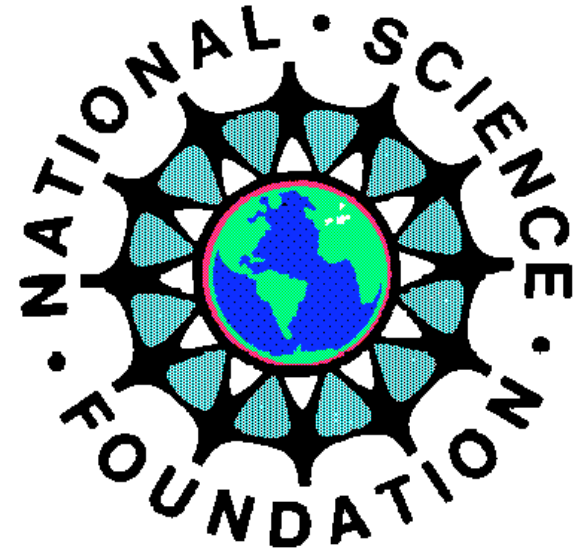


**NATIONAL SCIENCE
FOUNDATION**



**Tsunami Research in the NSF
ENG Directorate, NSF
Richard Fragaszy, Program Director**

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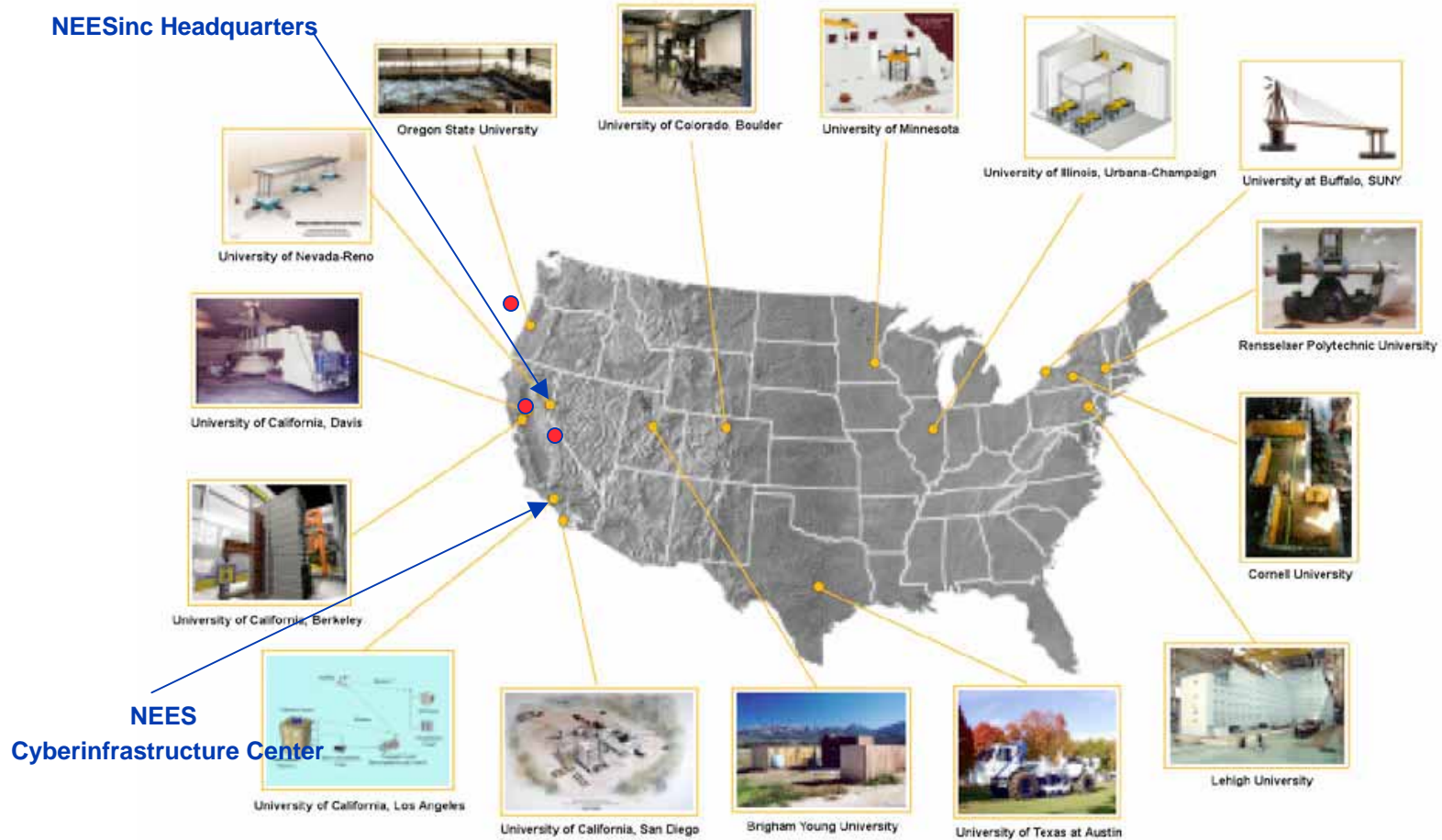


SUMMARY OF FY05 NSF FUNDING

- **Approximately \$6.3million directly related to tsunamis**
 - Hazard Assessment - \$3.1million
 - Warning Guidance - \$0.4million
 - Response & Preparedness - \$2.7million
- **Funding from 5 Directorates**
 - Engineering (ENG) – approx. 70% of total funding
 - » NEES approx. \$2.7million
 - Geological Sciences (GEO)
 - Social, Behavioral & Economic Sciences (SBE)
 - Biological Sciences (BIO)
 - Computer & Information Science & Engineering (CSE)
 - Co-funding from OISE, EHR, etc



NEES Infrastructure





SUMMARY OF FY06 NSF FUNDING ENGINEERING DIRECTORATE

- **NEESR-SG: TSUNAMOS: A Validated, Multi-Scale Tsunami Model for Hybrid Numerical-Experimental Simulation Hazard Assessment – CMMI-0619183**
 - Lynette, Liu, Mercado, Teng, von Hillebrandt-Andrade
 - Texas A&M; Cornell; U. Of Puerto Rico; U. of Hawaii
 - \$1.1 million/ 4years

- **Reconnaissance Survey of the July 17, 2006 Central Javan Earthquake and Tsunami - CMMI-0646278**
 - Synolakis & Fritz
 - USC and Georgia Tech
 - \$40k



FY07 and Future Funding

- Sources of Funding

- NEES Research

- » Funding level for tsunami research depends on quality and competitiveness of proposals

- » Must use NEES facilities

- » Types of Award

- Payload Projects (up to \$200k)
 - Individual Investigator (up to \$375k)
 - Small Group (up to \$1.6 million)
 - Grand Challenge (up to \$3.9 million)
 - Award types/funding levels subject to change
 - Small Group and Grand Challenge need to be multi-disciplinary



FY07 and Future Funding (continued)

– Individual Programs

- » **No NSF Directorate Program deals exclusively with tsunamis**
- » **Funding level for tsunami research depends on quality and competitiveness of proposals**
- » **Examples of Programs currently funding tsunami research**
 - **Geoenvironmental Engineering & GeoHazards Mitigation (ENG/CMS)**
 - **Infrastructure Management & Hazard Response (ENG/CMS)**
 - **Geophysics (GEO/EAR)**
 - **Marine Geology & Geophysics (GEO/OCE)**
 - **Digital Society & Technologies (CSE/IIS)**
 - **Decision Risk & Management Science (SBE/SES)**



FY07 and Future Funding (continued)

– Solicitations

- » Human Social Dynamics
- » Future solicitations may be suitable for research related to tsunamis

– Funding Levels

- » NSF has no target spending for tsunami research
- » Funding levels for tsunami research will depend on competitiveness of NEESR proposals, proposals to other solicitations, and unsolicited proposals
- » Funding for rapid data collection likely to be available for future events



Oregon State University NEES Tsunami Facility (49 m x 27 m x 2 m)





Oregon State University NEES Tsunami Facility

