

Manufacturing Machines and Equipment (MME)

ZJ Pei

Program Director

Manufacturing Machines and Equipment (MME) Program

Division of Civil, Mechanical and Manufacturing Innovation

Directorate for Engineering

National Science Foundation



Advanced Manufacturing Cluster

- MEP Materials Engineering and Processing (Alexis Lewis, Mary Toney)
- MME Manufacturing Machines and Equipment (ZJ Pei)
- NM NanoManufacturing (Khershed Cooper)



MME Program Synopsis

- ➤ MME supports fundamental research that enables the development of new and/or improved manufacturing machines and equipment, and optimization of their use.
- Proposals relating to a wide range of manufacturing operations are encouraged, including both subtractive and additive processes, forming, bonding/joining, and laser processing.
- ➤ Of particular interest are proposals that relate to the manufacture of equipment and facilities that enable the production of energy products.



Competitive Proposals Received by MME

- Competitive projects will propose hypothesis-driven research that advances the frontiers of knowledge in relevant areas.
- Proposals submitted to the MME program should include a clearly articulated research (not developmental) objective and a coherent plan to accomplish the stated objective.
- Both experimental and theoretical work are supported.
- ➤ All proposals must include a statement outlining the societal benefits of the proposed activities.



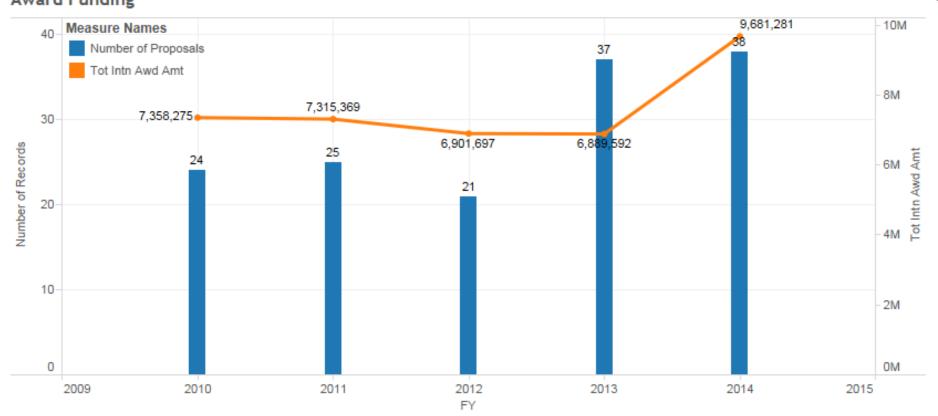
NSF Workshop on Environmental Implications of Additive Manufacturing; Arlington, Virginia; October 14-15, 2014

- Co-funded by NSF CMMI MME and CBET ES programs
- 96 participants
- 8 invited speakers
- Workshop report available (https://www.wilsoncenter.org/sites/nsfamenv/index.html)



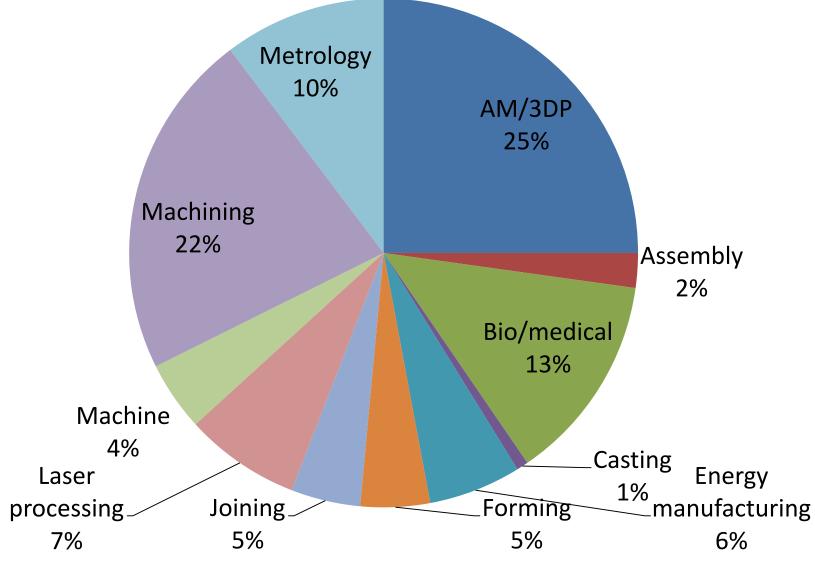
Number of MME Awards







MME Portfolio by Area (# of Awards)

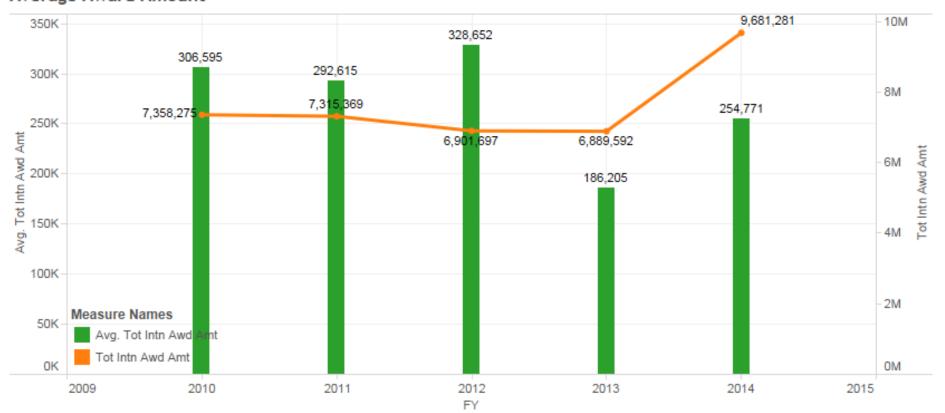




Average Size of MME Awards

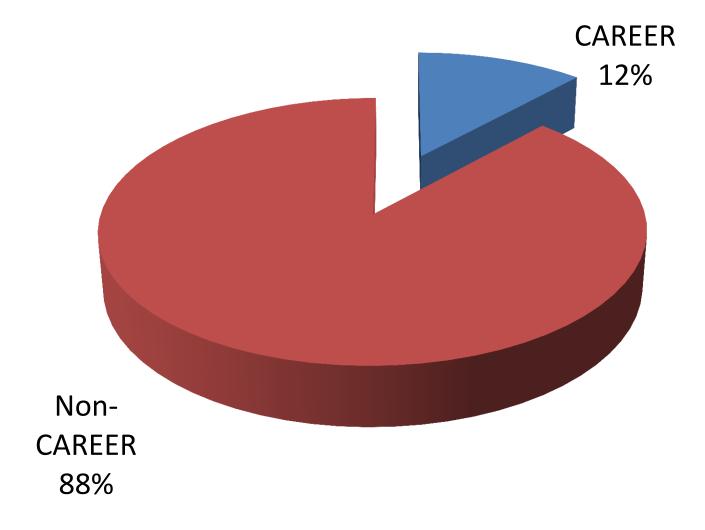
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Average Award Amount



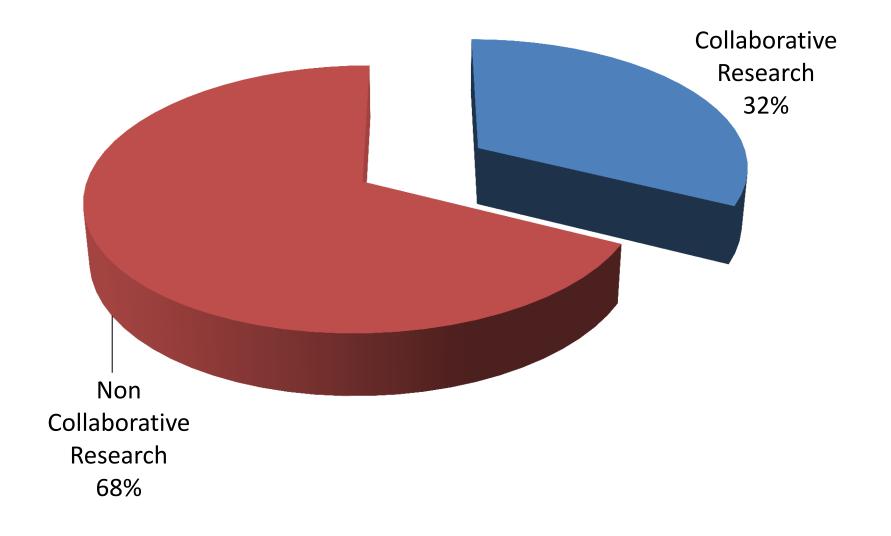


MME CAREER Proposals by # of Awards





MME Collaborative Proposals by # of Awards





MME GOALI Proposals by # of Awards

