



# External Advisory Panel

January 19, 2009



**NIEHS**  
National Institute of  
Environmental Health Sciences

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
National Institutes of Health

<http://www.niehs.nih.gov/sbrp>

# Meeting Overview

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- Monday
  - Welcome
  - SBRP Program Staff Presentation
  - Stakeholder Discussions
- Tuesday
  - Federal Partners Discussions
  - Closed Session
- Wednesday
  - Closed Session
  - Wrap-up & Next Steps

# Goal

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The goal of convening the Superfund Basic Research Program External Advisory Panel is to provide the SBRP staff input for the development of a framework for the future direction of the Program.

# Rationale

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We are seeking insights on how to:

Balance current research needs and anticipate emerging issues pertaining to hazardous substances in the environment

Target best scientists, best approaches

Move research from “lab” into practical use

# Charge

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To provide the SBRP with independent analyses and recommendations to:

1. What are the key, fundamental scientific issues that should frame the SBRP research enterprise?
2. What are the emerging issues that the SBRP should anticipate and incorporate into future initiatives?
3. How can the SBRP best support the acceleration of the basic science into application?
4. What activities and relationships would suit the objectives stated in the rationale?

# Work Plan

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- Interactive discussions with SBRP staff, stakeholders and federal partners
- Work session Tuesday afternoon: Panel discussion – agree on major conclusions, develop report sections and content, refine writing assignments
- Work session Wednesday morning: presentation of report sections by authors, finalize report organization, prepare draft chapters
- Layout next steps

# Post-Meeting

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- Chair to compile chapters; request additional material/clarification as needed from Panel; complete draft EAP Report
- Panel review of draft EAP Report
- Chair review Panel comments, revise EAP Report
- SBRP Director and Panel review second draft EAP Report
- Chair to finalize EAP Report and submit to NIEHS
- Chair and Council Representative to present findings to May 2009 NAEHS Council

# Presentation Overview

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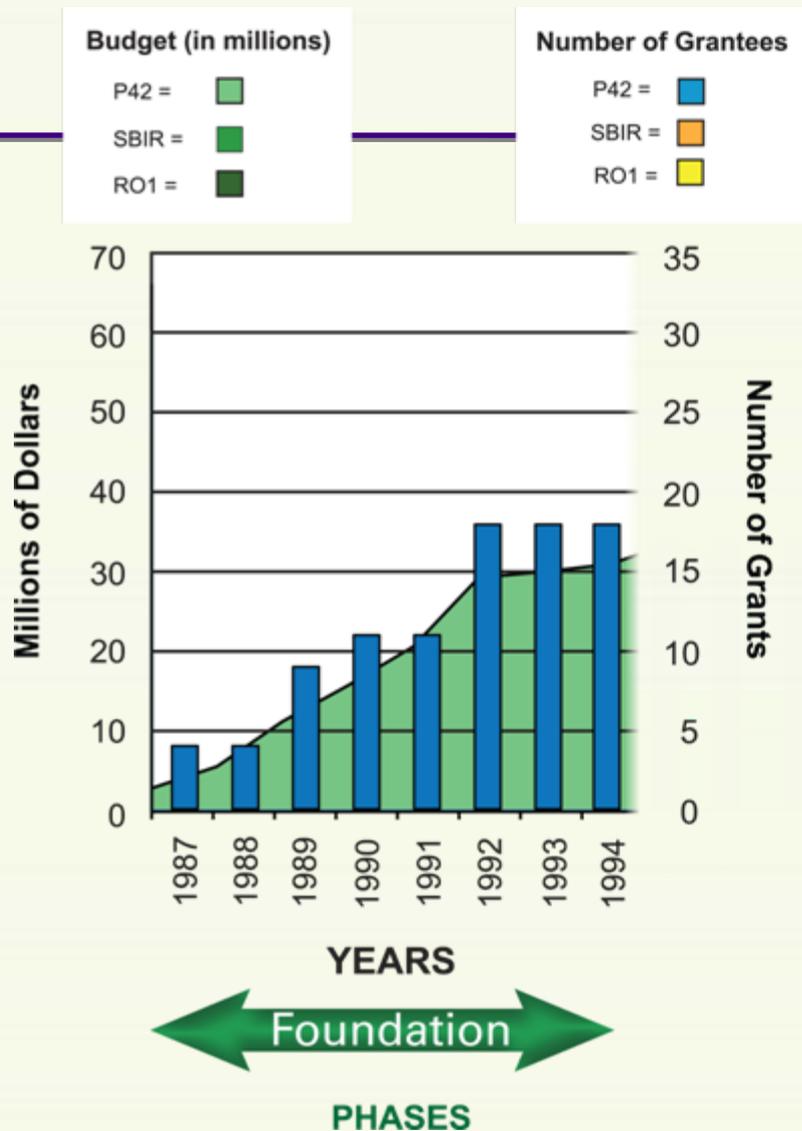
- Historical perspective
- Snapshot of the science
- Management strategies
- Vision for the future

# Overarching Program Goals

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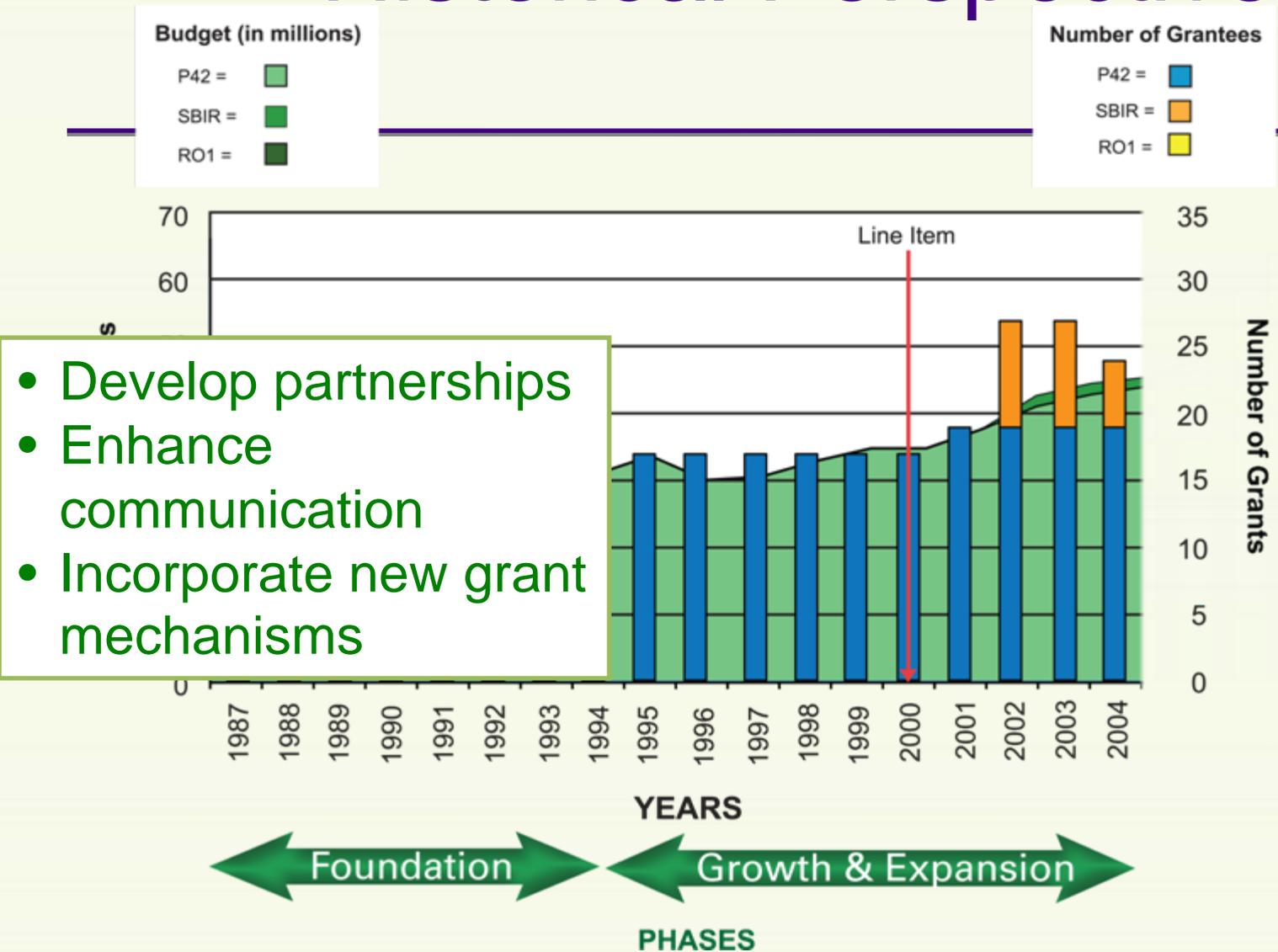
- Elucidate relationship between exposure and disease
- Improve public health
- Reduce the risk of exposure
- Develop efficient and cost-effective cleanup strategies
- Contribute to the decision-making process

# Historical Perspective

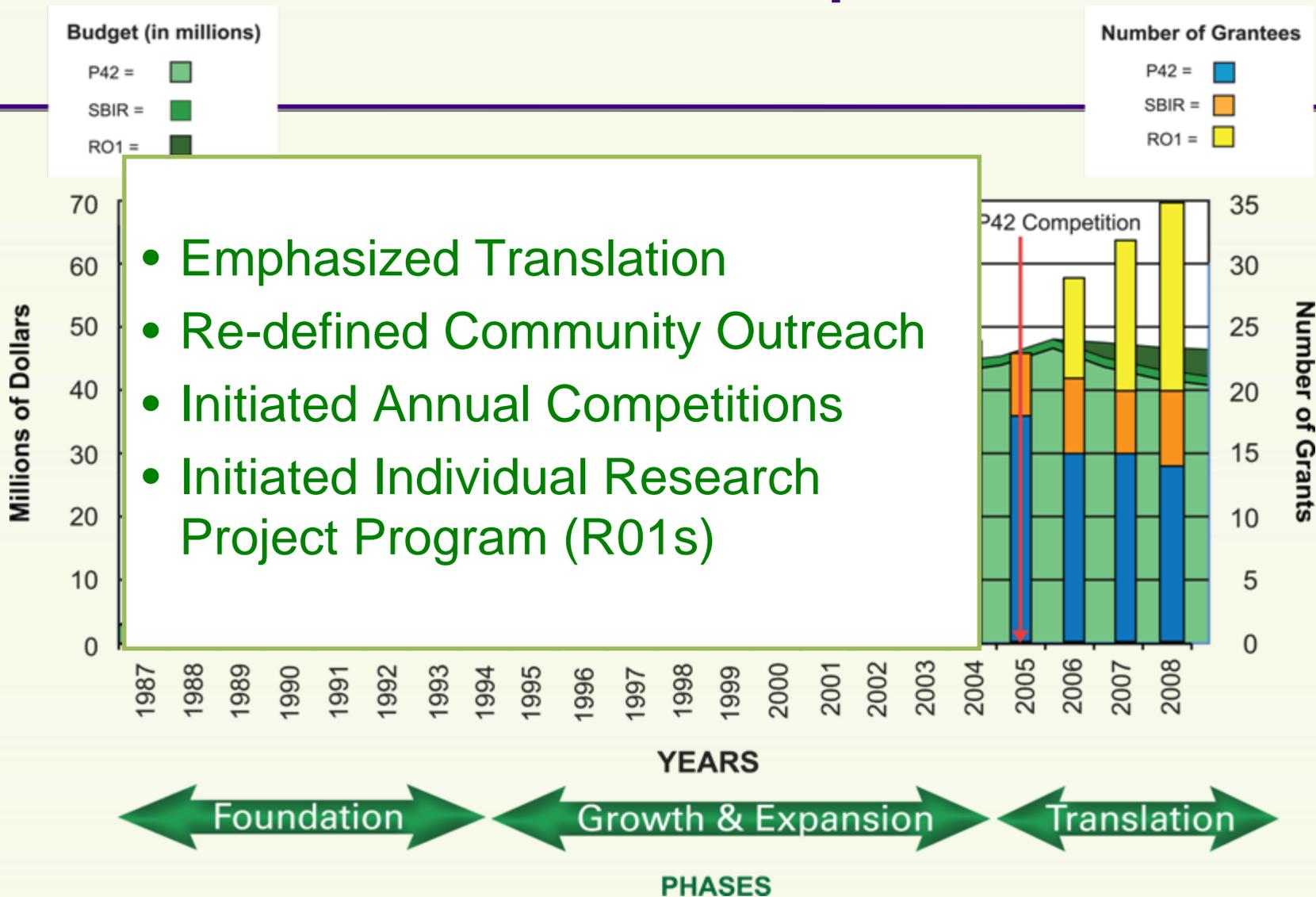


- SARA 1986
- Multi/Interdisciplinary
- Multi-project
- Development of science capacity
- 4 programs and \$3M → 18 programs and \$30M

# Historical Perspective

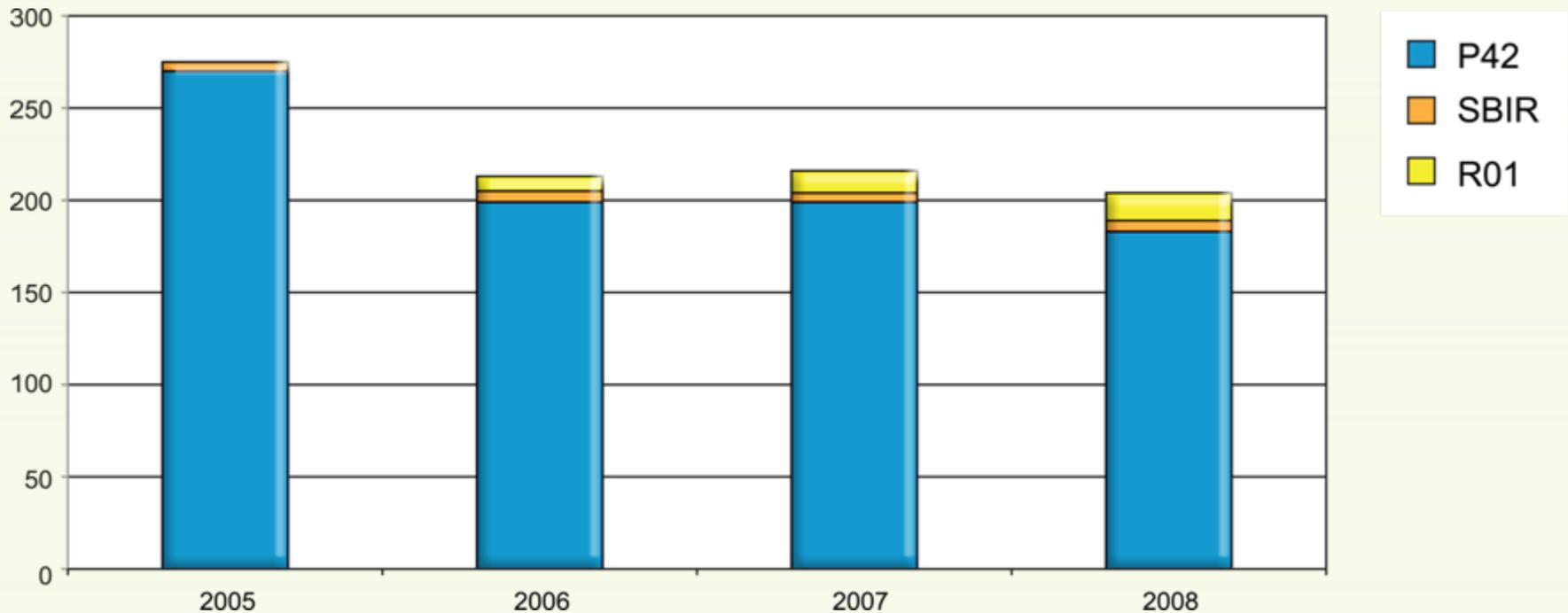


# Historical Perspective

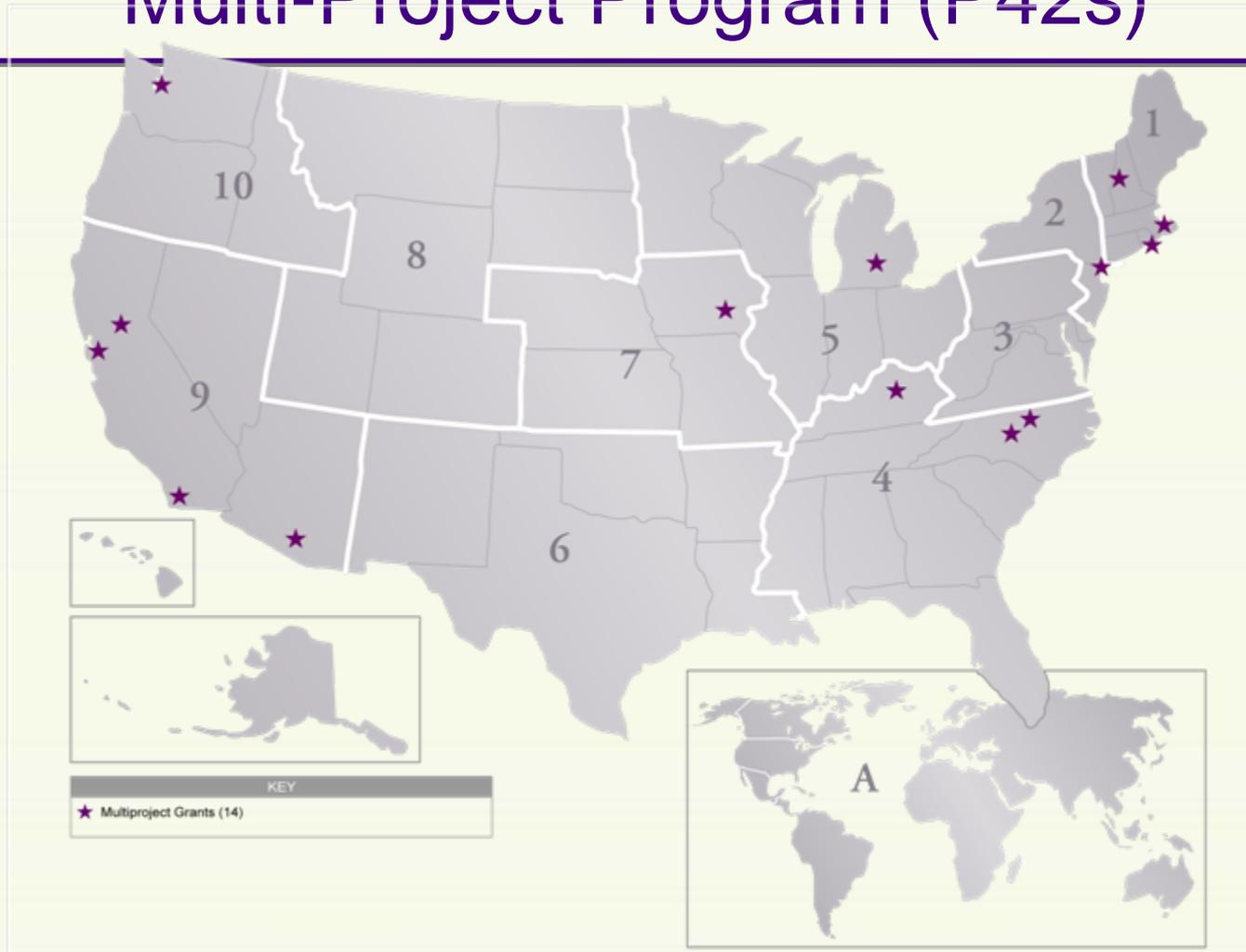


# SBRP Funding History

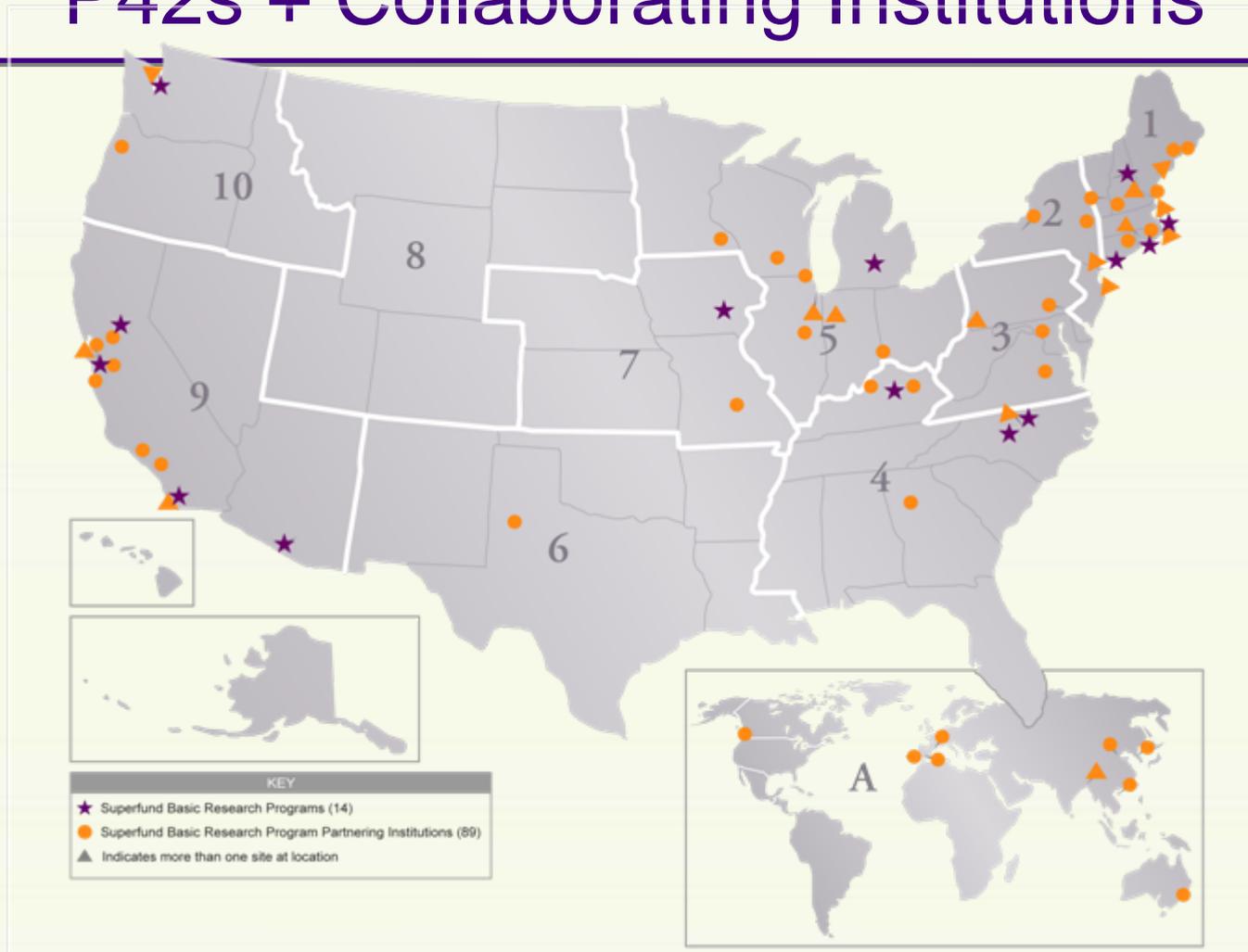
## Number of Research Projects: 2005-2008



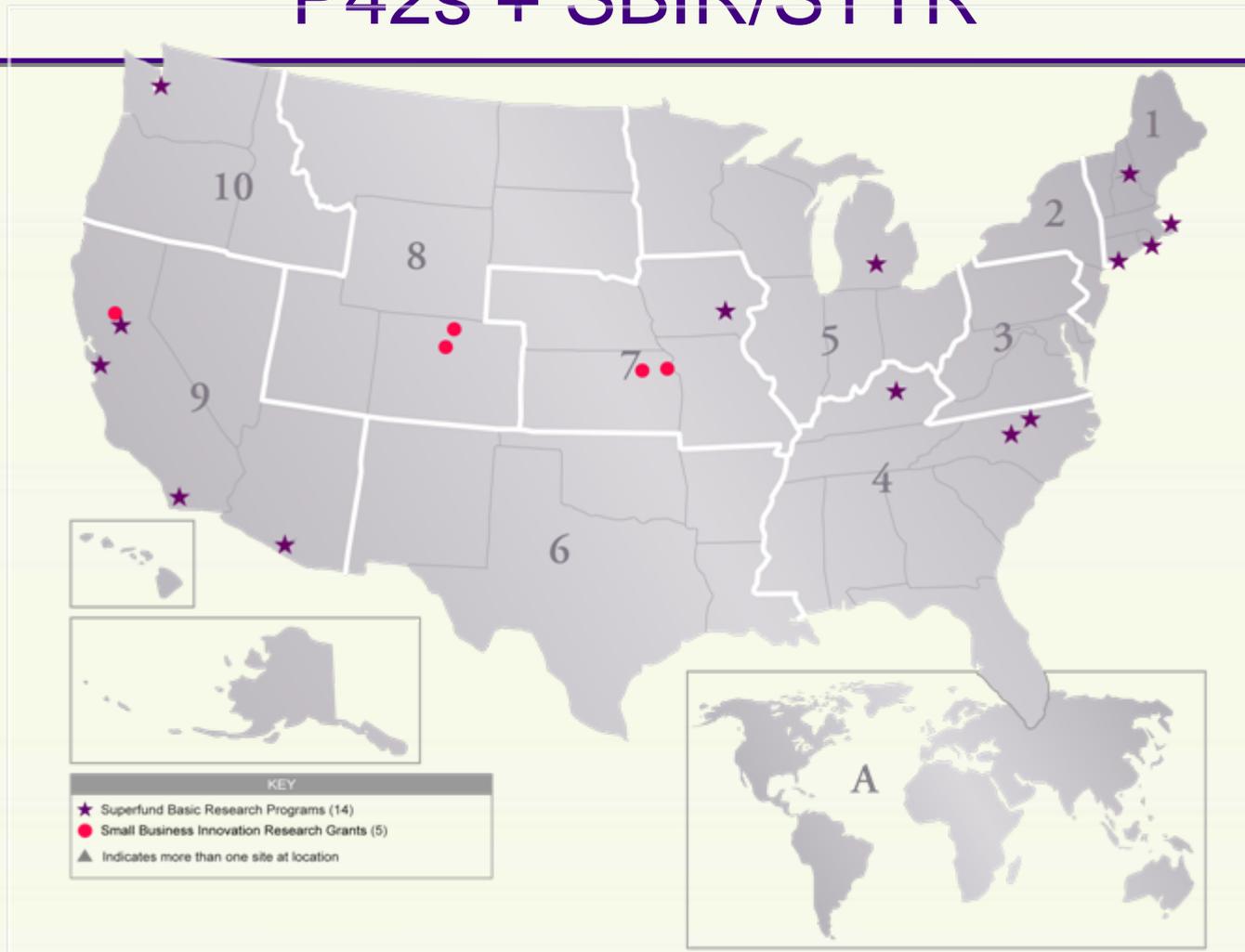
# The Current Program: Multi-Project Program (P42s)



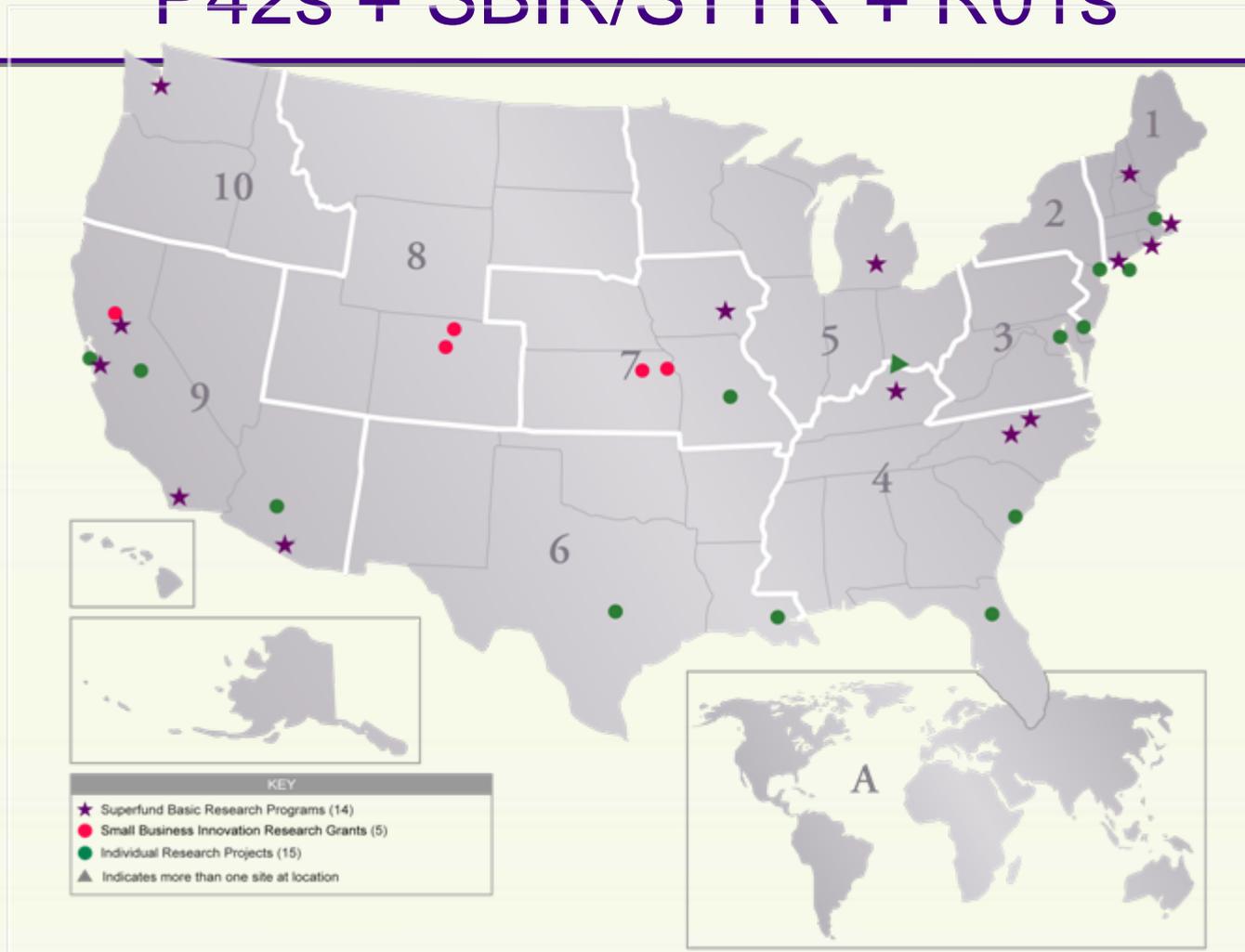
# The Current Program: P42s + Collaborating Institutions



# The Current Program: P42s + SBIR/STTR

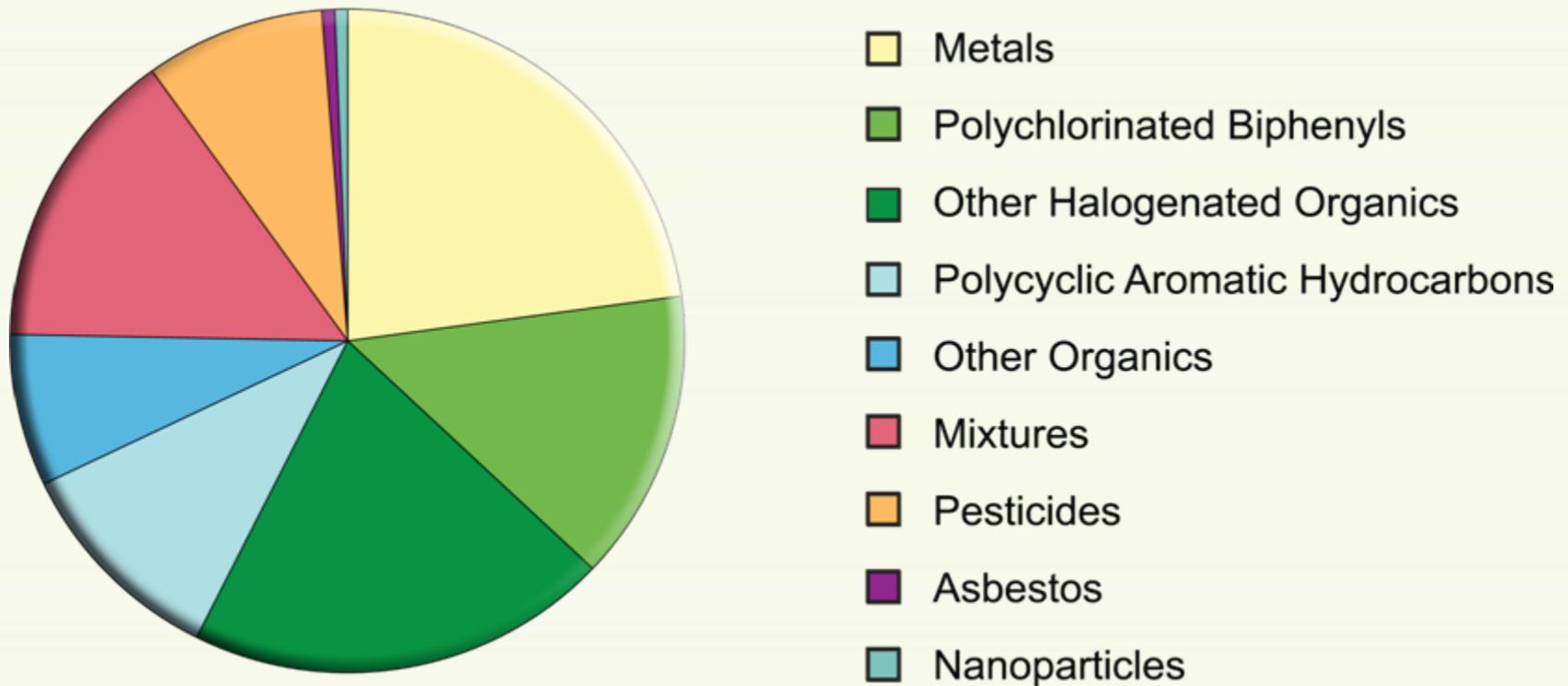


# The Current Program: P42s + SBIR/STTR + R01s



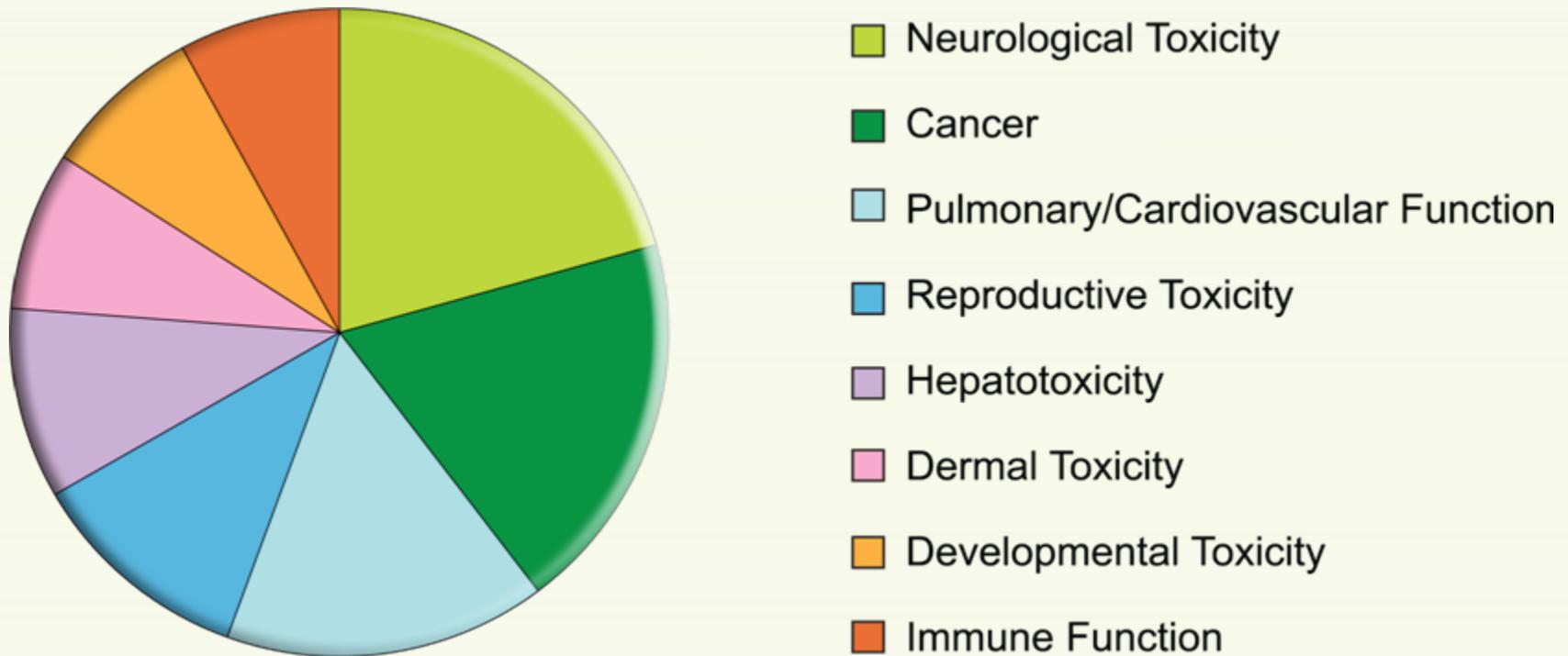
# The Current Program: Breakdown by Hazardous Substance

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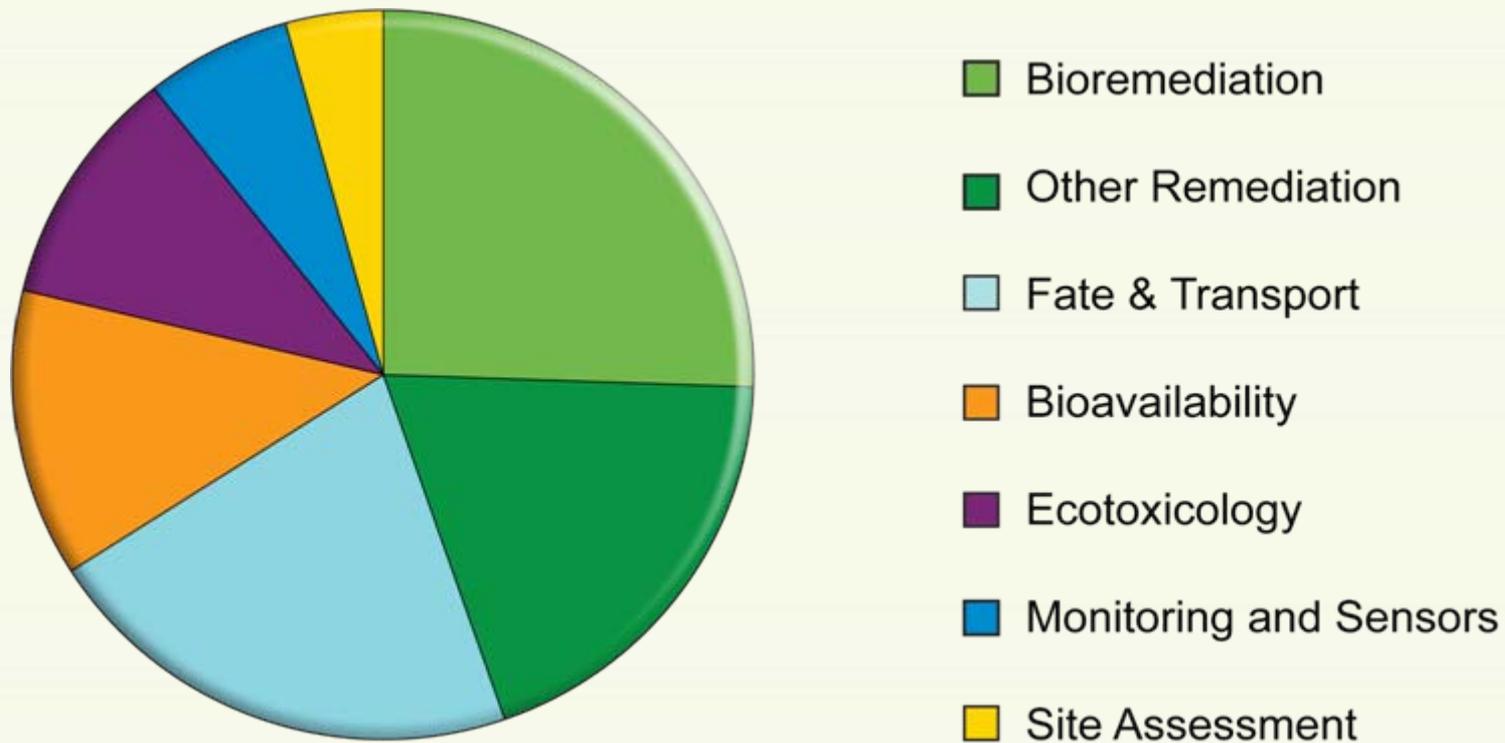
# The Current Program: Breakdown by Disease / Dysfunction

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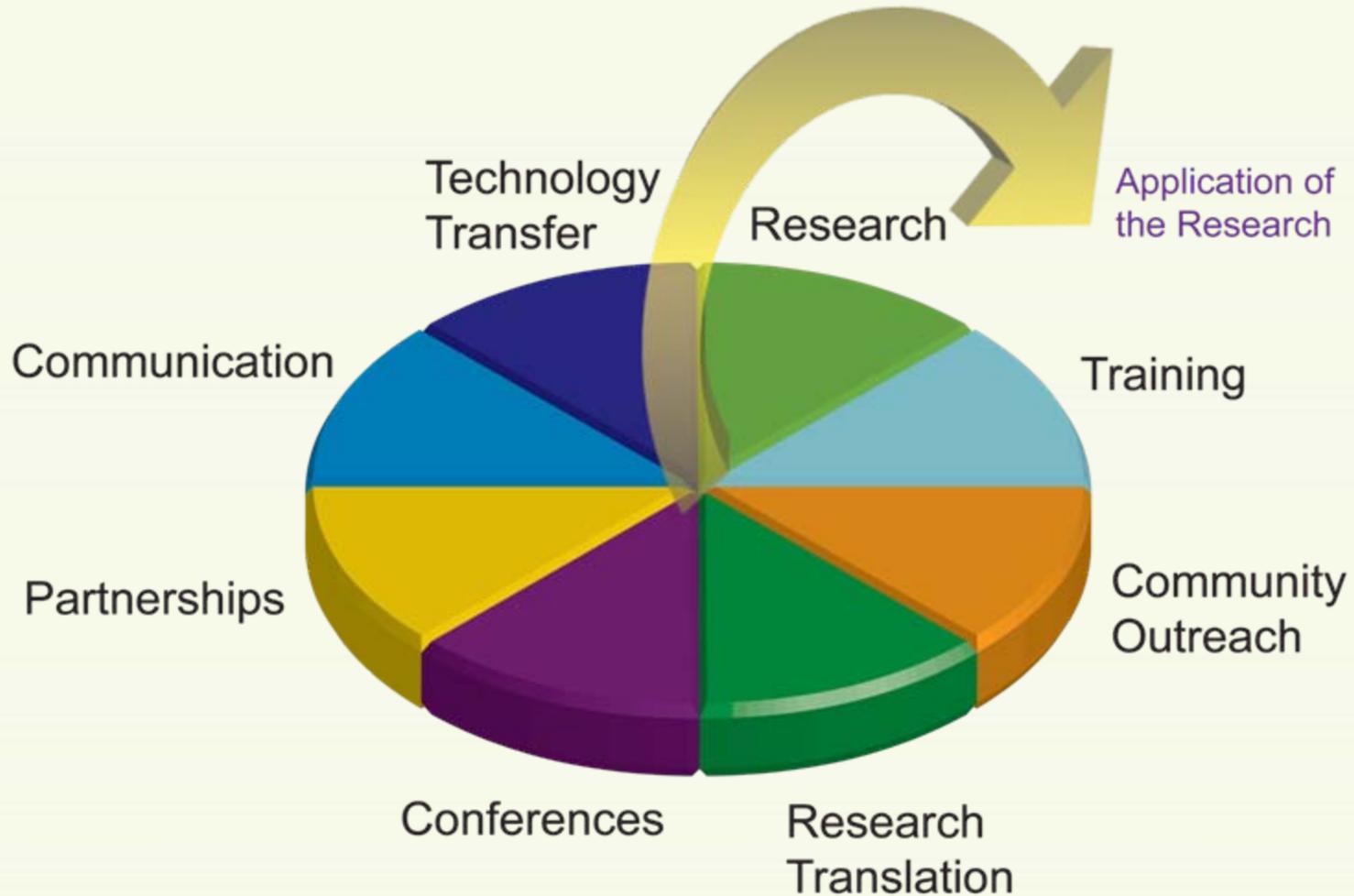


# The Current Program: Breakdown of Non-Biomedical Research

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# Critical Components of SBRP



# Management Strategies

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1. Build partnerships
2. Coordinate with other federal agencies
3. Facilitate inter-laboratory projects
4. Provide seed funds for tech transfer
5. Support conferences
6. Communicate research findings

# Management Strategies

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## 1. Build partnerships

- EPA
- ATSDR
- Department of Defense
- Bridges to be built
  - States
  - Tribes
  - NGOs
  - Others?

# Management Strategies

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## 2. Coordinate with other federal agencies

### – EPA

- SBRP RFA development & review process
- Joint funding of conferences
- Program staff & Grantee participation at EPA conferences
- Risk-e-Learning web seminars
- Targeted web seminars for EPA Regional staff

# Management Strategies

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## 2. Coordinate with other federal agencies

### – ATSDR

- SBRP RFA development & review process
- Joint funding of conferences
- Grantee seminars for ATSDR staff

# Management Strategies

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2. Coordinate with other federal programs
  - NIEHS Worker Education & Training Program
  - NIOSH
  - Department of Defense (SERDP/ESTCP)
  - Asbestos Working Group
  - Partnerships for Environmental Public Health
  - NIEHS Nanotechnology (NNI)

# Management Strategies

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## 3. Facilitate inter-laboratory projects

- Bioassay Network

*TAMU, Duke U, MSU, UC-San Diego, UC-Davis, U Washington, EPA R10, EPA ORD*

- Bayesian Models for Decision Making

*EPA ORD, Duke U, Dartmouth*

- Environmental Fate and Exposures to TCC

*UC-Davis & Arizona State U, Cal EPA*

- Arsenic Bearing Solid Residuals

*U Arizona, Dartmouth, Columbia*

# Management Strategies

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## 4. Provide seed funds for tech transfer

- Milt Gordon – Phytoremediation
- Cass Miller – DNAPL Source Zone Remediation
- Kent Udell – Steam Extraction
- Wendell Ela – Stabilization of Arsenic Residuals
- David Ozonoff – Software Development
- Eric Suuberg – Vapor Intrusion Modeling
- Mike Hooper – Biological Monitoring

# Management Strategies

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## 5. Support conferences

- Dioxin Toxicity: Mechanisms, Models, and Potential Health Risks
- Vapor Intrusion In Commercial and Industrial Buildings: Assessment & Mitigation
- Green Technology Entrepreneurship Academy
- The Central and Eastern Europe Conference on Health and the Environment
- Mine Tailings Stabilization in Arid and Semi-Arid Environments: Assessment, Problems, and Solutions
- Fifth PCB Workshop: New Knowledge Gained From Old Pollutants

# Management Strategies

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## 6. Communicate research findings

- Research Briefs
- Risk-e-Learning Web Seminars
- Conference Participation
- Meetings with EPA and ATSDR Regional and Headquarter staff
- Dynamic web page
- Articles in the NIEHS monthly newsletter

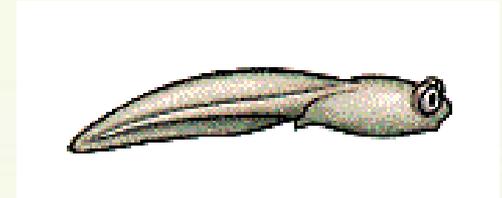
# SBRP: 20 Years of Success...

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“...I can tell you that I regularly forward SBRP research findings (your Research Briefs) to several fairly large listserves, reaching many different NGOs and individuals. This kind of summary is very useful and is much appreciated.

I am entirely convinced that reaching community groups/diverse NGOs is essential for helping to develop sound public policy.”

Ted Schettler, MD, MPH  
Science Director  
Science & Environmental Health Network



# SBRP: A Vision for the Future

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- Preserve positive aspects
  - Long term funding – allows researchers to take risks
  - Not prescriptive – provides flexibility
- Support full spectrum of research
  - Continued support for basic research
  - Application of research: impacts on policy, decision makers, public health
- Address emerging issues

# SBRP's Hopes/Expectations for Panel Input

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- Look forward, not back
- Think outside of the box
- The SKY is the limit  
(SBRP will do reality checks later)

# Acknowledgements

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## Special Thank You to

- Beth Anderson, SBRP, NIEHS
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