

Discovery to Innovation

**University Industry
Partnerships**

Kesh Narayanan

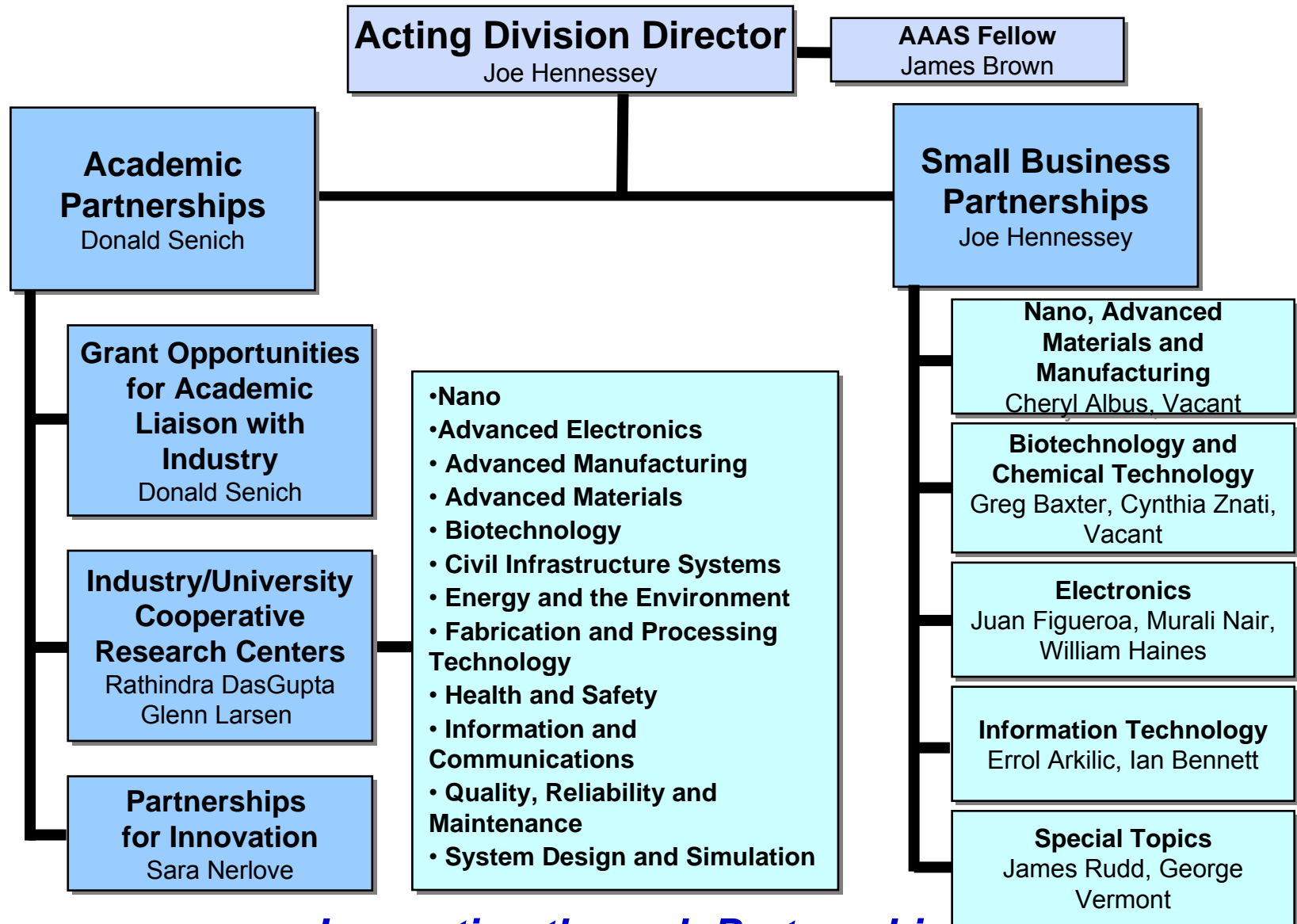
**Division of Industrial Innovation
and Partnerships**

**Directorate for Engineering
National Science Foundation**

***I/UCRC Annual Meeting
January 8, 2009***

Innovation through Partnerships

Industrial Innovation and Partnerships

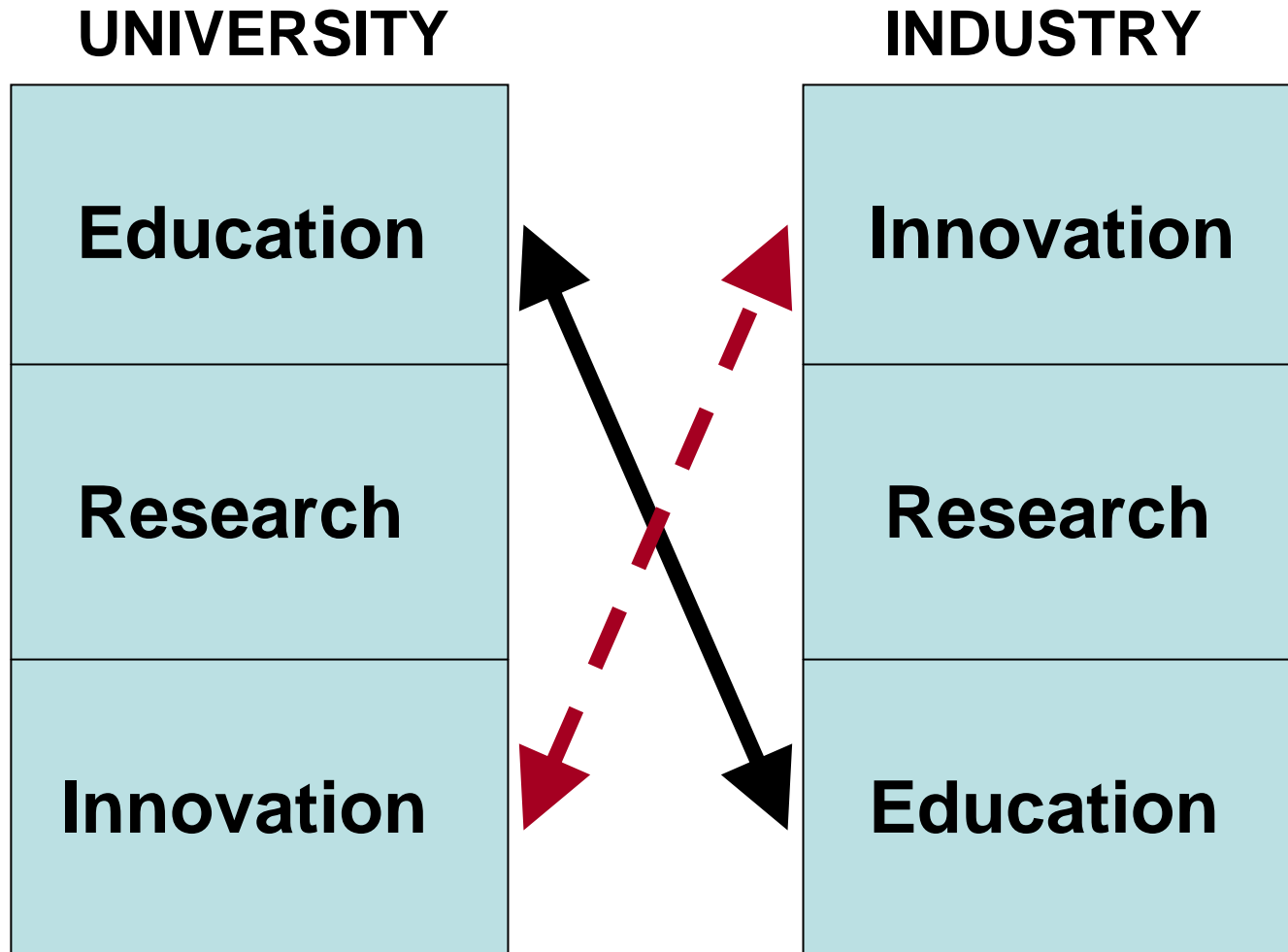


Innovation through Partnerships

Industry/University Partnerships

- Why
- How
- So What

University – Industry Priorities



Innovation through Partnerships

Innovation*

The design, invention, development and/or implementation of new or altered products, services, processes, systems, organizational structures, or business models for the purpose of creating **new real value** for customers and financial returns for the firm

*Innovation Measurement
A Report to the Secretary of Commerce
January 2008

Members of NSF University-Industry Advisory Subcommittee

- E. Jennings Taylor, Faraday Technology Inc (Co-Chair)^{1,2,3}
- Cherri Pancake, Oregon State University (Co-Chair)¹
- Albert Johnson, Corning^{2,3}
- Wayne Johnson, Hewlett-Packard³
- Lesa Mitchell, Kauffman Foundation³
- Richard Pearson, National Center for Manufacturing Sciences
- Karthik Ramani, Purdue University²
- Winslow Sargeant, Venture Investors LLC²

1 – ENG AdCom

2 – SBIR AdCom

3 – University/Industry Demonstration Project(UIDP)

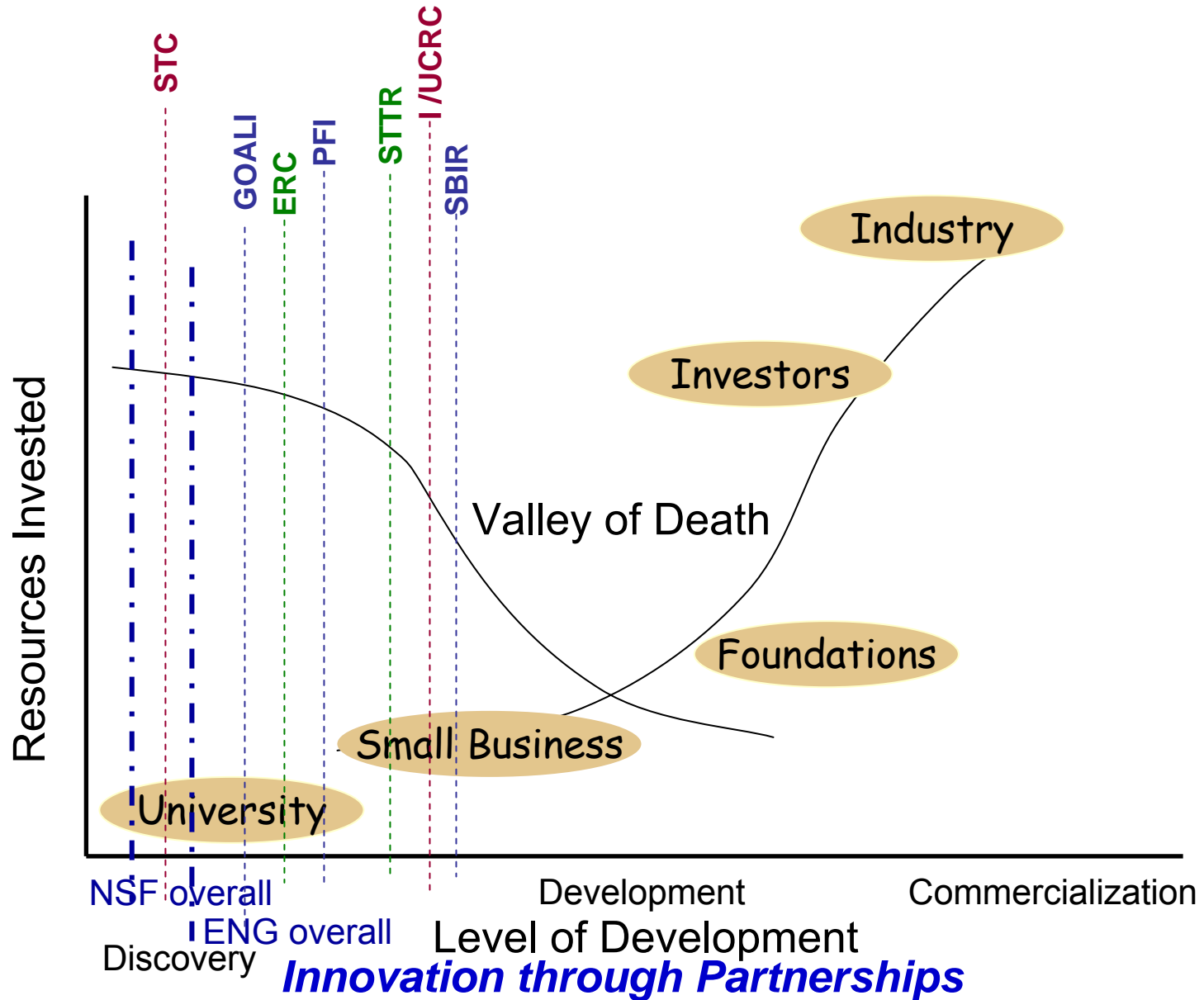
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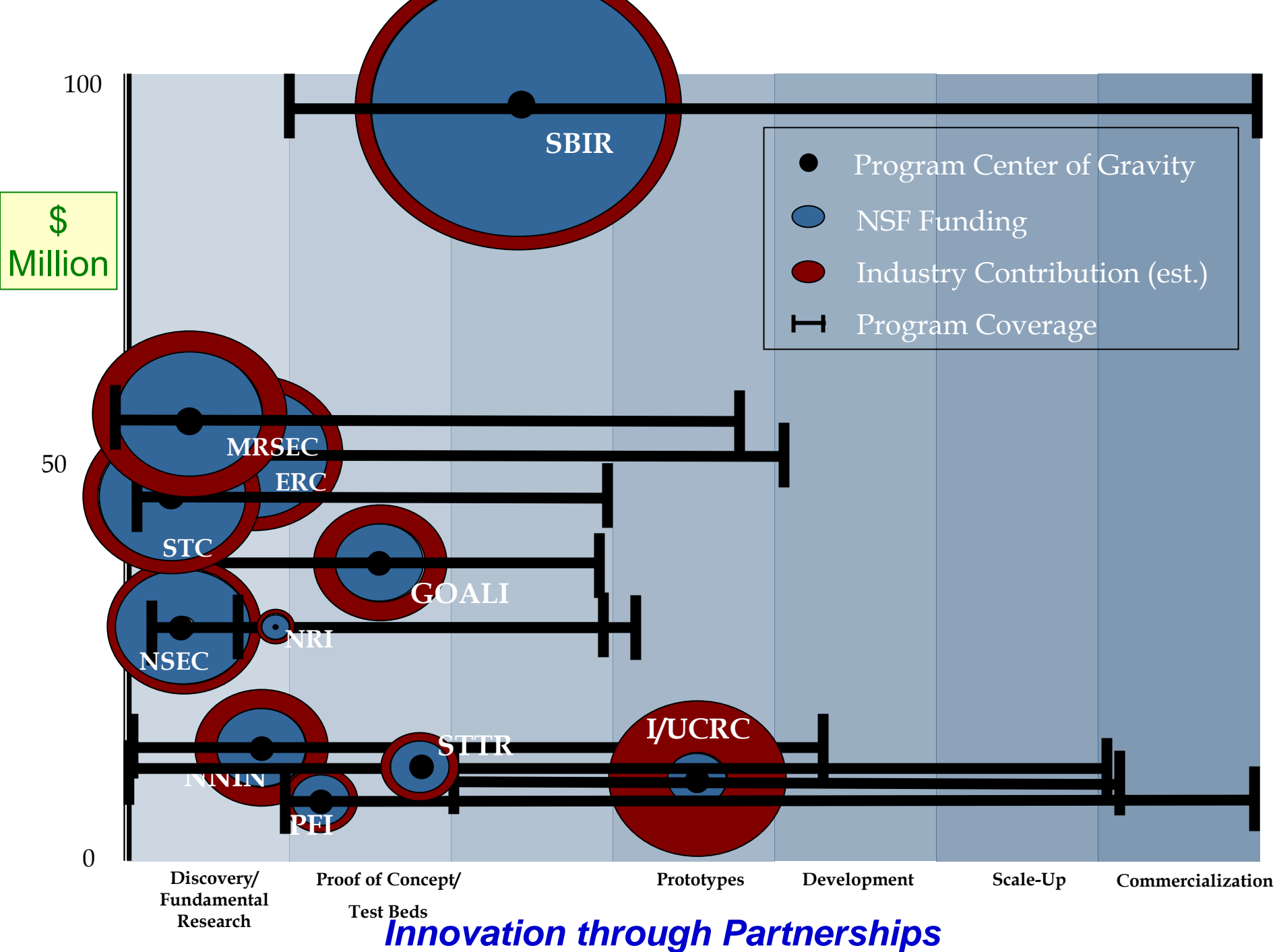
University-Industry Partnerships at NSF

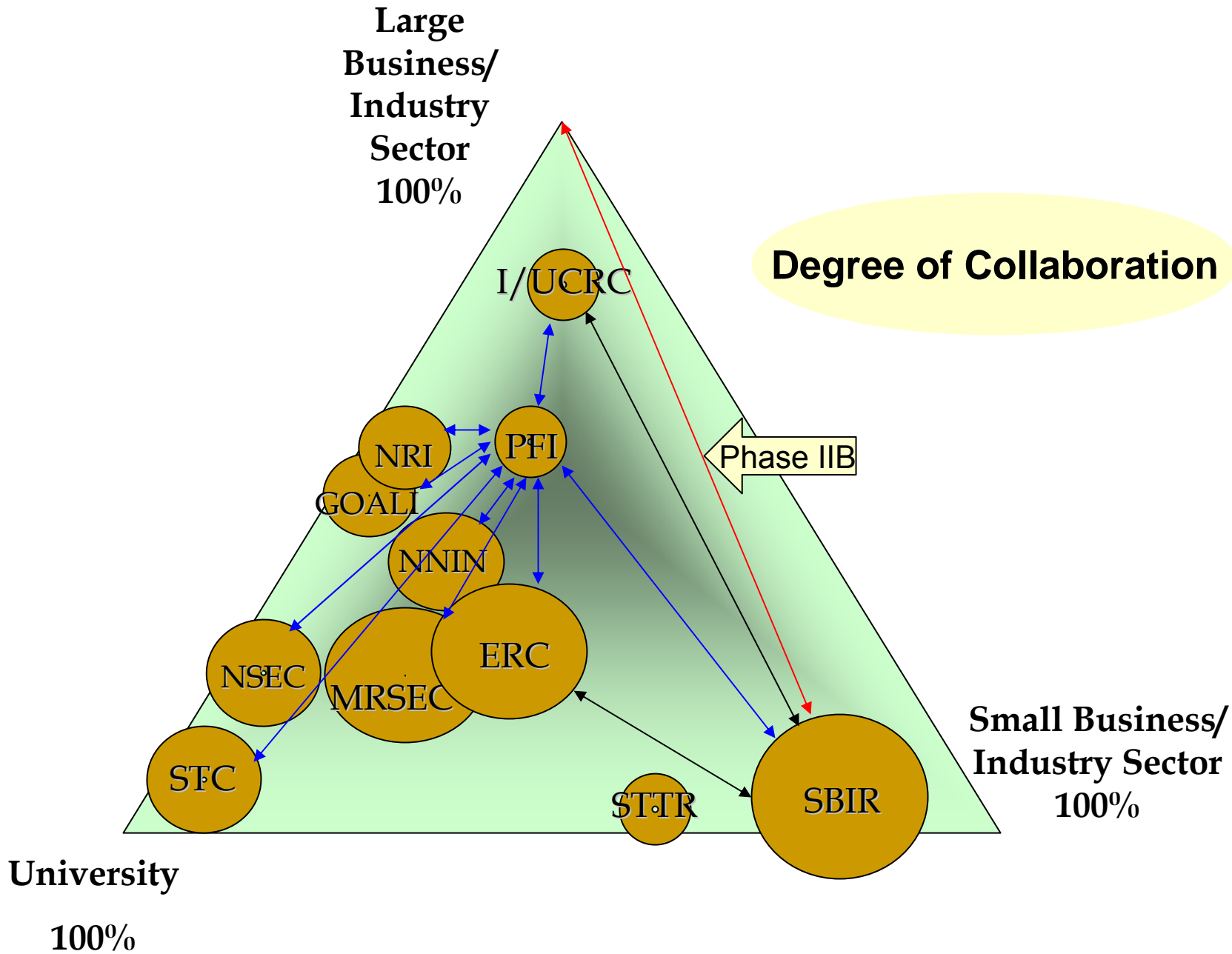
- **STC** – Science and Technology Centers
- **MRSEC** – Materials Research Science & Engineering Centers
- **ERC** - Engineering Research Centers
- **PFI** – Partnerships for Innovation
- **GOALI** - Grant Opportunities for Academic Liaison with Industry
- **I/UCRC** - Industry/University Cooperative Research Centers
- **STTR** - Small Business Technology Transfer
- **SBIR** - Small Business Innovation Research
- **NSEC** –NanoScience and Engineering Centers
- **NNIN** – National NanoInfrastructure Networks
- **NRI** –Nanoelectronics Research Infrastructure

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Filling Gaps in Current Portfolio

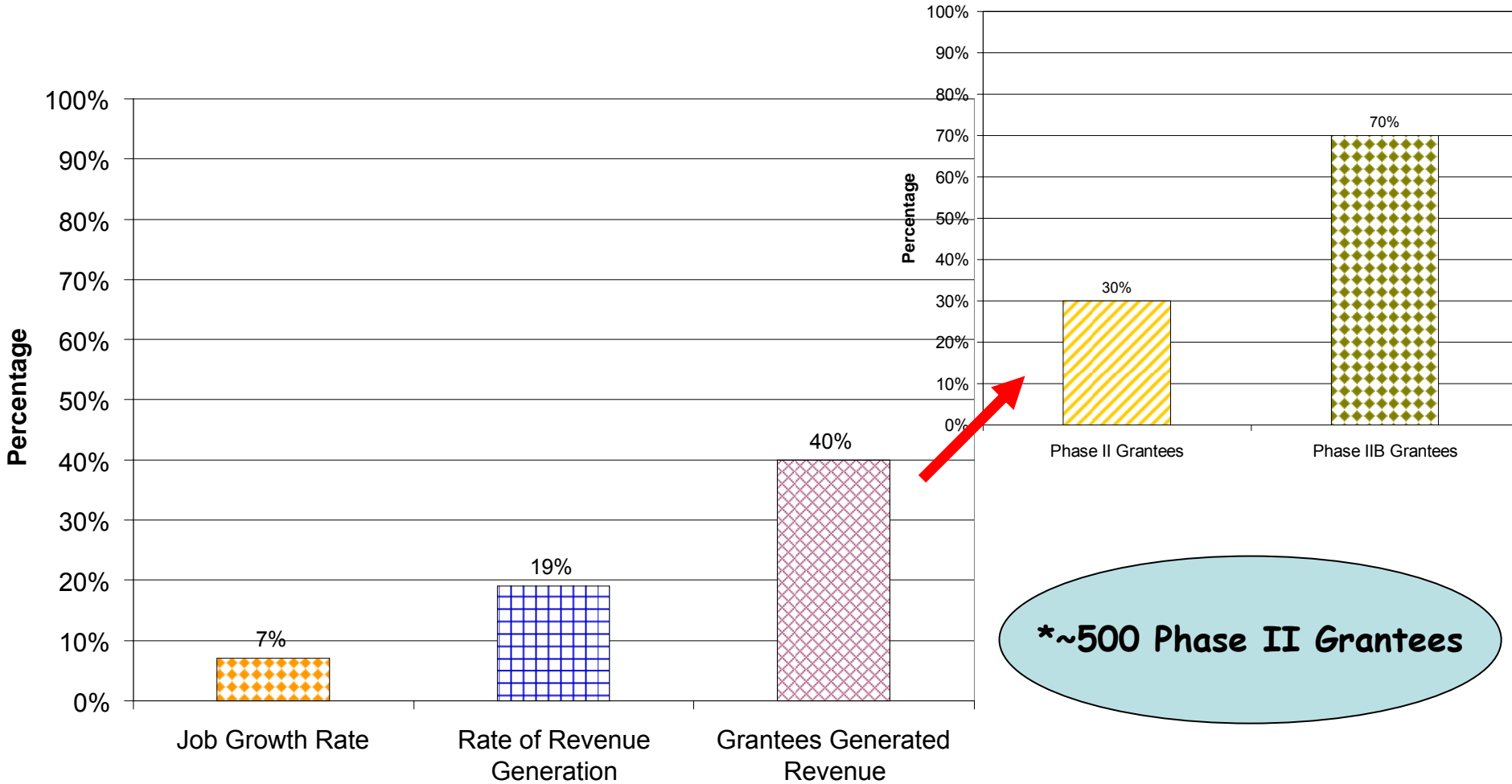






Innovation through Partnerships

SBIR/STTR Commercialization Record



***~500 Phase II Grantees**

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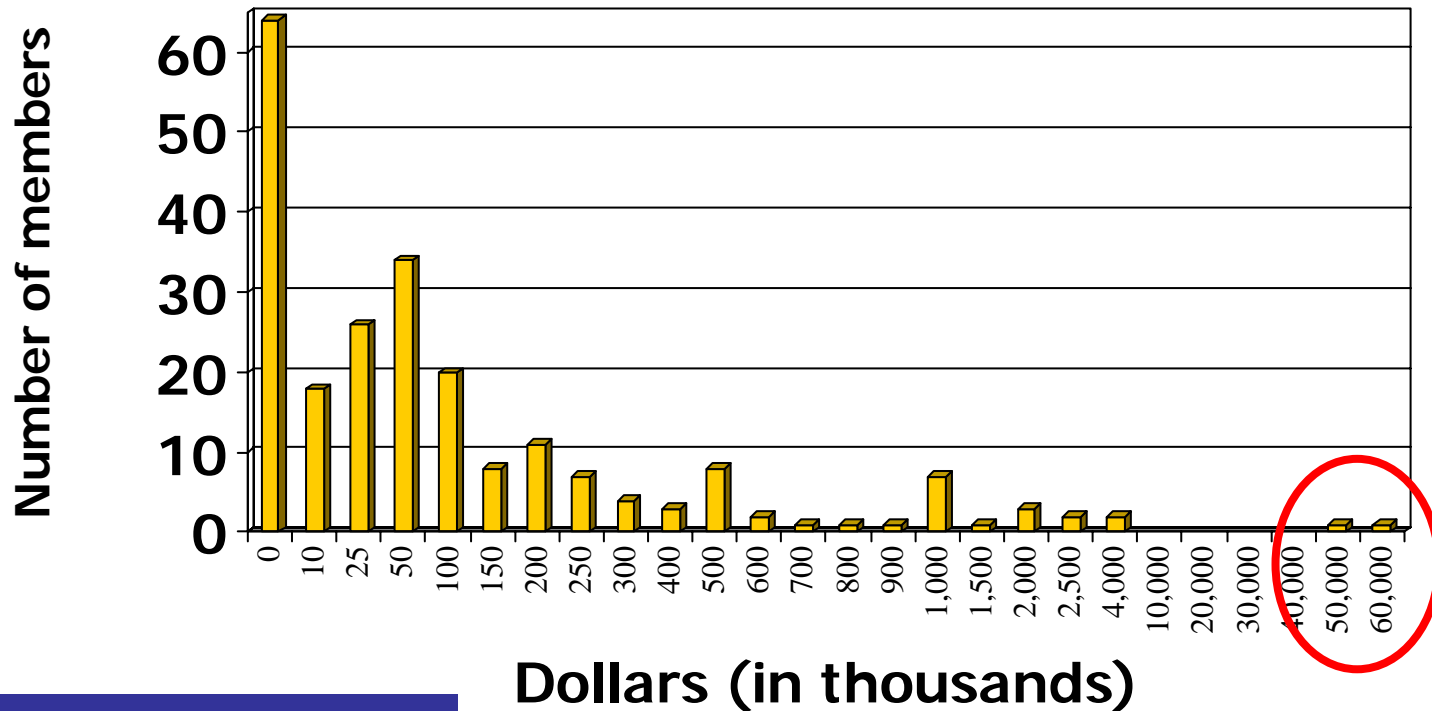
Membership Summary

	Count	Percent
Total memberships	623	100%
Industry: large firms (500 + employees)	405	65%
Industry: small firms (< 500 employees)	111	18%
US Government: Federal	78	12.5%
US Government: State or local	17	2.5%
Non-Profit	10	1.7%
Other	2	.3%
Number of organizations with memberships [1]	431	--

¹Many firms and agencies maintain more than 1 membership in the I/UCRC program

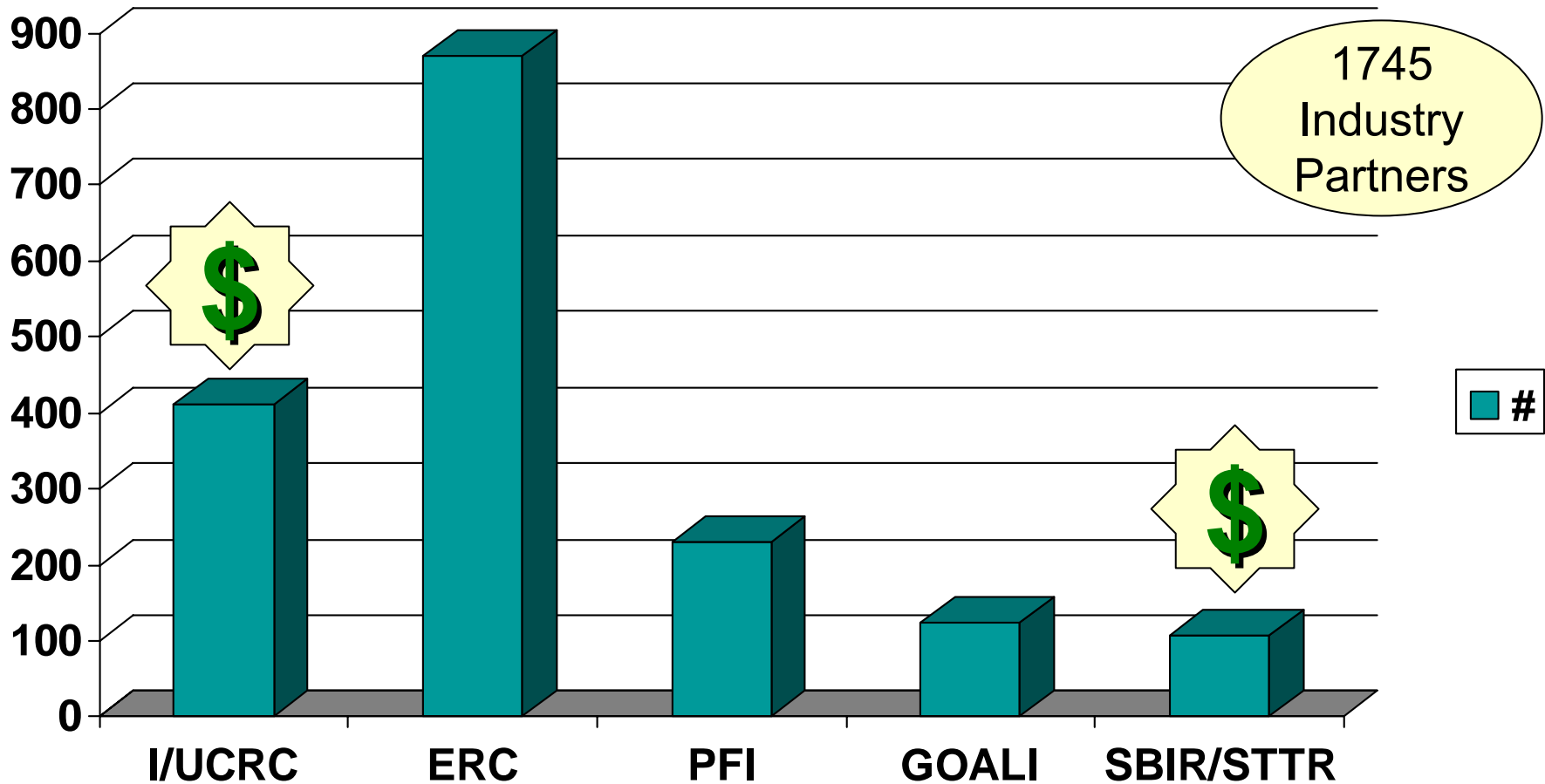
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Value of Center-Stimulated Projects: FY 2006-2007



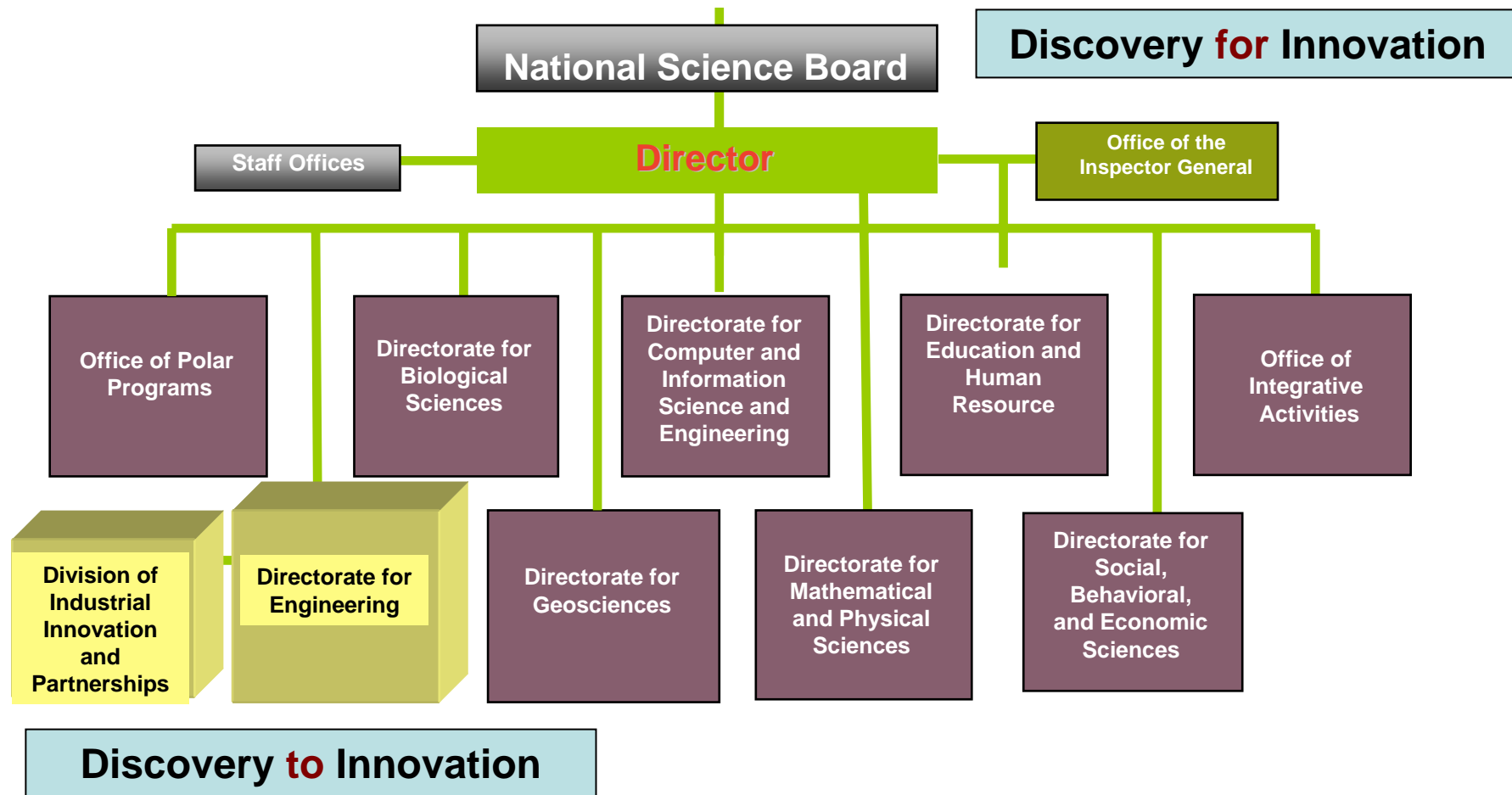
50% respondents

Industry Partners with NSF funded Institutions



Innovation through Partnerships

National Science Foundation



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