



# DEPARTMENT OF DEFENSE MANUFACTURING USA INSTITUTES



## Quick Start Engagement Guide for Academic Institutions

*Sharpen the focus of your funded research!*

### MAKING THE U.S. MORE COMPETITIVE

The Department of Defense (DoD) Manufacturing USA institutes collectively represent nearly 1,000 organizations including defense and commercial manufacturers of all sizes, start-ups, universities, community colleges, and state or local economic developers in active partnership with the U.S. Federal Government. Since 2012, the DoD has established eight Manufacturing USA institutes, combining \$600 million in federal investment with \$1.2 billion in matching funds from industry, academia and state governments to form centers of excellence promoting U.S. competitiveness.

Each institute is its own public-private partnership and innovation ecosystem providing high value access to world class pilot manufacturing facilities that complement member capabilities, yielding a robust and sustainable domestic 'industrial commons' in a promising technology area. Also critical to U.S. competitiveness is the availability of a well-trained, qualified workforce with manufacturing skills matched to the nation's current and emerging production needs. Each institute has developed a set of education and workforce development activities that can be leveraged by all participants.



### PARTNER UP TO ADVANCE YOUR IMPACT AND REACH

Engaging with the institutes is a unique method for universities, community colleges & other educational institutions to network with and understand the needs of industry and government, so that targeted manufacturing research can be undertaken for the benefit of the institution, individual, and students. Cutting edge sponsored research enhances the reputation of the institution. For students, institutes provide opportunities for hands-on training and access to internship leading to jobs.

*"The University of Connecticut is involved in five institutes in the Manufacturing USA network. A major benefit to our faculty is the opportunity to work closely with industry on relatively high TRL projects that have high impact in emerging technology areas in manufacturing."*

- Professor Michael Accorsi, Senior Associate Dean, University of Connecticut School of Engineering



#### STRONG COLLABORATION



- Collaborate with industry, academia, and government
- Collaborate to design and execute innovative apprenticeship and educational programs
- Develop vision for future of technology



#### LICENSE RESEARCH AND INTELLECTUAL PROPERTY



- Create IP through institute funded research
- Utilize your own organization's research
- Use state of the art facilities at the institute to further technology and manufacturing



#### FOSTER PREEMINENCE



- Enhance department reputation by providing employable students trained inline with industry needs
- Create content consistent with the latest technology



#### SOLVE MANUFACTURING PROBLEMS



- Help create ecosystems to positively impact U.S. economy
- Solve applied research problems faced by industry

# Department of Defense Manufacturing USA Institutes Program Office

Office of the Secretary of Defense | Manufacturing Industrial Base Policy Office | Manufacturing Technology Program

For more information visit: [www.businessdefense.gov](http://www.businessdefense.gov) | [www.manufacturingusa.com](http://www.manufacturingusa.com)

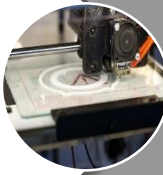
Or email inquires to: [osd.mc-alex.ousd-atl.mbx.dod-mfg-usa@mail.mil](mailto:osd.mc-alex.ousd-atl.mbx.dod-mfg-usa@mail.mil)



America Makes

**America Makes: National Additive Manufacturing Innovation Institute**  
Youngstown, OH | [www.americamakes.us](http://www.americamakes.us)

*America Makes strengthens U.S. capabilities in 3D printing and additive manufacturing.*



DMDII  
a UI LABS Collaboration

**DMDII: Digital Manufacturing and Design Innovation Institute**  
Chicago, IL | [dmdii.uilabs.org](http://dmdii.uilabs.org)

*DMDII leads the nation's research institute into applying cutting-edge digital technologies.*



**LIFT: Lightweight Innovations For Tomorrow**

Detroit, MI | [lift.technology](http://lift.technology)

*LIFT speeds development of new lightweight metal manufacturing processes.*



**AIM Photonics: American Institute for Manufacturing Integrated Photonics**  
Albany & Rochester, NY | [www.aimphotonics.com](http://www.aimphotonics.com)

*AIM Photonics accelerates development of the photonic integrated circuit industry.*



**NextFlex: America's Flexible Hybrid Electronics Institute**

San Jose, CA | [www.nextflex.us](http://www.nextflex.us)

*NextFlex innovates electronic packaging & printing to produce flexible electronic products.*



**AFFOA: Advanced Functional Fabrics of America**

Cambridge, MA | [join.affoa.org](http://join.affoa.org)

*AFFOA accelerates widespread commercialization of highly functional fabrics.*



**BioFabUSA: Advanced Tissue Biofabrication Institute**

Manchester, NH | [www.armiusa.org](http://www.armiusa.org)

*BioFabUSA develops next-generation techniques for cell & tissue biofabrication.*



**ARM: Advanced Robotics Manufacturing Institute**

Pittsburgh, PA | [www.arminstitute.org](http://www.arminstitute.org)

*ARM improves U.S. competitiveness through advancements in smart collaborative robotics.*

