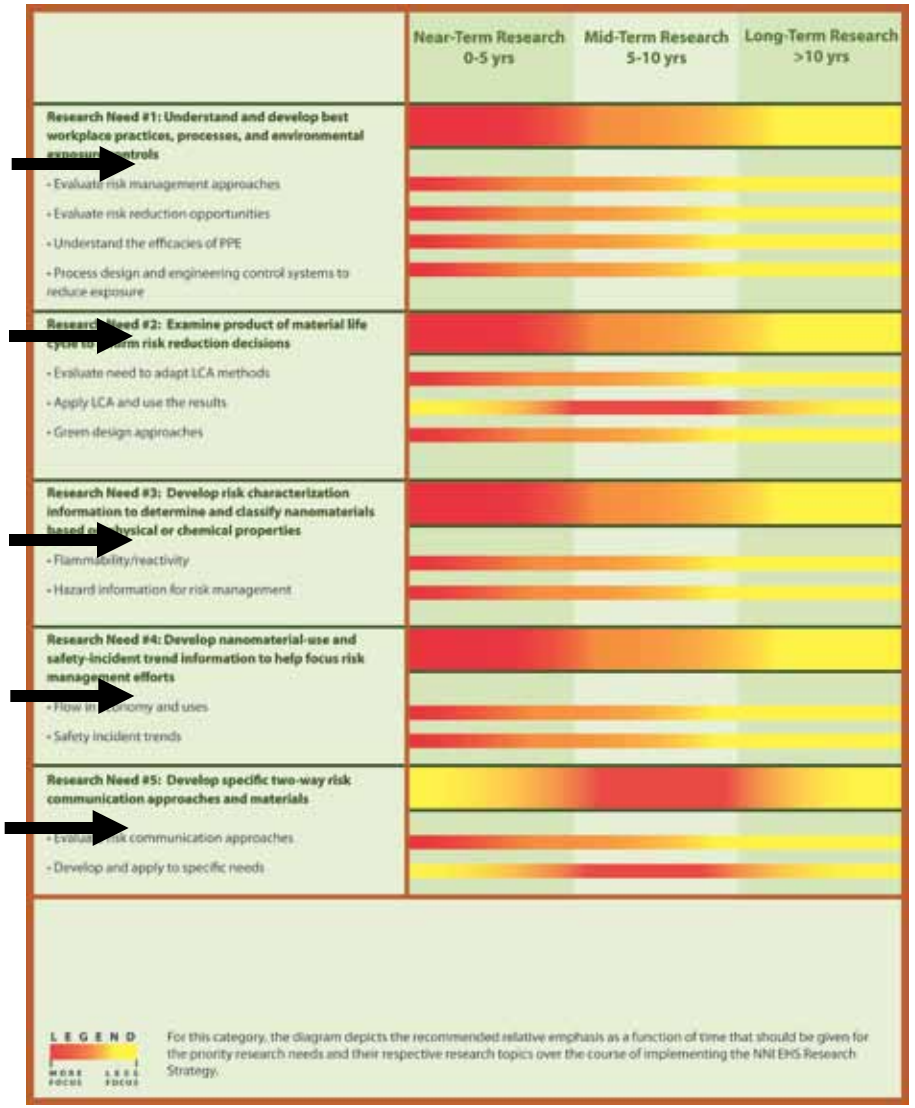
Risk Management and the Workplace
Breakout Session 1

Risk Management and LCA
Breakout Session 2

Risk Characterization Information
Breakout Session 3

Risk Management and the Workplace
Breakout Session 1

ELSI and RMM Communications
Breakout Session 5



Ethical, Legal, and Societal Implications Topic

Developing and applying risk management methods is one aspect of EHS decision making

Risk management also fits within a broader societal context

- Equity and distributional issues
- Legal frameworks
- Economic (micro and macro) factors
- Public engagement and participation

NNI EHS Workshops

Human and Environmental Exposure Assessment
February 24-25, 2009
www.nano.gov/html/meetings/exposure

Nanomaterials and the Environment &
Instrumentation, Metrology, and Analytical Methods
October 6-7, 2009
www.nano.gov/html/meetings/environment/

Nanomaterials and Human Health &
Instrumentation, Metrology, and Analytical Methods
November 17-18, 2009
www.nano.gov/html/meetings/humanhealth/

Capstone: Risk Management Methods & Ethical, Societal, and Legal Implications of Nanotechnology
March 30-31, 2010
www.nano.gov/html/meetings/capstone/

Workshop Goals

- **Provide an open forum to facilitate effective communication on RMM and ELSI by bringing stakeholders together**
  - Determine the status of RMM as it applies to nanotechnology, including gaps, emerging trends to adaptively modify the current RMM research needs,
  - Determine the status of ELSI as it applies to nanotechnology, including gaps and emerging trends that might guide the addition of ELSI to the EHS strategy,
  - Integrate output from previous workshops, identify crosscutting themes, issues, and opportunities and,
  - Build dialogue and facilitate collaborations

Workshop Goals Cont.

The output of the workshop will be a report:

- Status of RMM and the progress made in each RMM research need, including
  - Barriers to completing research needs
  - A timeline for current and future research needs
- Review of the status of ELSI and recommendations for inclusion in the next iteration of the EHS strategy
- Produce a summary of the overarching, integrated EHS research themes identified throughout the workshop process
- Determine how overarching, integrated themes inform risk management methods and identify grand challenges for the next decade of nanotechnology EHS research

Workshop Representation

- Academia
- Industry
- Public Health Advocates
- General Public
- Media
- Federal Government
- Webcast Participants

Workshop Leadership

- **Workshop Planning Team**
  - RMM Subcommittee
  - ELSI Subcommittee
- **Workshop Participants**
  - Speakers
  - Subject Matter Experts
- **NNCO Staff**
- **Workshop Co-Chairs**

Workshop Design – Day 1 Morning Session

This morning

- Welcoming, Opening remarks,
  Framing the Workshop Goals
- Plenary Session on Topics
  - Risk Management Methods
  - Ethical, Legal, and Societal Implications
  - Case Scenario Introduction
- Lunch on your own

This afternoon

- Breakout Sessions
- White House Perspective on Nanotechnology

Workshop Design – Day 1 Afternoon

This Afternoon's Breakout Sessions (1:45 pm -3:45 pm)

- Risk Management and the Workplace (Session 1)
- Risk Management and Product/Material Lifecycle (Session 2)
- Risk Characterization Information (Session 3)
- Ethical, Legal, and Societal Implications: What are attitudes about nanotechnology and how are they formed? (Session 4)
- ELSI and Risk Management Communications (Session 5)
- Specific ELSI Issues (Session 6)

This Afternoon Plenary (4:00 pm, Rosslyn Ballroom)

White House Perspective on Nanotechnology

Tom Kalil, Office of Science & Technology Policy

Workshop Design – Day 2

Tomorrow's Agenda

Morning Session

- Report Out: Breakout Sessions
- Case Scenario
  Panel Discussion
  Interface between RMM and ELSI

Working Lunch: Workshops Summary

Afternoon Session

- Overarching Themes from both RMM and ELSI
- Grand Challenges for nanoEHS Research

Charge to Participants