

2021 NNI Strategic Planning Stakeholder Workshop

January 11–13, 2021

Daily runtime: 11:00 a.m.– 3:00 p.m. ET

Over the past 20 years, the National Nanotechnology Initiative (NNI) has supported nanotechnology discovery, development, and deployment, and has nurtured the strong ecosystem that exists today. Building on this foundation, nanoscience will underpin a wide range of advanced technologies and enable solutions to challenges into the future. Conversations at this workshop will identify effective mechanisms to advance research and development, strategies for communication, and priority topics to shape future directions.

Jan. 11 Outlining the Vision

ET

Agenda

11:00

Welcome and Program Overview

Lisa Friedersdorf, National Nanotechnology Coordination Office & NSET Co-Chair

11:15

World-Class R&D

This session will explore the vision for the future of nanotechnology research and development with an emphasis on identifying key supporting elements needed. Panelist presentations (10 minutes each) will be followed by a moderated discussion with live audience questions.

Moderator: Andrew Schwartz, Department of Energy & NSET Co-Chair

Pedro Alvarez, Rice University

Cherie Kagan, University of Pennsylvania

Kurt Kolasinski, West Chester University

Carmen Gomes, Iowa State University

12:45

Break

1:15

The Nanotechnology Development Pathway

This session will explore the vision for the future of nanotechnology commercialization with an emphasis on identifying key elements needed to support the technology development pathway. Panelist presentations (10 minutes each) will be followed by a moderated discussion with live questions from the audience.

Moderator: Katherine Tyner, Office of Science and Technology Policy

Joe Sprengard Jr., Veelo Technologies

Michael Goergen, U.S. Endowment for Forestry and Communities

Heike E. Riel, IBM Research

Baratunde Cola, Carbice Corporation

2:50

Day 1 wrap-up

Lisa Friedersdorf, NNCO & NSET Co-Chair

3:00

Day 1 Concludes

Jan. 12 Laying the Groundwork

ET Agenda

11:00 **Welcome**

Andrew Schwartz, Department of Energy & NSET Co-Chair

11:05 **Keynote: Nanotechnology R&D**

Sangeeta Bhatia, Massachusetts Institute of Technology

11:30 **Breakout Sessions (Concurrent)**

The breakout sessions will be discussion-based with topics provided to help guide the conversation. Each session will be framed around the mechanisms needed, strategies for communication, and priority topic areas.

- **Research & Development**
Moderator: Kristin Persson, Lawrence Berkeley National Laboratory
- **Commercialization**
Moderator: Landon Mertz, Cerion Nanomaterials
- **Physical & Cyber Infrastructure**
Moderator: Jennifer Dionne, Stanford University
- **Education & Workforce Development**
Moderator: Jared Ashcroft, Pasadena City College
- **Responsible Development**
Moderator: Gretchen Mahler, Binghamton University

1:00 **Break**

1:30 **Synthesizing Breakout Discussions**

Breakout chairs will participate in a moderated panel to share key themes and cross-cutting ideas from their sessions.

Moderator: Lisa Friedersdorf, NNCO & NSET Co-Chair
Kristin Persson, Lawrence Berkeley National Laboratory
Landon Mertz, Cerion Nanomaterials
Jennifer Dionne, Stanford University
Jared Ashcroft, Pasadena City College
Gretchen Mahler, Binghamton University

3:00 **Day 2 Concludes**

Andrew Schwartz, Department of Energy & NSET Co-Chair

Jan. 13 Ensuring Success

ET Agenda

11:00 **Welcome**

Antti Makinen, Office of Naval Research & NSET Co-Chair

11:05 **Measuring Impact**

Building on the themes that emerged during the first two days of the workshop, this session will focus on defining what success looks like in the areas of R&D, commercialization, infrastructure, education and workforce development, and responsible development. Discussions will further explore how to assess the NNI as a catalyst for collaboration. Panelists will present (10 minutes each) their perspectives on potential data and metrics that could support an evaluation of progress. Presentations will be followed by a moderated discussion with live questions from the audience.

Moderator: Piotr Grodzinski, National Cancer Institute

Paul Weiss, University of California, Los Angeles

John Joannopoulos, Institute for Soldier Nanotechnologies

Julia Phillips, National Science Board

Christopher Ober, Cornell University

Piotr Grodzinski, National Cancer Institute

Michael Russo, SEMI

1:05 **Break**

1:35 **Closing Keynote: Nanotechnology Commercialization**

Chad A. Mirkin, Northwestern University

2:00 **Closing Discussion**

Moderator: Lisa Friedersdorf, NNCO & NSET Co-Chair

J. Alexander Liddle, National Institute of Standards and Technology

Anil Patri, U.S. Food and Drug Administration

Emilie Siochi, National Aeronautics and Space Administration