

# The Future of the NNI: A Stakeholder Workshop

August 1-2, 2019

Washington, DC

TENTATIVE AGENDA

The NNI has played a pivotal role in fostering and advancing a dynamic nanotechnology ecosystem in support of the initiative's four goals: advance world-class research, foster commercialization, develop and sustain research infrastructure, and support the responsible development of nanotechnology. Building on this strong foundation, experts across the nanotechnology community will share their perspectives on the key elements required for the nanotechnology enterprise to thrive over the next 15 years.

## DAY 1

8:00 – 9:00 am           **Registration and Coffee**

9:00 – 9:20 am           **Welcome and Introductions**

### **Session 1: Vision for the Future of the Nanotechnology Enterprise**

This session will explore a **vision** for what nanotechnology R&D can enable over the next 15 years. Based on the ideas discussed in this session, participants will address ecosystem needs to achieve this vision in subsequent sessions.

9:20 – 10:00 am       **Keynote**  
John Rogers, Northwestern University

10:00 – 10:30 am       **Break**

10:30 am – 12:00 pm   **Plenary Discussion Panel**  
Moderator: Andrew Schwartz, DOE  
Norman Scott, Cornell University  
Dawn Bonnell, University of Pennsylvania  
Sudipta Seal, University of Central Florida  
Alan Seabaugh, University of Notre Dame

12:00 – 1:00 pm       **Lunch**

### **Session 2: Needs Across the Nanotechnology Ecosystem**

Breakout sessions to discuss **needs** to achieve the vision outlined in Session 1. Each breakout session will be primarily discussion-based and address topics provided by workshop organizers.

1:00 – 2:15 pm       **Breakout Sessions**

- **Water & Environment**  
Moderator: Qilin Li, Rice University
- **Energy**  
Moderator: Saniya LeBlanc, George Washington University
- **Nanomedicine**  
Moderator: Andre Nel, University of California, Los Angeles
- **Electronics**

2:15 – 2:30 pm       **Break**

2:30 – 3:45 pm       **Breakout Sessions**

- **Food & Agriculture**  
Moderator: Eric McLemore, University of Florida
- **Sensing/Internet of Things**  
Moderator: Evangelyn Alocilja, Michigan State University
- **Aerospace & Automotive**  
Moderator: Debbie Senesky, Stanford University
- **Infrastructure**  
Moderator: Matteo Pasquali, Rice University

3:45 – 5:00 pm

**Breakout Session Read-outs**

Moderator: Stacey Standridge, NNCO

5:00 – 6:00 pm

**Town Hall Discussion**

Moderator: Lisa Friedersdorf, NNCO

The National Academies of Sciences, Engineering, and Medicine is seeking community input for the quadrennial review of the NNI. The study will analyze the relative position of the United States compared to other nations, identify critical research areas where the United States should be the world leader, and consider if and how the NNI should continue. Please join members of the study committee for a town hall to discuss future directions and opportunities for nanotechnology in the United States in the context of worldwide efforts. In particular, input on the following topics is welcome:

- new or revised goals for the NNI,
- new research areas and technical priorities for the future,
- potential partnerships, coordination, and management mechanisms to advance nanotechnology R&D.

The National Academies will issue a report in 2020 that will provide analysis and recommendations to the NSET Subcommittee of the National Science and Technology Council and NNCO.

## DAY 2

8:00 – 8:25 am

**Coffee**

8:25 – 8:30 am

**Day 2 Welcome**

8:30 – 9:30 am

**Commercialization Panel**

Moderator: Matthew Laudon, TechConnect Innovation  
Leonardo Spanu, Shell  
Matthew Hull, NanoSafe, Inc.  
Alexis Wells Carpenter, AxNano, LLC  
Jennifer Shieh, OSTP (tentative)

### **Session 3: Mechanisms to Support Key Ecosystem Needs**

This session will reconvene the breakout groups from Session 2 to discuss **mechanisms** to address the previously identified needs. The breakout sessions will be primarily discussion-based and moderated by Federal representatives.

9:30 – 10:45 am

**Breakout Sessions**

- **Water & Environment**  
Moderator: Nora Savage, NSF
- **Nanomedicine**  
Moderator: Piotr Grodzinski NIH
- **Energy**  
Moderator: George Maracas, DOE
- **Electronics**

10:45 – 11:00 am

**Break**

11:00 am – 12:15 pm

**Breakout Sessions**

- **Food & Agriculture**  
Moderator: Hongda Chen, USDA/NIFA
- **Sensing/Internet of Things**  
Moderator: Eric Forsythe, ARL
- **Aerospace & Automotive**  
Moderator: Mia Siochi, NASA
- **Infrastructure**  
Moderator: Jonathan Porter, DOT

12:15 – 1:15 pm

**Lunch**

1:15 – 2:30 pm

**Breakout Session Read-Outs**

2:30 – 2:45 pm

**Break**

### **Session 4: Tying It All Together**

Building on the conversations throughout the event, this session will synthesize the key findings to identify potential strategic directions for the NNI.

2:45 – 4:15 pm

**Synthesis of Workshop Discussions**

Moderator: Paul Westerhoff, Arizona State University  
Quinn Spadola, Georgia Institute of Technology  
Ahmed Busnaina, Northeastern University  
Jeff Nelson, Sandia National Laboratories

4:15 – 4:30 PM

**Workshop Wrap-Up**