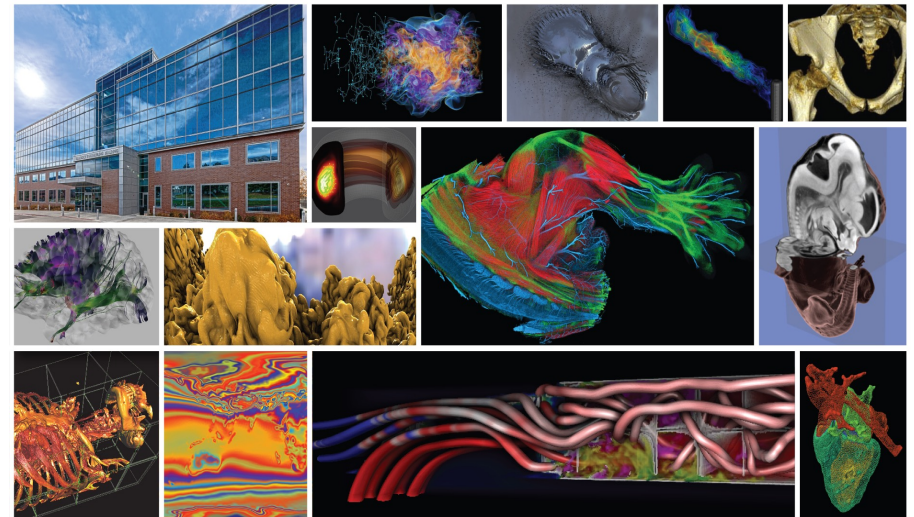# Highlights from the IEEE CS Ad Hoc Committee on Open Science & Reproducibility

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IEEE CS Ad Hoc Committee on Open Science & Reproducibility

- Goal: Analyze the models, practices and experiences in supporting open science and reproducibility within the IEEE Computer Society (CS) (and at peer societies and publishers) in the context of the recommendation of the NASEM Report Reproducibility and Replicability in Science*

- Key Activities
  - Review of the NASEM report*; identification of most relevant recommendations
  - Survey of reproducibility activities across the IEEE CS and more broadly
    - Survey of journal/magazine EiCs and conference chairs
    - Survey of the broader community (planned)
  - Deep dives for key issues related to ensuring reproducibility
    - Roles and responsibilities
    - Infrastructure, workflows and logistics
    - Incentives and norms
    - Economic issues
    - Sustainability
  - Case studies, e.g., TPDS

https://www.computer.org/ volunteering/boards-and-committees/open-science-reproducibility

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*https://www.nap.edu/catalog/25303/reproducibility-and-replicability-in-science

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Recommendations and Next Steps

- Report available online
- Key Recommendations
  - **Recognize the urgency and need for action**
  - Develop a cross-cutting strategic and implementation plan
    - Define clear goals for technical committees, conferences/workshops and publications; establish best practices
  - Deploy the necessary support infrastructure
    - Support for data/code submission and evaluation
    - Integrated workflows for processing and publishing submissions
    - Standard and integrated badging
  - Develop a coordinated reproducibility communication plan
  - Coordination with other societies/organizations/stakeholders
  - Establish a task force to implement recommendations

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Thank you / Q&A

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