

# **NIST's Portfolio of Programs in Advanced Manufacturing**

**Visiting Committee on Advanced Technology  
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**Dr. Patrick Gallagher**

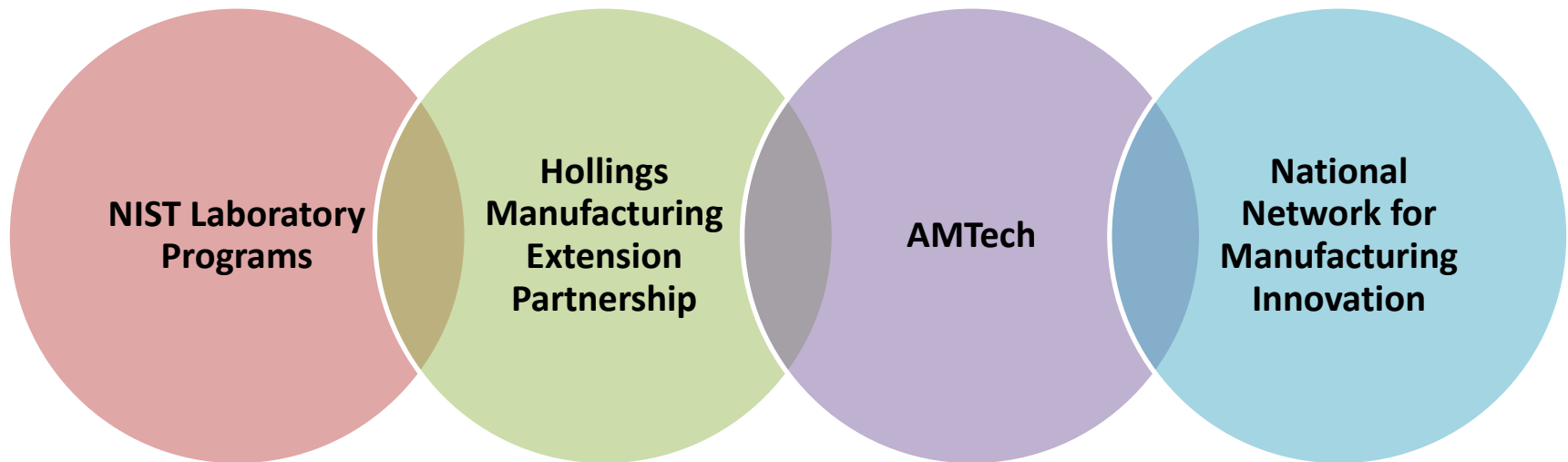
**Under Secretary of Commerce for Standards and Technology and NIST Director**

# NIST's Portfolio of Programs in Advanced Manufacturing

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Advanced manufacturing is fundamental to our economic strength and national security: it can create high-quality jobs, is an important source of exports, and is a key source of technological innovation.

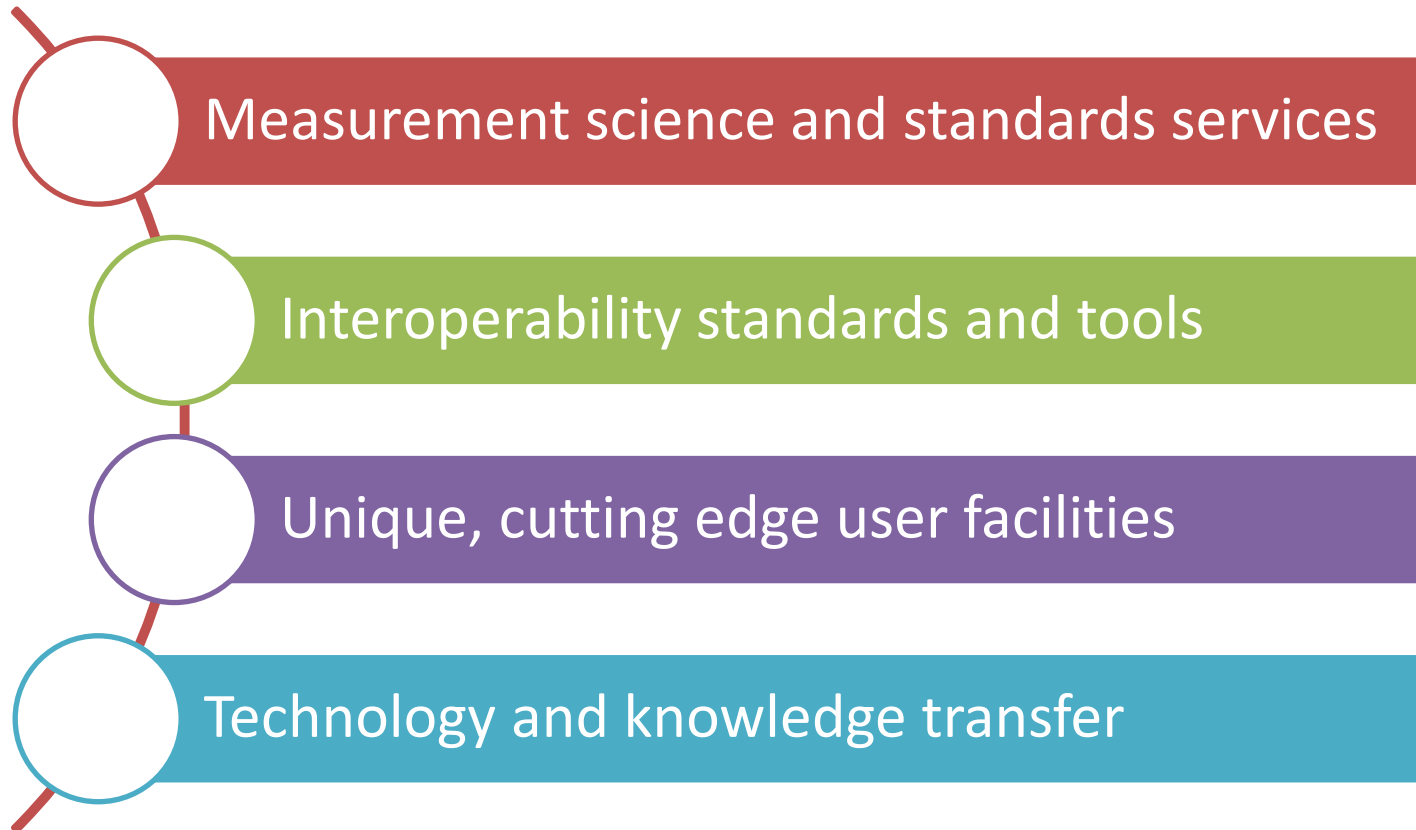
Manufacturing is at the heart of what NIST does, and is called out in the founding documents that established the National Bureau of Standards in 1901.



# The NIST Laboratories

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Research programs address increasingly complex measurement challenges, ranging from the very small (nanoscale devices) to the very large (vehicles and buildings), and from the physical (renewable energy sources) to the virtual (cybersecurity and cloud computing).



# NIST Laboratory Investments in Emerging Areas

- Biomanufacturing
- Nanomanufacturing
- Advanced Materials Modeling and Simulation
- Smart Manufacturing and Cyberphysical Systems
- Energy Efficiency and Sustainability



# Hollings Manufacturing Extension Partnership (MEP)

**MEP Centers are non-profit organizations that leverage nearly \$128 million of Federal investment into a \$300 million program by partnering with state / local governments and the private sector**

In FY 2009, MEP helped U.S. manufacturers realize \$8.4 billion in increased or retained sales, leverage nearly \$1.9 billion in new private sector investment, and generate more than \$1.3 billion in cost savings, with 72,000 jobs created or retained.

**Next-generation MEP strategies** in five themes represent the next logical steps toward generating profit, creating jobs, and bolstering a long-term competitive position for the Nation's manufacturers

1. Continuous performance improvement strategies
2. Technology acceleration
3. Supplier development
4. Sustainability
5. A Strong, engaged and skilled workforce



# Proposed Programs

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## Advanced Manufacturing Technology Consortia Program (AMTech)

- Collapsing the timescale of technological innovation through industry-led consortium based R&D
- \$21M in FY 2013 budget request

## National Network for Manufacturing Innovation (NNMI)

- A network of up to 15 Institutes for Manufacturing Innovation will bridge the existing gap in the U.S. innovation ecosystem between basic research and deployment of commercial products/technologies
- \$1B in FY 2013 budget request
- (mandatory spending, requires legislation)



Credit: B. Young/NIST

# Organizational Resources at NIST

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