

#### DEPARTMENT OF DEFENSE

## **MANUFACTURING INNOVATION INSTITUTES**

**Quick Start Opportunities Guide for** 

### **FEDERAL AGENCIES**

Partner up to achieve your mission!



# The Department of Defense Manufacturing Innovation Institutes (DoD MIIs) connect organizations and activities to better enable the affordable, rapid transition and delivery of defense-essential technologies.

Over the past century, U.S. National and economic security have relied on a robust American industrial base armed with the advanced manufacturing technologies needed to rapidly and affordably deliver critical products and systems. Today, our country faces new challenges, not only from great powers and regional adversaries, but also from infectious disease, cyberattacks, and intellectual property theft impacting our daily lives at home.

Despite unprecedented threats, we face unmatched opportunity.



America must lean forward to create the manufacturing capabilities needed to build back better our economic foundations and modernize our military. An innovative industrial base

can only be accomplished through Nation-wide collaboration that fosters healthy, competitive technology ecosystems. That's where the DoD MIIs come in...

The DoD Mlls bring new technologies to U.S. warfighters using a combined committed \$950 million in federal investment from the DoD and \$2 billion matching funds from

industry, academia, and state Institute members governments. include 1,700+ organizations across industry, commercial defense manufacturers of all sizes, start-ups, universities, community colleges, and state and local economic developers in active partnership with the U.S. Federal Government.



America's national security depends upon our ability to produce needed parts and systems, access healthy and secure supply chains, and employ a skilled U.S. workforce.

## PARTNER UP TO ADVANCE YOUR IMPACT AND REACH

DoD Mlls offer an array of high-tech leveraging opportunities for the federal professional. From a research and development perspective, the DoD Mlls provide access to joint DoD - commercial road-mapping activities, pilot manufacturing facilities, and responsive project contracting. From an acquisition perspective, these pre-competitive federal assistance agreements can be utilized to perform technology-related projects, provide access to cost share and ensure competition. From an operations and sustainment perspective, they can be a source for producing quick-turn complex parts and low cost research & development.

"The DoD has needed a concerted effort focused on invigorating manufacturing capabilities for some time. These Manufacturing Institutes address this need and are now providing solutions that DoD should be able to leverage for years to come."

- Dr. Nicholas Usechak, Government Program Manager, AIM Photonics



- Advance concepts through prototype development
- Sponsor projects to meet specific mission needs
- Contracting meets all competition requirements
- · Rapid flexible contracting



- Apply new manufacturing processes to reduce cycle time
- Utilize tools to support legacy systems
- Reduce risk on DoD Programs of Record



- Identify domestic sources for components and materials
- Advance from prototype to limited-scale production



ACCESS THE ADVANCED MANUFACTURING FCOSYSTEM

- Hone your expertise & engage with the best & brightest
- Participate in institute-led training programs

## Department of Defense Manufacturing Innovation Institutes Program Office



## Office of the Secretary of Defense Under Secretary of Defense for Research & Engineering

For more information visit: www.dodmantech.mil | www.manufacturingusa.com



#### America Makes: National Additive Manufacturing Innovation Institute

Youngstown, OH | www.americamakes.us

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





#### MxD: Manufacturing x Digital (formerly DMDII)

Chicago, IL | www.mxdusa.org

MxD leads the nation's research in applying cutting-edge digital technologies.





#### LIFT

Detroit, MI | lift.technology

LIFT connects materials, processes, systems, and talent.





#### AIM Photonics: American Institute for Manufacturing Integrated Photonics

Albany, NY & Rochester, NY | www.aimphotonics.com

AIM Photonics accelerates development of the photonic integrated circuit industry.

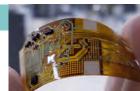




#### **NextFlex: America's Flexible Hybrid Electronics Institute**

San Jose, CA | www.nextflex.us

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





#### **AFFOA: Advanced Functional Fabrics of America**

Cambridge, MA | www.AFFOA.org

AFFOA accelerates widespread commercialization of highly functional fibers and fabrics.

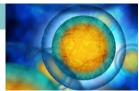




#### **BioFabUSA: Advanced Tissue Biofabrication Institute**

Manchester, NH | armiusa.org

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





#### **ARM: Advanced Robotics Manufacturing Institute**

Pittsburgh, PA | www.arminstitute.org

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





#### **BioMADE: Bioindustrial Manufacturing and Design Ecosystem**

St. Paul, MN | www.biomade.org

BioMADE is building a sustainable, domestic end-to-end bioindustrial manufacturing ecosystem.

