



DEPARTMENT OF DEFENSE

MANUFACTURING INNOVATION INSTITUTES

Quick Start Opportunities Guide for

ACADEMIC INSTITUTIONS

Sharpen the focus of your funded research!



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 MIIs 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 governments. Institute members include 1,700+ organizations across defense industry, commercial 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 & REACH

Networking with the institutes is a unique method for universities, community colleges & other educational institutions to engage 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, access to internships and apprenticeships, and increased connections to industry and 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 & execute innovative apprenticeship & educational programs
- Roadmap future technology



LICENSE RESEARCH & INTELLECTUAL PROPERTY

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



FOSTER PREEMINENCE

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



SOLVE MANUFACTURING PROBLEMS

- Create ecosystems that positively impact the U.S. economy
- Solve applied research problems faced by industry



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

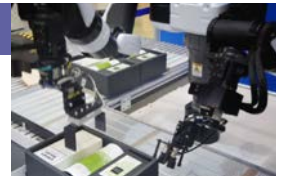
America Makes strengthens U.S. capabilities in 3D printing and additive manufacturing.



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

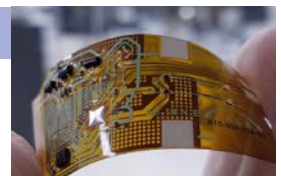
AIM Photonics accelerates development of the photonic integrated circuit industry.



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

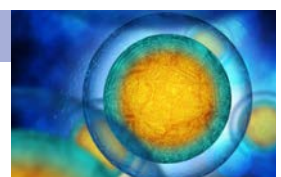
AFFOA accelerates widespread commercialization of highly functional fibers and fabrics.



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.

