NIST Centers of Excellence Program

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Standards and Technology**
U.S. Department of Commerce
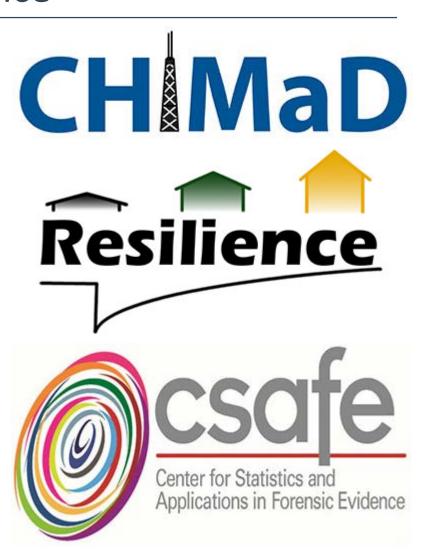
Centers of Excellence Program Purpose and Overview

The NIST Centers of Excellence expand NIST's impact and mission delivery by enabling NIST to partner with foremost experts in critical technical areas

- Enable collaborations between NIST and leading research institutions in emerging technology areas to help NIST meet mission needs in new or expanding areas of strategic focus

- Enhance technical innovation through early alignment of measurement science with emerging fields of research

- Provide new opportunities for training of students and postdocs in measurement science

- Provide greater opportunities for NIST to engage with entrepreneurs and with industry

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Current Centers of Excellence

- CHiMaD - Center for Hierarchical Materials and Design (January 2014)

- Center for Risk-Based Community Resilience Planning (February 2015)

- csafe - Center for Statistics and Applications in Forensic Evidence (May 2015)

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Future Plans for CoE Partnership Model

- Currently no new funding available for additional Centers
- Original Plans called for a total of 5 Centers in operation
- If new funding becomes available examples of strategically important areas for NIST under consideration for future competitions include:
  - **Complex Systems** – capabilities for measuring, predicting, and managing emergent behavior
  - **Measurement and Control of Biological Systems** –developing novel measurement capabilities for systems biology and biomanufacturing
  - **Advances in Photonic and Optical Measurements** - enabling real-time, non-destructive, in-situ sensing and characterization

Plans for Review of the CoE Program

- CoEs will be evaluated at year 5 to determine whether to extend the award or move in a new direction

- Robust process needed to evaluate quality, effectiveness, and value of partnership to determine continued investment

- Formal technical and operational reviews and site visits by NIST and external panels

  - Performance during initial award period

  - Quality of proposed plan for future period

  - Alignment with NIST programmatic priorities

  - Effectiveness of collaboration