

Designing for Impact I: Workshop on Building the National Network for Manufacturing Innovation

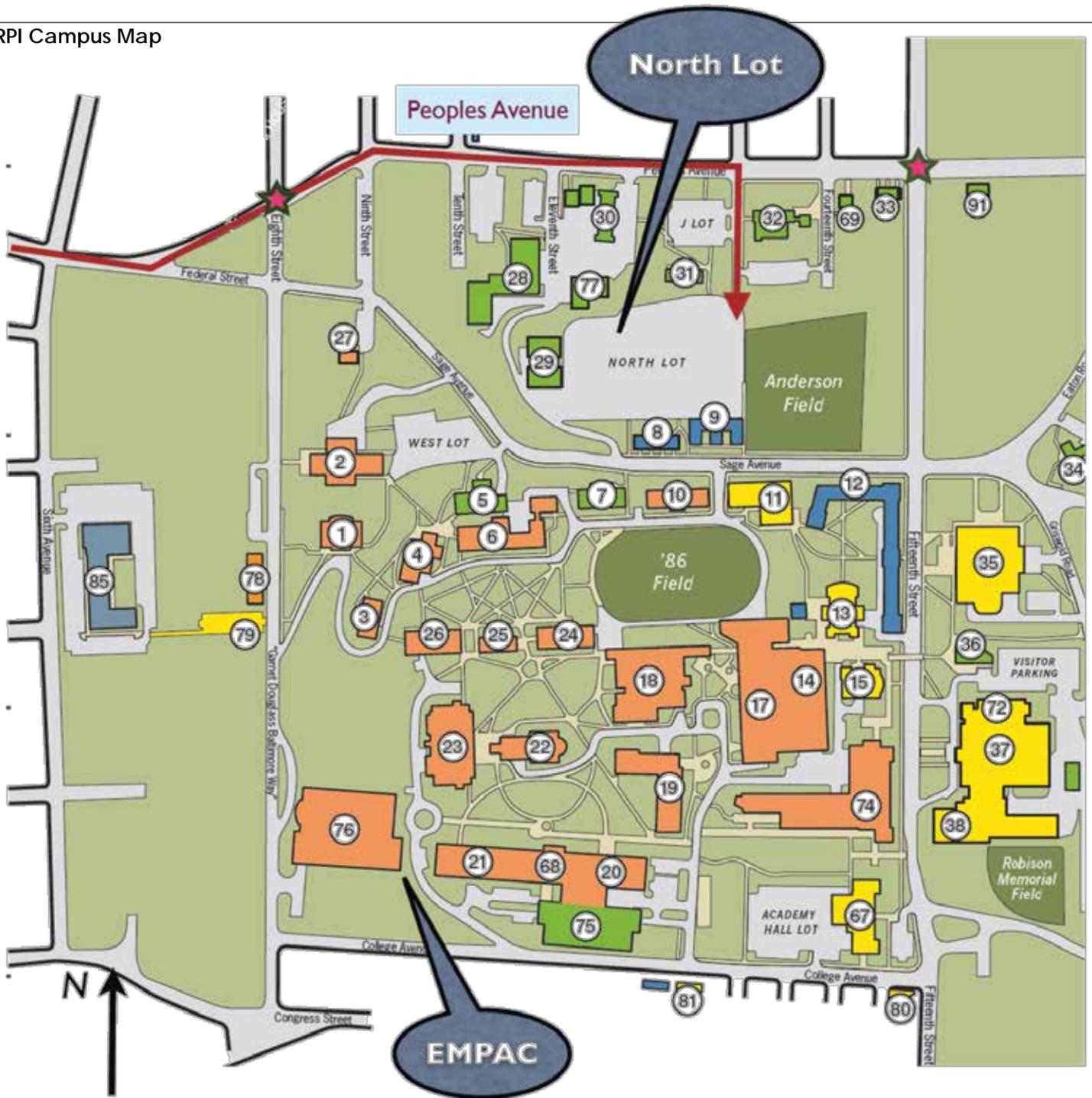


ADVANCED MANUFACTURING NATIONAL PROGRAM OFFICE

Participant Advance Information

Logistics

Workshop Times	<p>Wednesday, April 25</p> <p>See <i>page 4 for the workshop agenda</i></p>	<p>7:00 am* – Registration (Entrance Hall, 7th floor) Continental Breakfast (Evelyn’s Café, 5th floor)</p> <p>8:00 am – Opening Plenary Session (Concert Hall, 5th floor)</p> <p>3:10 pm – Workshop Adjourns</p>
Workshop Location and Instructions	<p>All Workshop activities will take place in the Curtis R. Priem Experimental Media and Performing Arts Center (EMPAC) on the RPI campus, as shown on the campus map below. EMPAC is located at the corner of 8th Street and College Avenue, in Troy, NY.</p>	
Parking and Shuttle Bus Service on the Day of the Workshop	<p>Free, on-campus parking for workshop attendees is available at the <u>North parking lot</u>, about a 5-10 minute walk through the Rensselaer campus to EMPAC.</p> <p>Continuous shuttle bus transportation to and from the North parking lot and EMPAC will be provided, starting at 6:45 AM and ending at 4:45 PM.</p> <p>* Please plan to catch the shuttle bus no later than 7:15 a.m. to allow sufficient time to be registered.</p>	
Directions to RPI and North parking lot (see map on next page)	<p>Driving Directions:</p> <p>From the South: Take I-87, the New York State Thruway, North to Exit 23. At Exit 23, get on I-787 North to Route 7 East. Follow the Direction to Campus (below).</p> <p>From the North: Take I-87, the Adirondack Northway, South to Exit 7 East. Get on Route 7 headed Eastbound. Follow the Direction to Campus (below).</p> <p>From the East: From I-90 (Massachusetts Turnpike, Berkshire Spur of the New York Thruway), take Exit B1. Continue East (13.5 miles) to the exit for I-787. Take I-787 North to Route 7 East. Follow the Direction to Campus (below).</p> <p>From the West: Take I-90, the New York State Thruway, to Exit 24. From Exit 24, continue onto I-90 East. Exit onto I-787 North. Take I-787 North to Route 7 East. Follow the Direction to Campus (below).</p> <p>By Plane or Train:</p> <p>If you are arriving by plane, fly into the Albany International Airport. By train, travel to the Albany/Rensselaer Amtrak station. Commercial taxicabs to campus are available from both locations.</p> <p>If you’re driving from the airport:</p> <ul style="list-style-type: none"> • From the airport exit, turn left onto Route 155. • Get on I-87 North via ramp on the left. • Take exit 7 onto Route 7 toward Troy. • Follow the Direction to Campus (below). <p>Direction to Campus (North Lot Parking)</p> <p>Stay in the right lane of Route 7. Take the exit for Downtown Troy. You will be on 6th Avenue. At the second traffic light, make a left turn onto Federal Street. Before continuing up the hill veer left at the fork in the road (becomes Peoples Avenue). After the traffic light on 8th St., proceed straight and make a right turn onto 13th Street. Proceed straight and into the North Lot (before the next light on 15th St.).</p>	



WiFi	There will be WiFi access with an open log-in for workshop participants at EMPAC.	
Taxis from EMPAC	Capitaland Taxi: (518) 270-8294 Black & White Taxi : (518) 272-6961	Taxi from EMPAC to Albany International Airport or the Amtrak Station is about \$25.00 and a 20-minute ride.

Workshop Organizers/Sponsors

Organizer: The interagency Advanced Manufacturing National Program Office, hosted by the [National Institute of Standards and Technology \(NIST\)](#), an agency of the U.S. Department of Commerce.

Coordinating agencies: U.S. Department of Energy, U.S. Department of Defense, National Aeronautics and Space Administration, National Science Foundation.

About The National Network for Manufacturing Innovation (NNMI)

The interagency Advanced Manufacturing National Program Office (AMNPO), hosted by the National Institute of Standards and Technology (NIST), an agency of the U.S. Department of Commerce, invites interested parties to provide input on a new public-private partnership program, the National Network for Manufacturing Innovation (NNMI or Network). Interested parties may provide input by attending any of a series of public workshops and by responding to a Request for Information. The proposed Network will be composed of up to fifteen Institutes for Manufacturing Innovation (IMIs or Institutes) around the country, each serving as a hub of manufacturing excellence that will help to make United States (U.S.) manufacturing facilities and enterprises more competitive and encourage investment in the United States. This program was proposed in the President's fiscal year (FY) 2013 budget.

Many technologies fail to move to commercialization or reach full scale-up in the United States because the domestic private sector, particularly small and medium-sized enterprises (SMEs), find that the risks of such investments are too great for an individual entity to make. The private sector also reports challenges in accessing key skills and technical infrastructure for demonstration and prototyping purposes.

To meet this challenge, the United States must build on its strengths, leverage its unique research, innovation, and workforce capabilities, and create an infrastructure for manufacturing innovation to ensure that the next generation of processes and products not only will be invented in the United States, but scaled up and manufactured in the United States as well.

Institutes for Manufacturing Innovation (IMIs) and Dialogue Goals

IMIs will bring together large companies, SMEs, academia, federal agencies, states, and other organizations to accelerate innovation through co-investment in industrially relevant manufacturing technologies with broad applications. Used in this context, "co-investment" means that non-federal entities will contribute financial and other resources to the Institutes to complement federal investments. The Institutes will take full advantage of existing infrastructure by integrating current capabilities and building new ones where needed to foster innovation that can impact the manufacturing sector on a large scale.

The objectives of the NNMI are to bridge the gap between applied research and product development, provide shared assets to help companies gain access to cutting-edge capabilities and equipment, and create an unparalleled environment to continuously educate and train students and workers in advanced manufacturing skills. Each Institute will become a self-sustaining technical center of excellence, providing and integrating innovation resources that will help to make U.S. manufacturing facilities and enterprises more competitive and encourage investment in the United States.

The objective of the four Dialogues within this *Designing for Impact* workshop is to inform workshop participants about the proposed NNMI and to solicit individual participant insights and ideas. The individual inputs offered by stakeholders will assist the AMNPO in the development of the new program should NNMI be funded in FY 2013.

Workshop Objective and Topics

The objective of the Designing for Impact workshop is to inform workshop participants on the proposed National Network for Manufacturing Innovation (NNMI) and to solicit individual participant insights and ideas.

Workshop dialogue will address the following topics:

- I Technologies with Broad Impact
- I Institute Structure and Governance
- I Strategies for Sustainable Institute Operations
- I Education and Workforce Development

Workshop Format and Process

Purpose: To share perspectives, pose questions, and propose ideas to help shape the design of the proposed National Network for Manufacturing Innovation (NNMI).

Plenary Presentations: Participants will hear welcoming talks from Rensselaer Polytechnic Institute and New York State. Representatives from the White House National Economic Council and the Advanced Manufacturing National Program Office will provide federal perspectives on the proposed IMIs, NNMI, and related activities.

Facilitated Breakout Sessions: Workshop participants will be divided into four groups for the breakout sessions, and will stay in the same breakout room for the morning and afternoon breakout sessions. Room assignments are indicated on the attendee list in your registration package. Professional facilitators will focus on a single dialogue topic related to IMIs and the NNMI, and will rotate to each room in 50 minute blocks so that each group has the opportunity to discuss every dialogue. Participants will engage in active discussion, and will have the opportunity to provide individual inputs that will assist the AMNPO in the development of the new program should the NNMI be funded. Participants will be asked to provide input on the topics shown below. Please review these topics and formulate your input in advance of the workshop. Dialogue topic worksheets will be provided in your registration package along with a description of each Dialogue topic. Dialogue topic worksheets will be turned in to facilitators prior to leaving the breakout session.

Dialogue Topics

Dialogue 1: Technologies with Broad Impact

1. What criteria should be used to select technology focus areas?
2. What technology focus areas that meet these criteria would you be willing to co-invest in?
3. What measures could demonstrate that Institute technology activities assist U.S. manufacturing?
4. What measures could assess the performance and impact of Institutes?

Dialogue 2: Institute Structure and Governance

1. What business models would be effective for the Institutes to manage business decisions?
2. What governance models would be effective for the Institutes to manage governance decisions?
3. What membership and participation structure would be effective for the Institutes, such as financial and intellectual property obligations, access and licensing?
4. How should a network of Institutes optimally operate?
5. What measures could assess effectiveness of Network structure and governance?

Dialogue 3: Strategies for Sustainable Institute Operations

1. How should initial funding co-investments of the Federal Government and others be organized by types and proportions?
2. What arrangements for co-investment proportions and types could help an Institute become self-sustaining?
3. What measures could assess progress of an Institute towards being self-sustaining?
4. What actions or conditions could improve how Institute operations support domestic manufacturing facilities while maintaining consistency with our international obligations?
5. How should Institutes engage other manufacturing related programs and networks?
6. How should Institutes interact with state and local economic development authorities?
7. What measures could assess Institute contributions to long-term national security and competitiveness?

Dialogue 4: Education and Workforce Development

1. How could Institutes support advanced manufacturing workforce development at all educational levels?
2. How could Institutes ensure that advanced manufacturing workforce development activities address industry needs?
3. How could Institutes and the NNMI leverage and complement other education and workforce development programs?
4. What measures could assess Institute performance and impact on education and workforce development?
5. How might institutes integrate research and development activities and education to best prepare the current and future workforce?

Workshop Agenda

Wednesday, April 25, 2012		
7:00 am	Registration Opens	Uphill Entrance Hall, 7th floor
	Continental Breakfast	Evelyn's Café, 5 th floor
8:00 am	CALL TO ORDER <i>Mike Molnar</i> , Director, Advanced Manufacturing National Program Office	Concert Hall, 5 th floor
	OPENING PLENARY SESSION	Concert Hall, 5 th floor
	<ul style="list-style-type: none"> · Host Welcome <i>Jonathan Dordick</i>, Howard P. Isermann Professor and Director, Center for Biotechnology and Interdisciplinary Studies, Rensselaer Polytechnic Institute · New York State Welcome and Perspective <i>Edward Reinfurt</i>, Director of the Division of Science, Technology and Innovation; Empire State Development Corporation · Advanced Manufacturing and the Federal Perspective <i>Jason Miller</i>, Special Assistant to the President for Manufacturing Policy, White House National Economic Council · Framing the Challenge <i>Mike Molnar</i>, Director, Advanced Manufacturing National Program Office 	
9:20 am	MEET YOUR ORGANIZERS AND CHARGE TO DIALOGUES <i>Mike Molnar</i> , Director, Advanced Manufacturing National Program Office	Concert Hall, 5 th floor
9:35 am	Morning Break & Networking	Evelyn's Café, 5 th floor
9:55 am	Move to your assigned breakout session room Instructions: Check the attendee list for your breakout room assignment. All participants will participate in all dialogues and are asked to stay in their assigned room for all breakout sessions (facilitators will rotate).	Studio 1, 5 th floor Studio 2, 5 th floor Studio Beta, 7 th floor Concert Hall, 5 th floor
10:00 am	BREAKOUT SESSION I	<ul style="list-style-type: none"> · Dialogue 1: Technologies with Broad Impact (NIST/NASA led) · Dialogue 2: Institute Structure and Governance (DOD led) · Dialogue 3: Strategies for Sustainable Institute Operations (DOE led) · Dialogue 4: Education and Workforce Development (NSF led)
	Period 1 - 10:00-10:50 am Break 10:50-11:00 am Period 2 - 11:00-11:50 am	
11:50 am	Lunch & Networking	Evelyn's Café, 5 th floor
12:45 pm	Return to your assigned breakout session room	
12:50 pm	BREAKOUT SESSION II	<ul style="list-style-type: none"> · Dialogue 1: Technologies with Broad Impact (NIST/NASA led) · Dialogue 2: Institute Structure and Governance (DOD led) · Dialogue 3: Strategies for Sustainable Institute Operations (DOE led) · Dialogue 4: Education and Workforce Development (NSF led)
	Period 3 - 12:50-1:40 pm Break 1:40-1:50 pm Period 4 - 1:50-2:40 pm	
2:40 pm	Afternoon Break & Networking	Evelyn's Café, 5 th floor
3:00 pm	CLOSING PLENARY SESSION <ul style="list-style-type: none"> · Results & Next Steps <i>Mike Molnar</i>, Director, Advanced Manufacturing National Program Office 	Concert Hall, 5 th floor
3:15 pm	Workshop Adjourns	