

## CIF21 CDS&E Working Group

Eduardo Misawa  
Program Director  
National Science Foundation  
Office of Cyberinfrastructure  
emisawa@nsf.gov

## Computational and Data-Enabled Science and Engineering (CDS&E) Working Group

### Members:

- Tom Russell - OD/OIA
- Evelyn Goldfield - MPS/CHE
- Daryl Hess - MPS/DMR
- Pedro Marronetti - MPS/PHYS
- Peter McCartney - BIO/DBI
- Julie Dickerson - BIO/DBI
- Almadena Chtchelkanova - CISE & GEO/OAD
- Vasant Hanaver – CISE/IIS
- Sumanta Acharya - ENG/CBET
- Clark Cooper - ENG/CMMI
- Doris Carver – EHR/DGE
- Richard Smith – EHR/HRD
- Eva Zanzerkia – GEO/EAR
- Gabrielle Allen – OD/OCI (co-Chair)
- Sastry Pantula – MPS/DMS (co-Chair)
- Eduardo Misawa – ENG/CMMI (co-Chair)
- (SBE member: TBD)

## Background

- The ACCI's Task Force on Grand Challenges provide this recommendation  
“ It is recommended that permanent programmatic activities in *Cyber Science and Engineering (CS&E)* be established within NSF. These activities should range from division- and directorate-level programs for discipline-specific aspects of CS&E, to permanent NSF-wide crosscutting CS&E programs possibly managed by OCI. Interdisciplinary projects could be co-funded between cross-cutting and relevant disciplinary programs. The permanent NSF programmatic activities in CS&E would play a significant role in incentivizing universities to expedite the creation of CS&E research and educational programs, which in turn would go a long way in addressing the immense shortage of well-trained computational scientists and engineers in the workforce.”
- NSF is planning a cross-directorate “core” program on CDS&E (i.e. CS&E), following the ACCI Task Force on Grand Challenges’ recommendation.

## Questions for ACCI

- If the CDS&E cross-directorate “core” program is created, what should be the appropriate balance between disciplinary and multi-disciplinary research? And what should be the balance between research and prototyping and infrastructure? And support for traditional faculty careers and professional staff?
- What other CDS&E activities would support the careers of CDS&E researchers?
- How do we encourage research and education in CDS&E ? How do we encourage universities to develop and support career paths for CDS&E researchers?