

# National Center for Environmental Research



## NCER Vision Statement

NCER engages the scientific community to advance research for sustainable solutions to human health and environmental challenges

- Public nonprofit institutions/organizations
- Private nonprofit institutions/organizations
- State and local governments
- Federally Recognized Indian Tribal Governments
- U.S. territories or possessions

\* Located in the U.S.

# NCER Mantra

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Researching a sustainable tomorrow today

U.S. Environmental Protection Agency

## NCER - What We Do



- Fund high-quality research by the nation's leading scientists and engineers to improve EPA's scientific basis for decisions on national environmental issues
  - Science to Achieve Results (STAR) Grants
  - Small Business Innovation Research (SBIR)
  - People, Prosperity and the Planet (P3)
  - Fellowships

## Grant Competitions

- Create and implement competitions for proposals in research topics derived from the ORD Strategic Plan and from research plans for specific topics developed by ORD and Agency priorities
  - The STAR Grants Program is the primary way that EPA competitively funds university cooperative research.
    - In FY14, NCER supports 328 active and newly awarded STAR grants, totaling approximately \$320 million.

# Supporting National Programs and Agency Priorities



Collaborating with Agency  
partners to support  
extramural research in  
support of National Research  
Programs

# CSS Overarching Priorities

- CSS overarching priorities are to enable EPA to:
  - Address impact of existing chemicals, materials/products across the lifecycle.
  - Anticipate impacts of new chemicals, materials/products across the lifecycle.
  - Enable consideration and evaluation of complex interactions of chemical biological systems to support Agency decisions.

# 2016 – 2019 CSS Topics

- **Chemical evaluation**

- **Methods for chemical prioritization**

- **Complex systems Science**

- **Systems Based approach to understand exposure, effects and adverse outcomes**

- **Lifecycle analytics**

- **LCA and sustainable chemical design and use**

- **Solution-Based Translation and Knowledge Delivery**



# Recent STAR Grants: Chemical Evaluation

1. Susceptibility and Variability in Human Response to Chemical Exposure – 1 award
  - Texas A&M: “Toxicogenetics of tetrachloroethylene metabolism and toxicity; Ivan Rusyn
2. New Methods in 21<sup>st</sup> Century Exposure Science – 5 awards
  - University of California – San Francisco: A Non-targeted Method for Measuring Multiple Chemical Exposures; Tracey Woodruff
  - Virginia Polytechnic Institute and State University: Rapid Methods to Estimate Exposure to SVOCs in Indoor Environments; John C. Little
  - University of Michigan: 3-dimensional Micro-gas Chromatography Device for Rapid and Sensitive Indoor Chemical Exposure Analysis; Xudong Fan
  - Duke University, Boston University: Residential Exposure of Young Children to SVOCs; Heather Stapleton
  - University of California – Davis: Tracking Semivolatile Organic Compounds Indoors; Deborah Bennett

# Questions?

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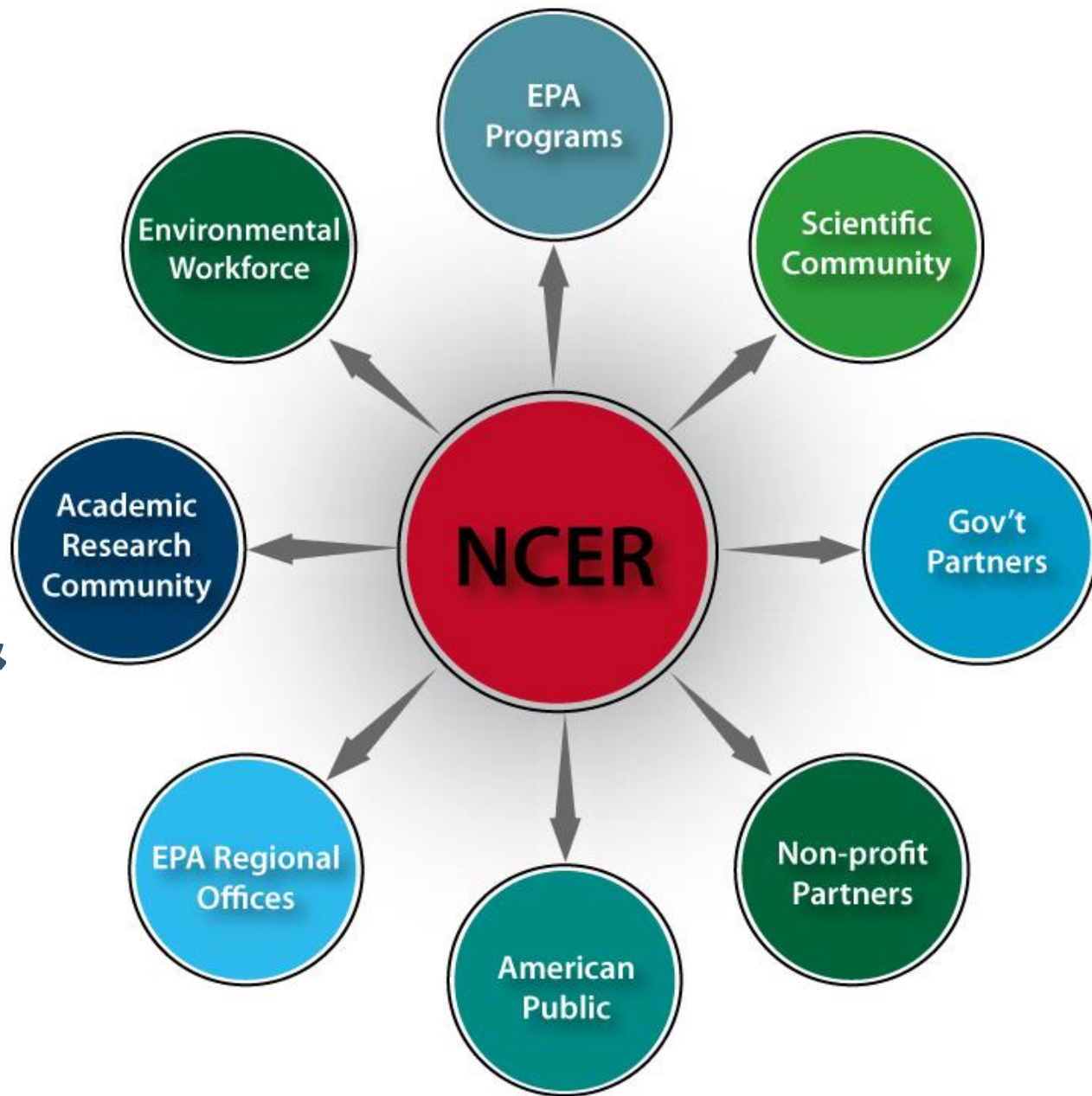
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# Engaging through Interagency Agreements & Partnerships



# STAR Grants Process



Each phase of the grants process provides opportunity for engagement and collaboration from NPD teams and subject matter experts from other applicable EPA offices.

# NCER Programs

- People, Prosperity, and the Planet (P3)
- Fellowships
  - Greater Research Opportunity (GRO) Fellowship
  - STAR Fellowship
  - Fellowship Partnerships
    - American Association for the Advancement of Science (AAAS)
    - Association of Schools and Programs of Public Health (ASPPH)
    - EPA Marshall Scholarship Program