SUPERFUND BASIC RESEARCH PROGRAM

sbrp

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

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

Goal

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

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

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

- 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

- 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

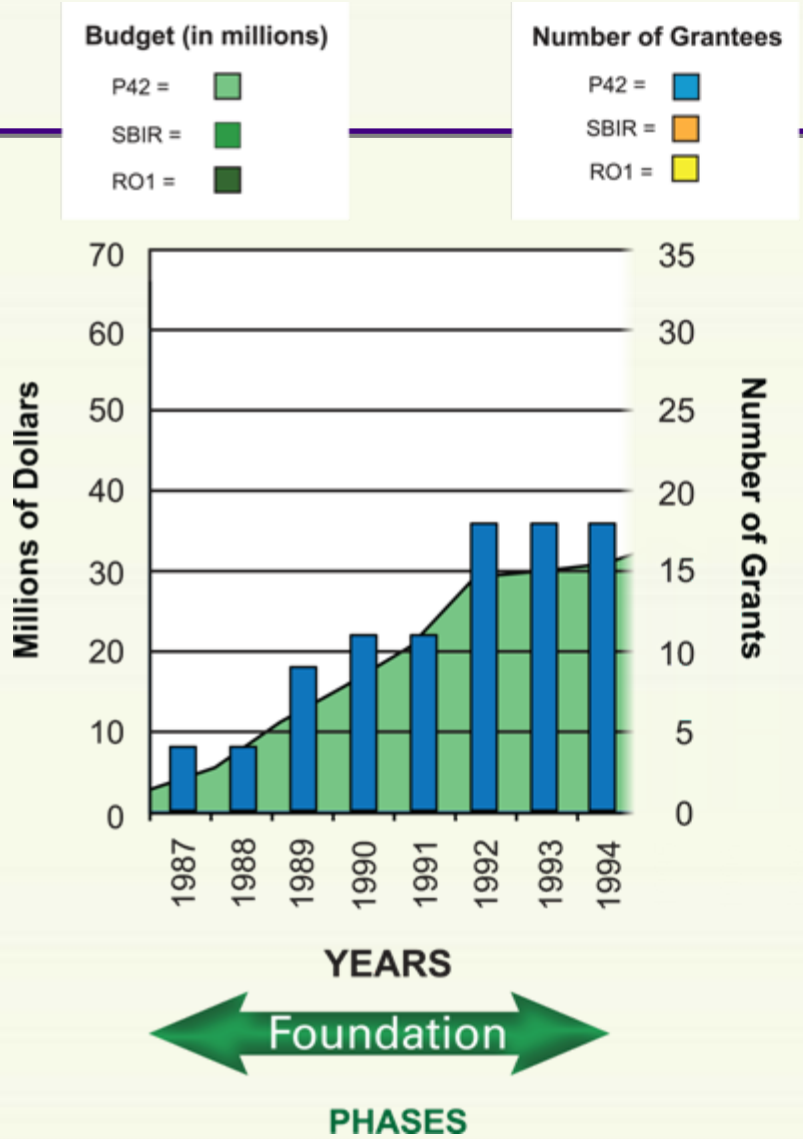
Presentation Overview

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

Overarching Program Goals

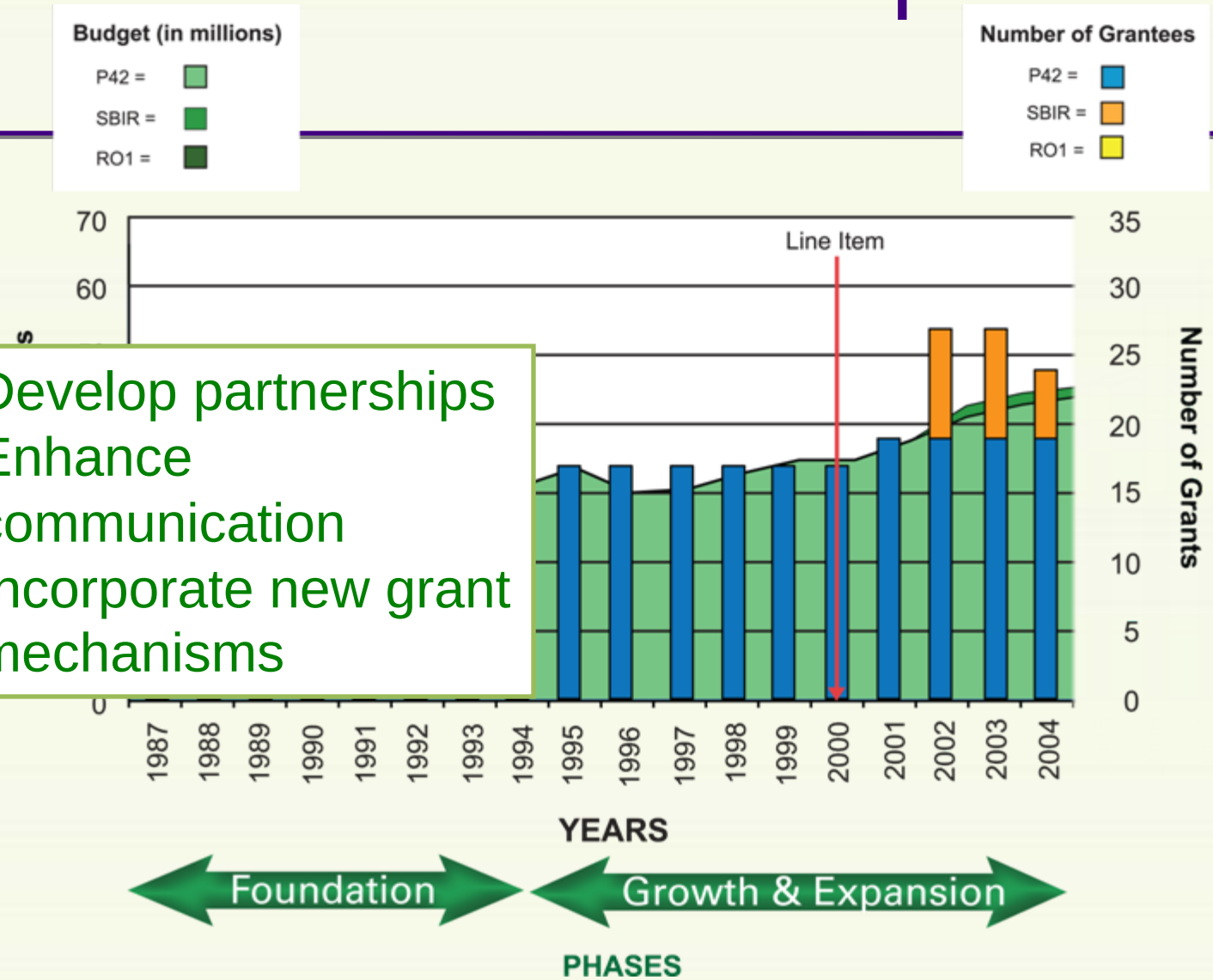
- Elucidate relationship between exposure and disease
- Improve public health
- Reduce the risk of exposure
- Develop efficient and cost-effective cleanup strategies
- Contribute to the decision-making process

Historical Perspective



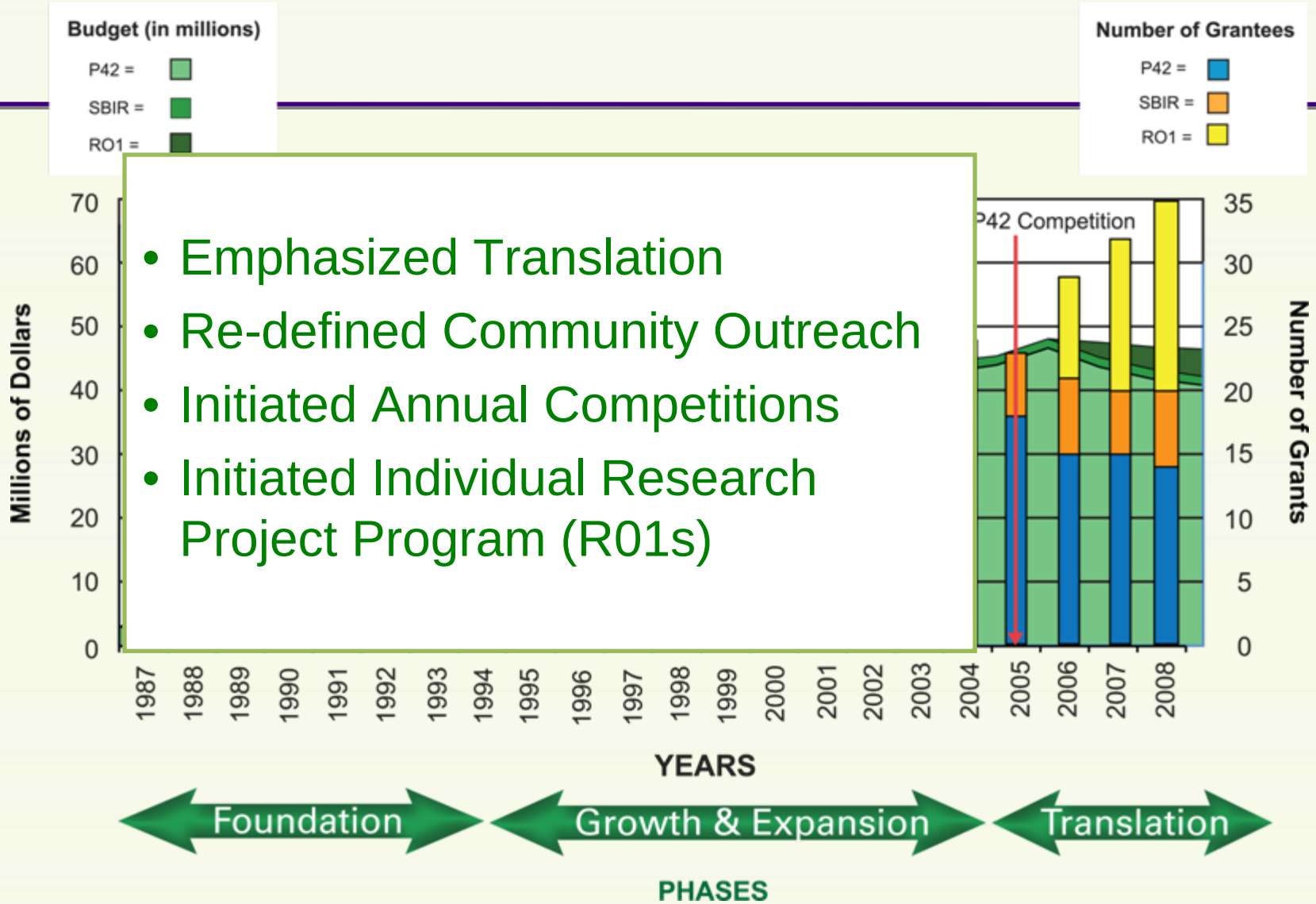
- SARA 1986
- Multi/Interdisciplinary
- Multi-project
- Development of science capacity
- 4 programs and $3M ➔18 programs and $30M

Historical Perspective



- Develop partnerships
- Enhance communication
- Incorporate new grant mechanisms

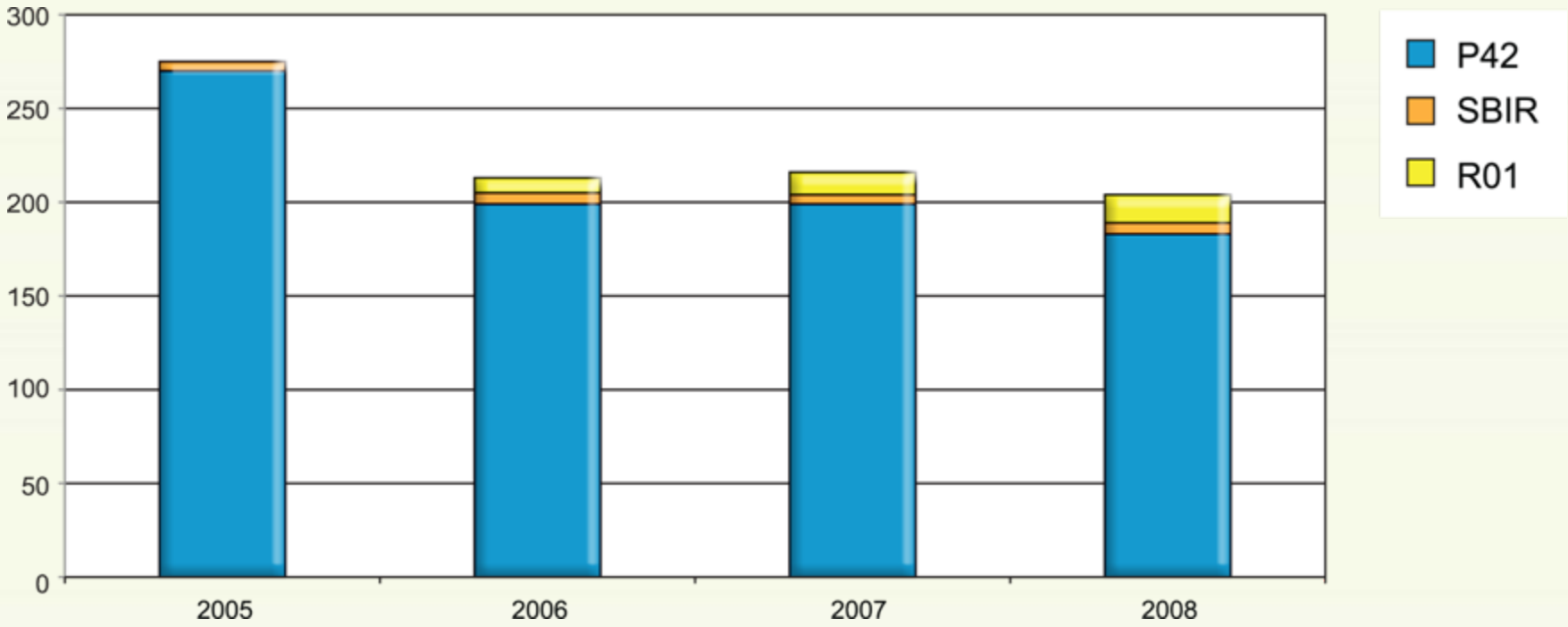
Historical Perspective



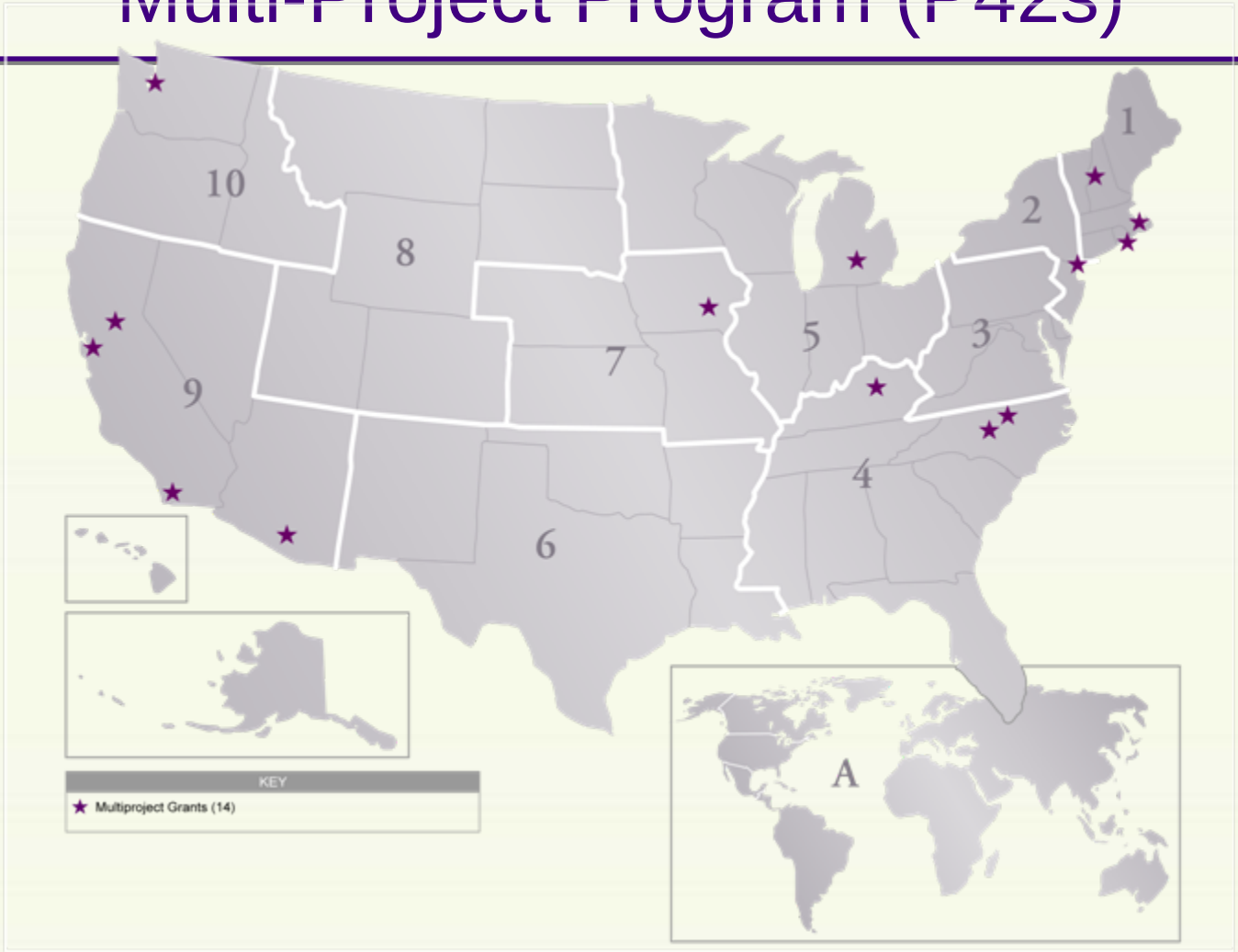
- Emphasized Translation
- Re-defined Community Outreach
- Initiated Annual Competitions
- Initiated Individual Research Project Program (R01s)

SBRP Funding History

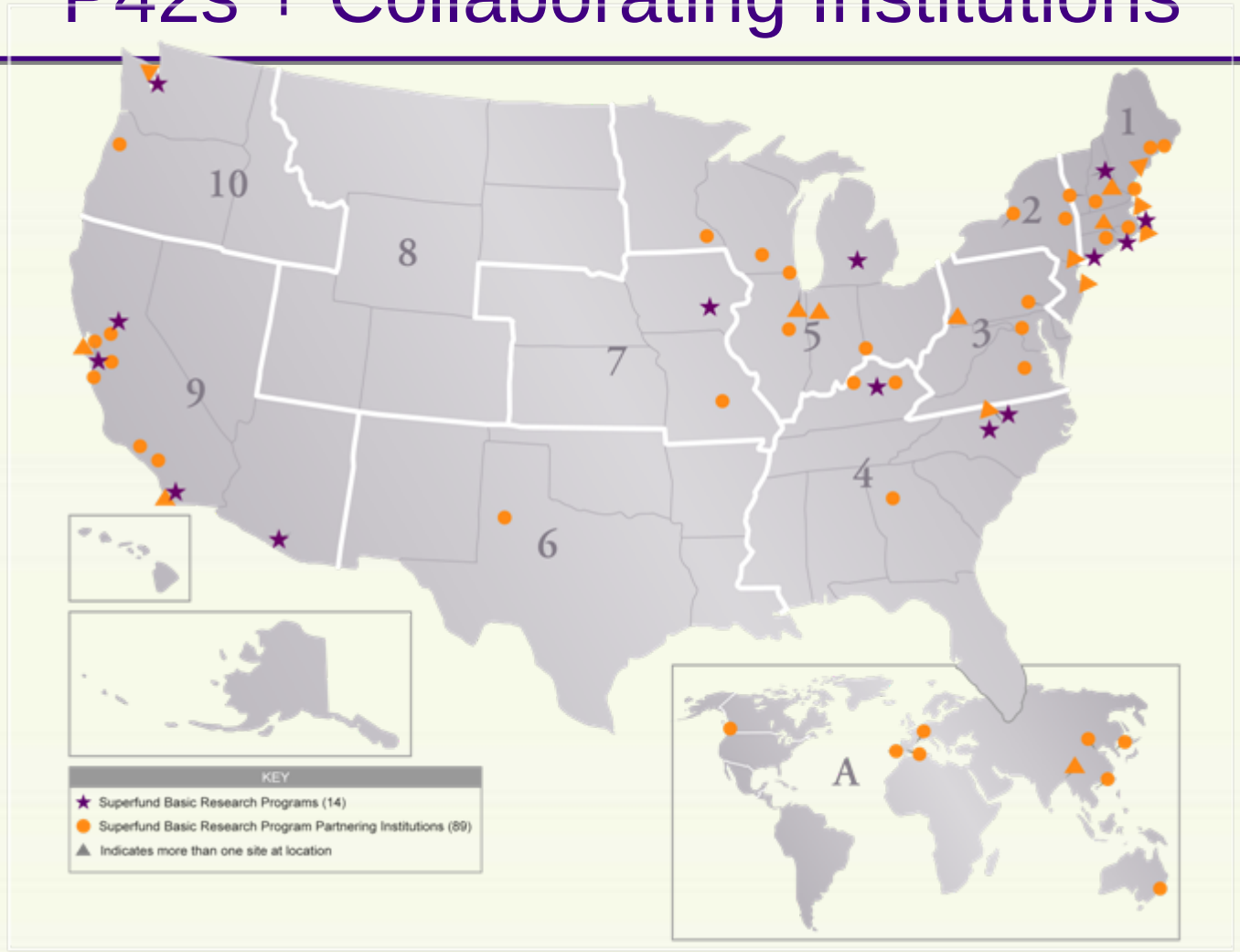
Number of Research Projects: 2005-2008



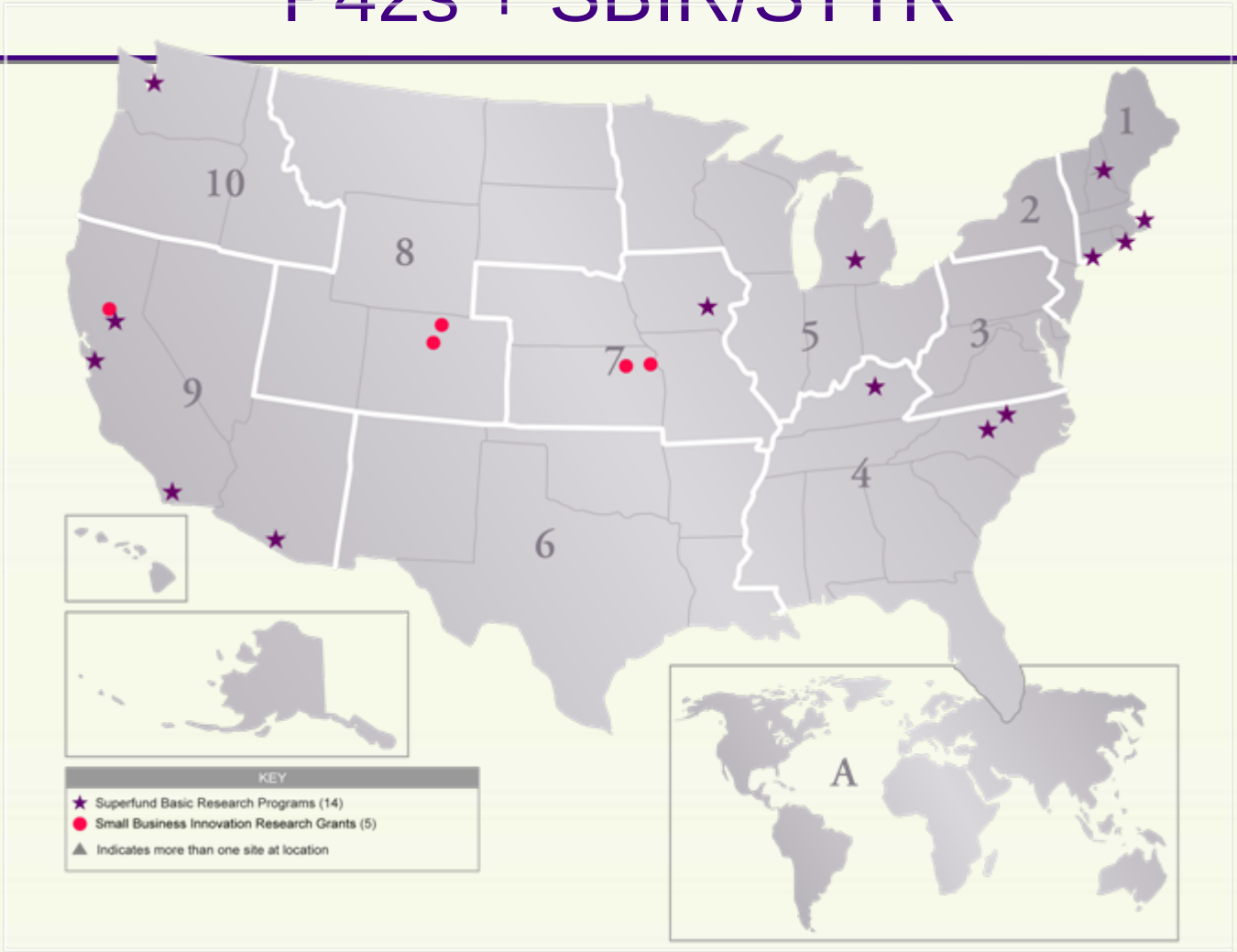
The Current Program:
Multi-Project Program (P42s)



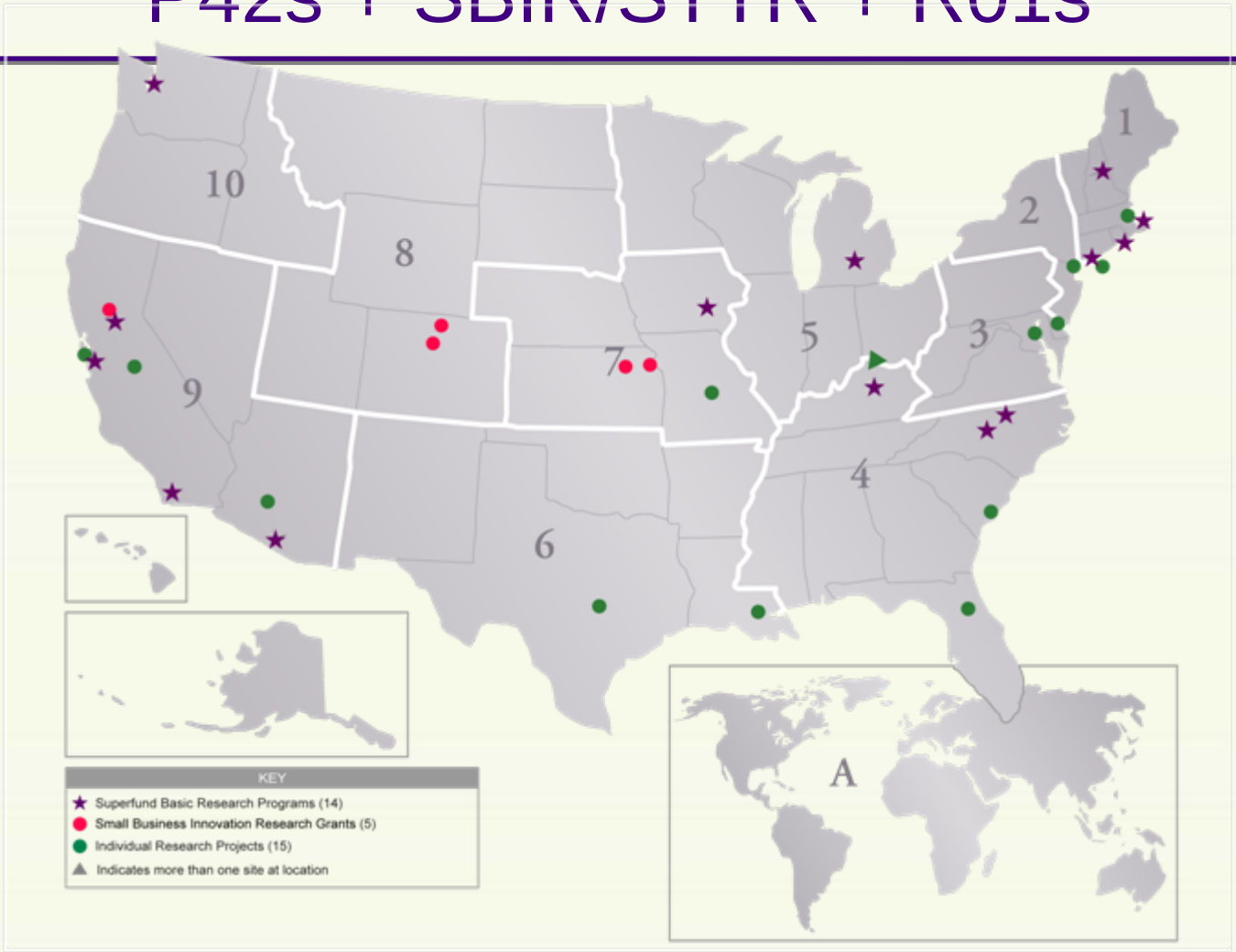
The Current Program:
P42s + Collaborating Institutions



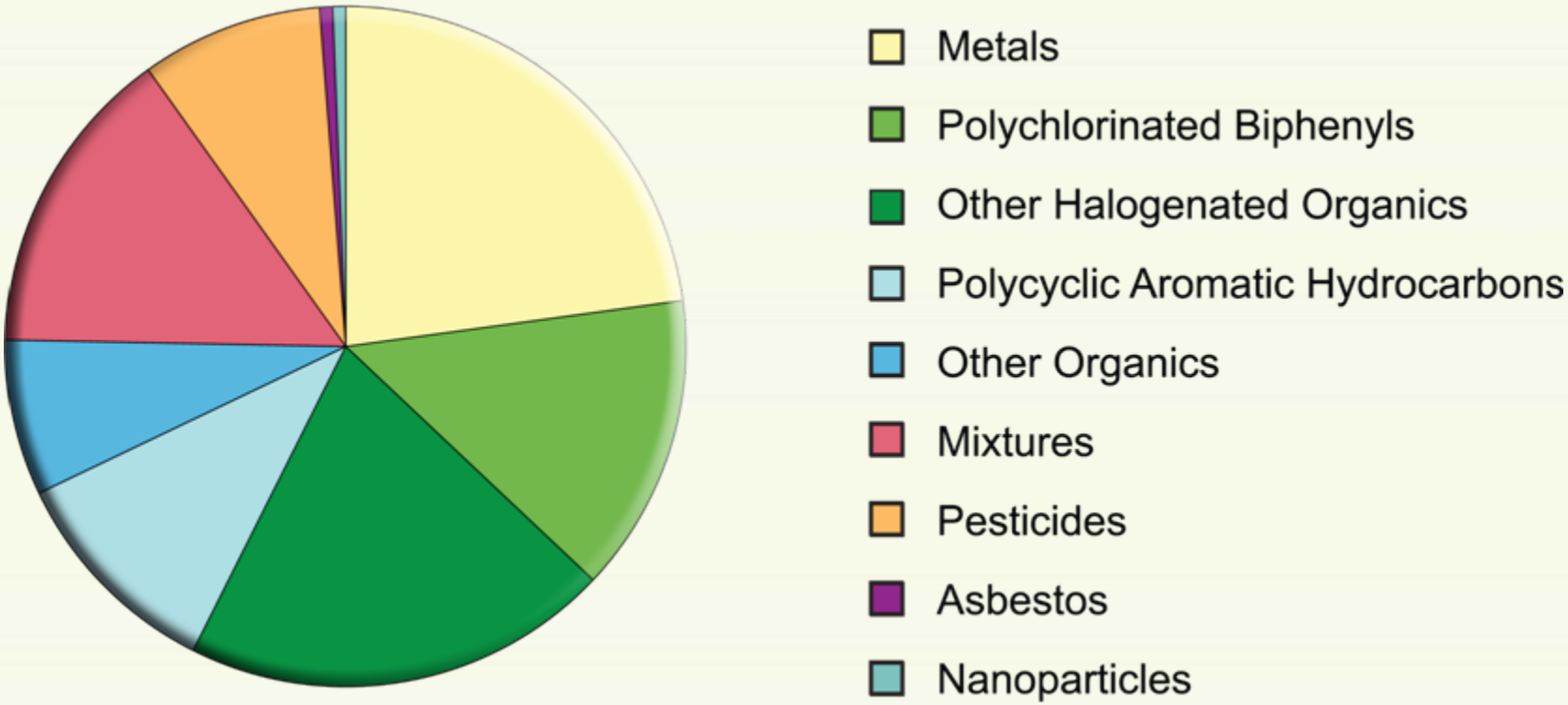
The Current Program:
P42s + SBIR/STTR



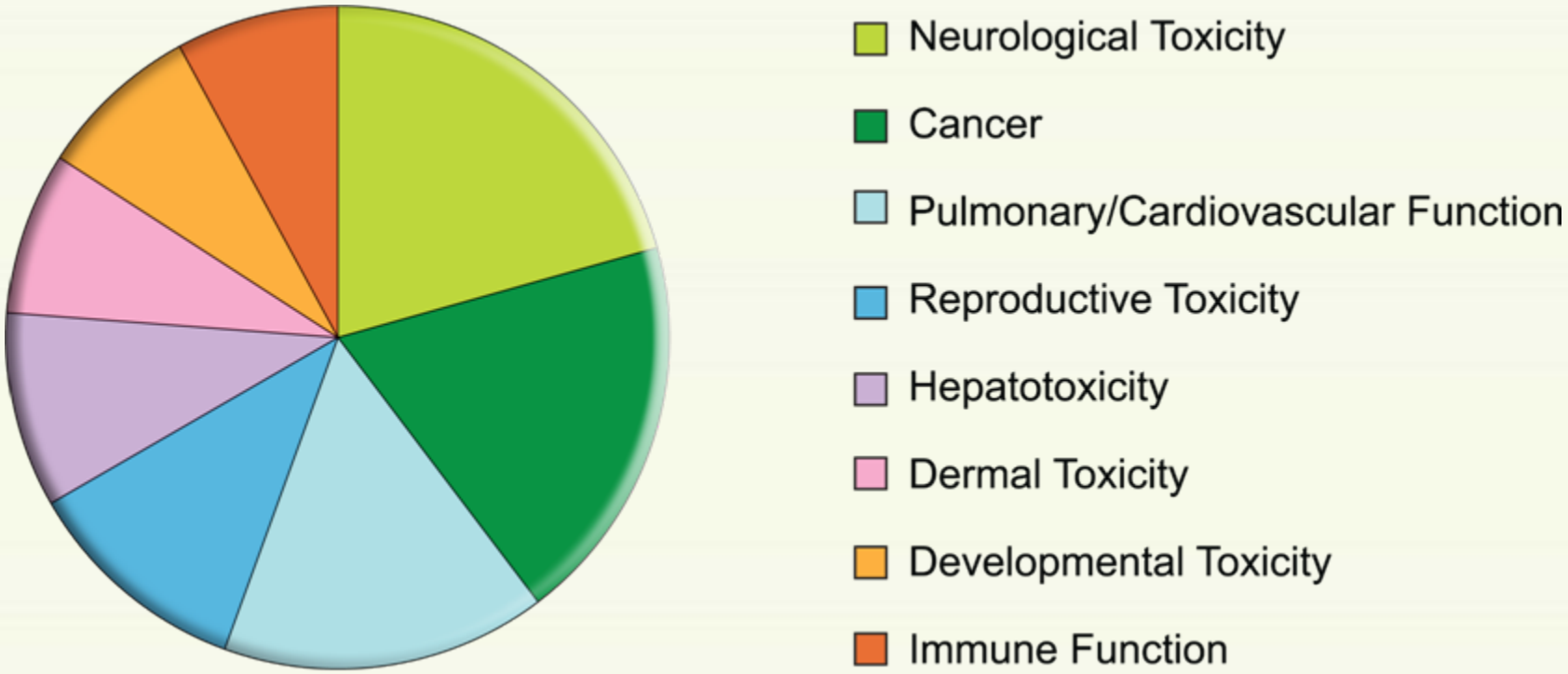
The Current Program:
P42s + SBIR/STTR + R01s



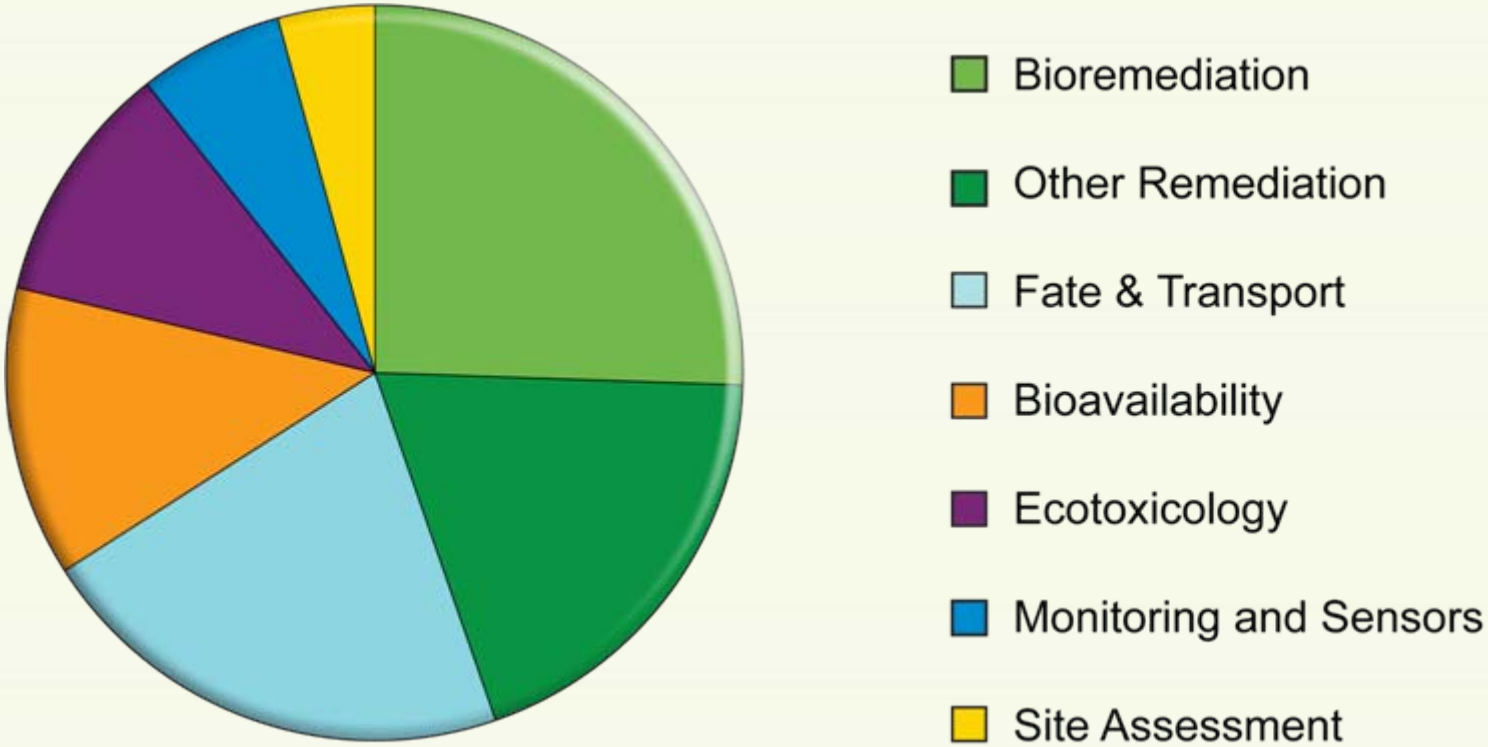
The Current Program:
Breakdown by Hazardous Substance



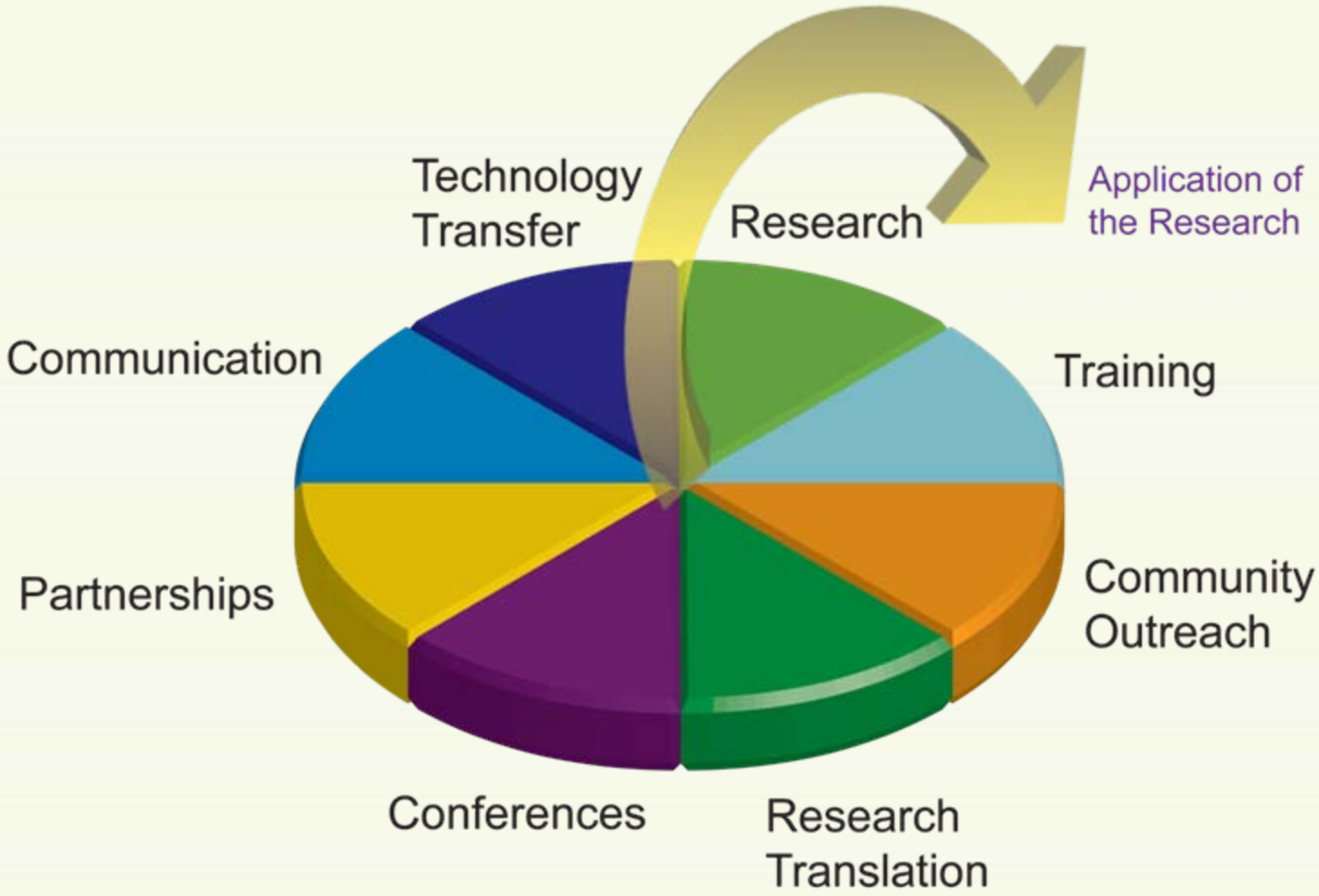
The Current Program:
Breakdown by Disease / Dysfunction



The Current Program:
Breakdown of Non-Biomedical Research



Critical Components of SBRP



Management Strategies

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

1. Build partnerships
   - EPA
   - ATSDR
   - Department of Defense
   - Bridges to be built
     - States
     - Tribes
     - NGOs
     - Others?

Management Strategies

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

2. Coordinate with other federal agencies
   - ATSDR
     - SBRP RFA development & review process
     - Joint funding of conferences
     - Grantee seminars for ATSDR staff

Management Strategies

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

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

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

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

6. Communicate research findings

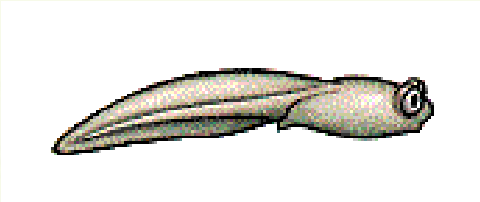
- Research Briefs
- Risk-e-Learning Web Seminars
- Conference Participation
- Meetings with EPA and ATSDR Regional and Headquarter staff
- Dynamic web page
- Articles in the NIEHS monthly newsletter

SBRP: 20 Years of Success…

"…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

- 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

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

Acknowledgements

Special Thank You to

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