



Update on the Integrated Photonics Innovation Manufacturing Institute (IP-IMI)

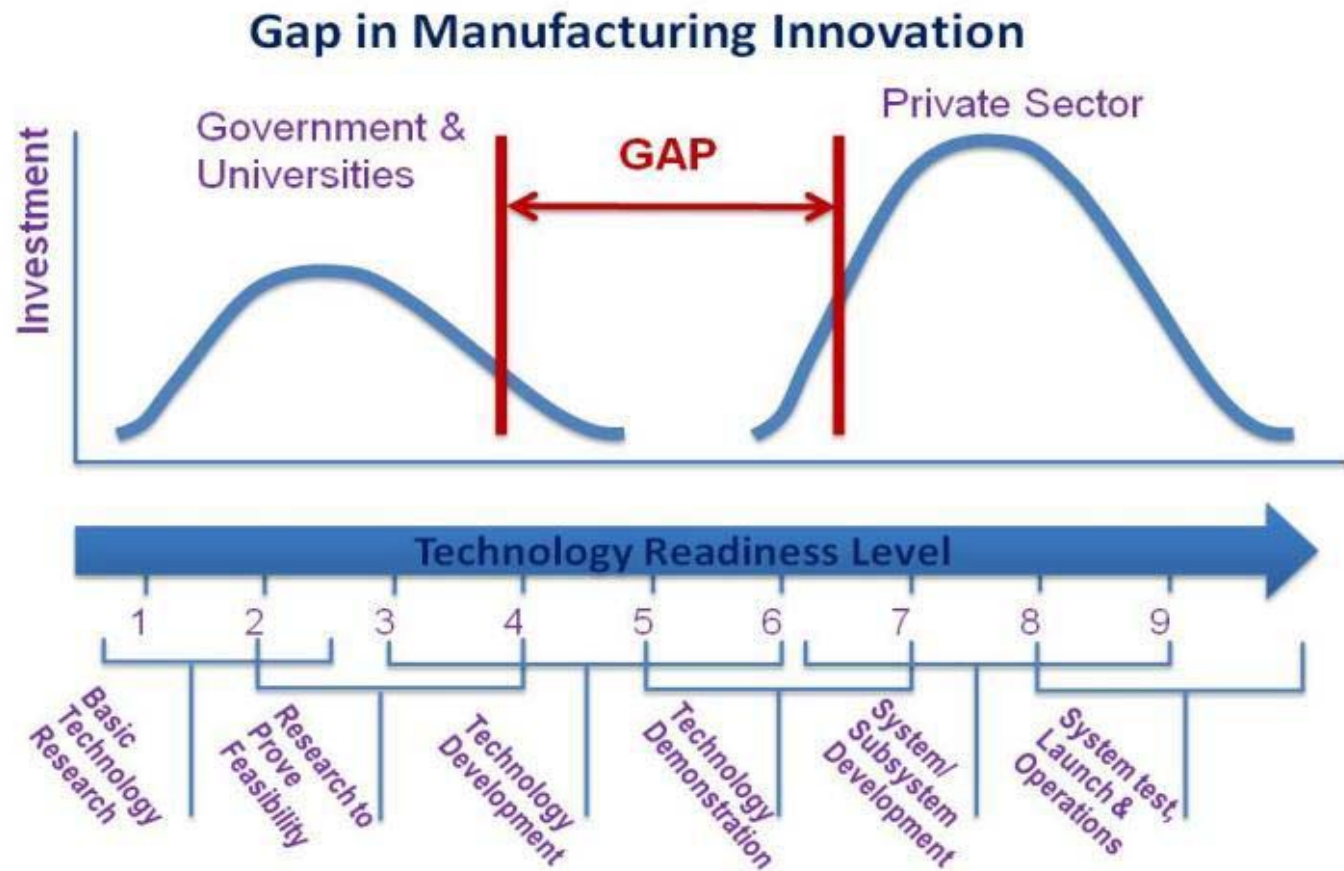
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NNMI and TRL-MRL 4-7

The NNMI institutes are designed to fill a gap in government and private sector funding.



Source: (Top) *Capturing a Domestic Competitive Advantage in Advanced Manufacturing* (Executive Office of the President, PCAST) July 2012.

NNMI IMIs announced so far

Institute	Consortium Headquarters (Award Date)	Managing Agency
America Makes: National Additive Manufacturing Innovation Institute (NAMII)	NCDMM, Youngstown, Ohio (August 2012)	DOD
Next Generation Power Electronics Manufacturing Innovation Institute	North Carolina State Univ. (Jan 2014)	DOE—Office of EERE
Design Manufacturing & Design Innovation (DMDI) Institute	UI Labs, Chicago (Feb 2014)	DOD—Army R&D Command
Lightweight & Modern Metals Manufacturing Innovation (LM3I) Institute	EWI, Detroit (Feb 2014)	DOD—Off. Naval Research
Institute for Advanced Composites Manufacturing Innovation	Univ. of Tenn.-Knoxville (Jan 2015)	DOE—Office of EERE
Integrated Photonics Innovation Manufacturing Institute (IP-IMI)	TBD	DOD—AFRL
Flexible Hybrid Electronics Manufacturing Innovation Institute	TBD	DOD—AFRL
Advanced Sensors, Controls, Platforms and Modeling for Manufacturing IMI	TBD	DOE—Office of EERE
Revolutionary Fibers & Textiles Manufacturing Innovation Institute	TBD	DOD



- President Obama proposed a national network of regional Institutes for Manufacturing Innovation (IMIs) in 2012—one-time \$1B investment for up to 15 institutes.
- NNMI funding is now authorized for the remaining institutes from existing funds, to be managed through NIST.

Necessary features of an IMI

Focus area:

- Process, material, technology, or sector

Activities:

- Tech development and supply chain expansion
- Workforce training
- SMEs
- Shared facilities—local flavor

Funding and management:

- 1:1 federal/non-federal matching
- 5 year runway to self-sufficiency
- Managed by a U.S. not-for-profit

Timeline

Nov 5	FOA for concept proposals
Dec 19	Deadline for concept proposals
Jan 30	Invitations for full proposals
March 31	Deadline for full proposals
June 22	Award announced
Fall 2015	Contracts signed
Spring 2016	End of stand-up period; institute launched
Spring 2021	End of federal funding

Prospective Teams

- ***University of Central Florida (UCF)***

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- ***University of Southern California (USC) via ISI (Information Sciences Institute)***

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- ***State of New York***

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NIST AMTech roadmapping grants

Advanced Manufacturing Technology Consortia (AMTech)



iNEMI-MIT collaboration:

Jim McElroy—Exec. Director

Bob Pfahl—Principal Investigator

Lionel Kimerling—Principal Investigator



University of Rochester, CEIS:

Paul Ballantine—CEIS Deputy Director

New York Photonics

Rochester Inst. Of Technology (RIT)