



National Institutes of Health
Office of Extramural Research



The NIH SBIR/STTR Program & Universities

SBIR/STTR & Commercialization of University Innovations

February 5, 2014

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**SBIR/STTR Program Coordinator
Office of Extramural Research, NIH**





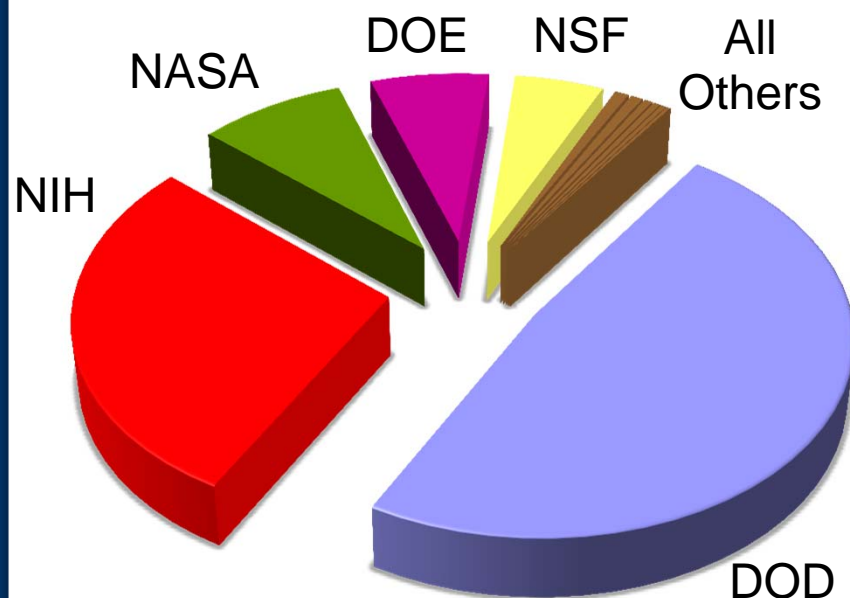
- Size of NIH/HHS program
- Set-asides & spending
- STTR nuances
- Research Institutions and Universities in STTR





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SBIR/STTR Budgets by Agency, FY2012



**~ \$2.4B in FY12
across all agencies**

Agencies with SBIR and STTR Programs

Department of Defense (DOD)	\$ 1.1 B
Department of Health and Human Services: National Institutes of Health (NIH)	\$717.0 M
National Aeronautics and Space Administration (NASA)	\$161.8 M
Department of Energy (DOE)	\$188.3 M
National Science Foundation (NSF)	\$ 150.6 M

Agencies with SBIR Programs

U.S. Department of Agriculture (USDA)	\$19.3 M
Department of Homeland Security (DHS)	\$12.6 M
Department of Education (ED)	\$13.4 M
Department of Transportation (DOT)	\$8.6 M
Department of Commerce: National Oceanic and Atmospheric Administration (NOAA) and National Institute of Standards and Technology (NIST)	\$4.7 M
Environmental Protection Agency (EPA)	\$4.8 M





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HHS/NIH Program Funding

2013 Budget	SBIR	STTR
NIH	\$617M	\$80M
CDC	\$8.4M	N/A
FDA	\$1.4M	
ACF	\$233K	
Phase I	\$150K* 6 months*	\$150K* 1 year*
Phase II	\$1M* 2 years*	\$1M* 2 years*





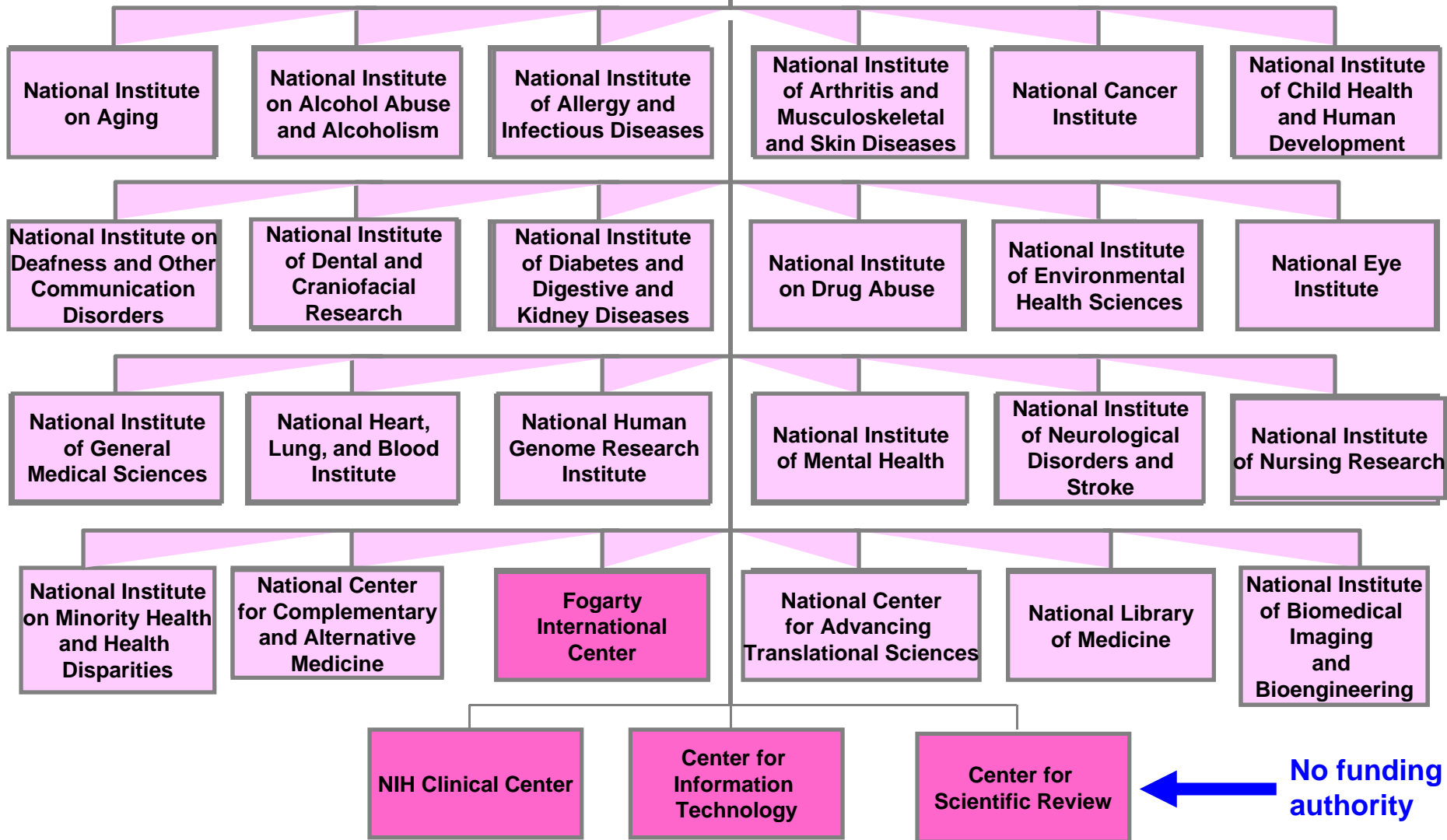
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Office of Research
Infrastructure Programs

Office of the Director

<http://www.nih.gov/icd>



No funding
authority



NIH has Dozens of SBIR/STTR Solicitations

http://grants.nih.gov/grants/funding/sbir_announcements.htm

Special Announcements for Small Business Research Opportunities

[\[Return To Small Business Funding Opportunities Page\]](#)

NOTE: Receipt dates for the following Program Announcements (PAs) and Request for Applications (RFAs) may vary. See the [NIH Guide for Grants and Contracts](#) for all NIH RFA and PA announcements.

SBIR and STTR Omnibus Solicitations (Parent Announcements)

- * PHS 2014-02 Omnibus Solicitation of the NIH, CDC, FDA and ACF for Small Business Innovation Research Grant Applications (**Parent SBIR [R43/R44]**) and Program Descriptions and Research Topics ([PDF - 1 MB](#) or [MS Word - 1 MB](#))

<http://grants.nih.gov/grants/quide/pa-files/PA-14-071.html>

Receipt Date(s): April 5, August 5, December 5
AIDS & AIDS Related: May 7, September 7, January 7

Release Date(s): January 17, 2014

- * PHS 2013-02 Omnibus Solicitation of the NIH for Small Business Technology Transfer Grant Applications (**Parent STTR [R41/R42]**) and Program Descriptions and Research Topics (**PDF** - 1 MB or **MS Word** - 1 MB)

<http://grants.nih.gov/grants/quide/pa-files/PA-14-072.html>

Receipt Date(s): April 5, August 5, December 5
AIDS & AIDS Related: May 7, September 7, January 7

Release Date(s): January 17, 2014

58 FOAs

SBIR and STTR Funding Opportunities (58 Records - Sorted by Release Date)

Announcement Number	Issuing Organization	Other Participating Organizations	Release Date	Opening Date (SF424 Only) ?	Receipt Date(s)	Expiration Date	Activity Code(s)	Title
PA-14-071	NIH	ACF, CBER, CGH, FDA, NCATS, NCBDDD, NCCAM, NCI, NIDDK, NICHD, NIA, NIDCR, NINDS, NINR, NIOSH, NLM, NLSI, NUP, OHRP, OSTP, PCORI, PHS, SBA, VA, CDC, FDA, NIH, ACF, HHS, NSF, NASA, DOE, DOD, EPA, GSA, IIR, IRS, NIST, NOAA, NRECA, NRC, SEC, USDOJ, USDOH, USDA, USMIA, USNIA, USDOC, USICE, USIA, USMIL, USN, USMC, USA, USCG, USFWS, USFS, USGPO, USPS, USPTO, USDOE, USDOJ, USDOH, USDA, USMIA, USNIA, USDOC, USICE, USIA, USMIL, USN, USMC, USA, USCG, USFWS, USFS, USGPO, USPS, USPTO	01/17/2014	03/05/2014	Standard Due Dates	01/08/2015	R43, R44	PHS 2014-02 Omnibus Solicitation of the NIH, CDC, FDA and ACF for Small Business Innovation

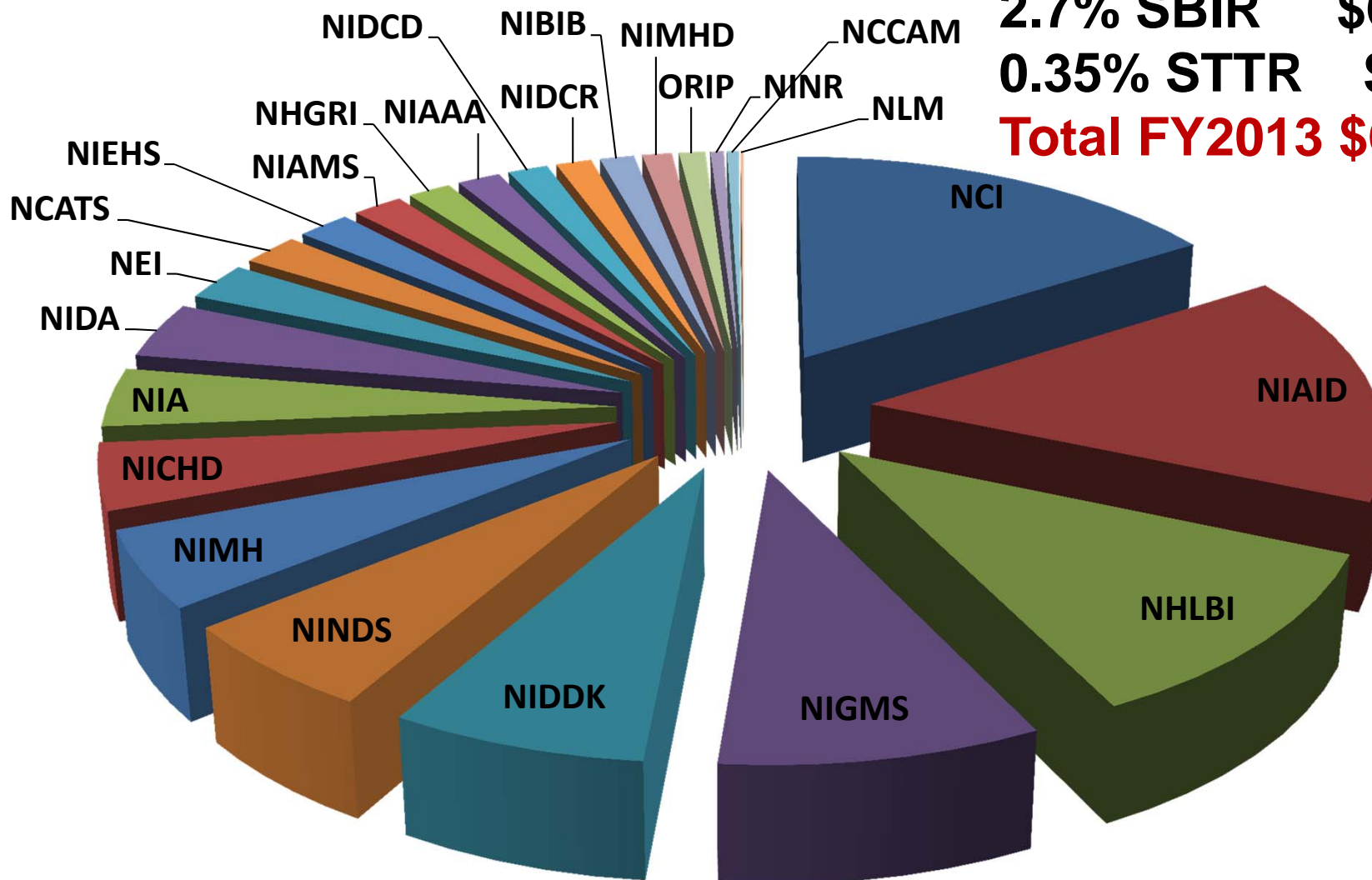


NIH SBIR/STTR Budget Allocations FY2013

2.7% SBIR \$617M

0.35% STTR \$80M

Total FY2013 \$697M





HHS SBIR Expenditures

Source: <http://www.gao.gov/assets/660/657489.pdf>

Dollars in millions

700

600

500

400

300

200

100

0

2006

2007

2008

2009

2010

2011



Spending requirement



Obligations

Source: GAO analysis of agency annual report data submitted to SBA.





HHS STTR Expenditures

Source: <http://www.gao.gov/assets/660/657489.pdf>

Dollars in millions

100

80

60

40

20

0

2006

2007

2008

2009

2010

2011



Spending requirement

Obligations

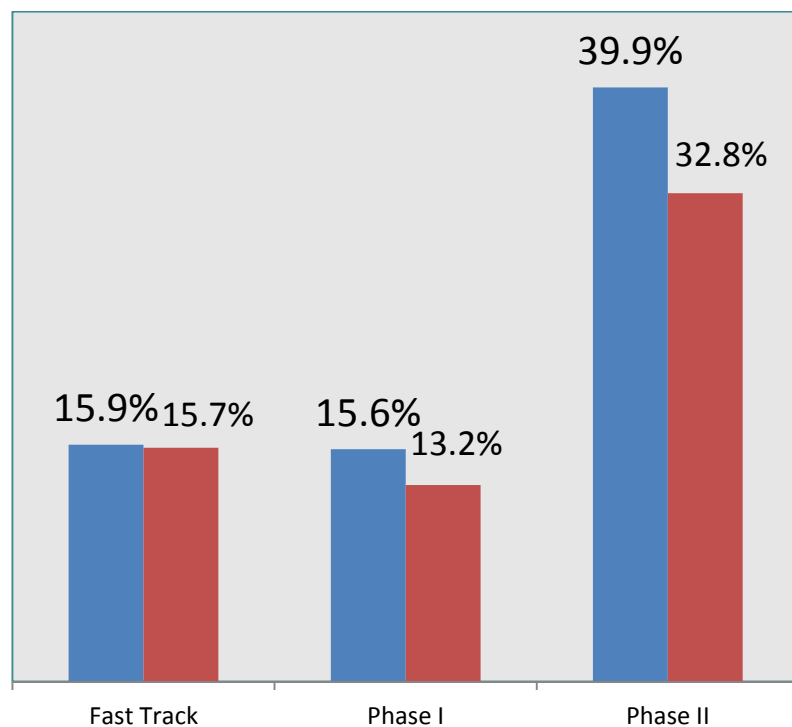
Source: GAO analysis of agency annual report data submitted to SBA.



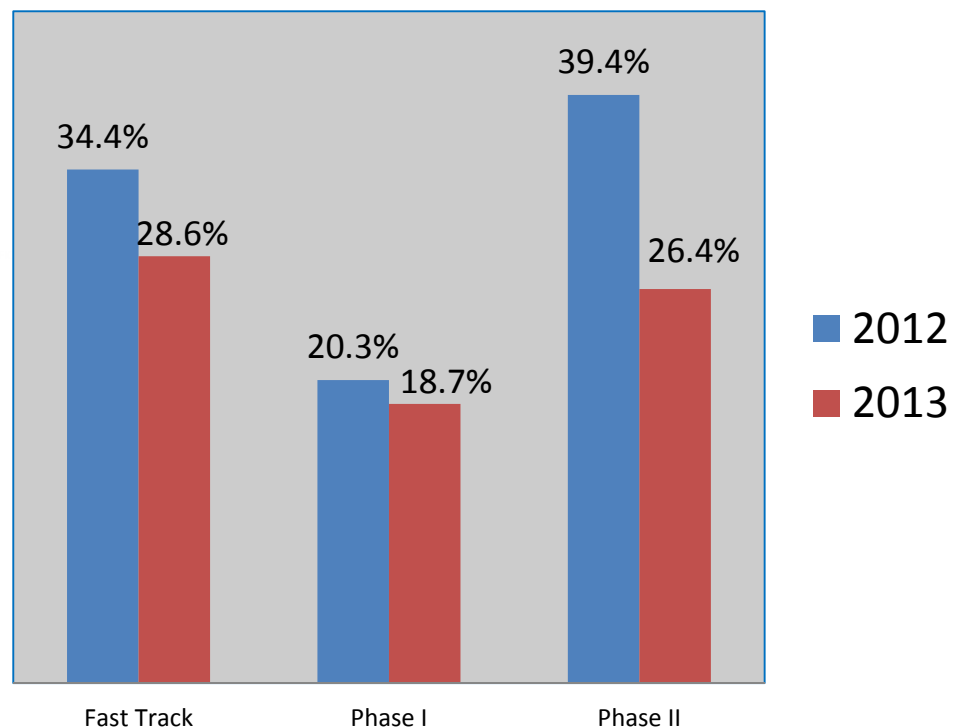


Success Rate of SBIR/STTR 2012 and 2013 by Phase

SBIR



STTR



■ 2012
■ 2013





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NIH-wide SBIR/STTR Success Rates

Fiscal Year	SBIR/STTR	Phase	Number of Applications Reviewed	Number of Applications Awarded	Success Rate	Total Funding
2012	SBIR	Fast Track	358	57	15.9%	\$13,985,802
2012	SBIR	Phase 1	4,287	667	15.6%	\$154,237,890
2012	SBIR	Phase 2	557	222	39.9%	\$153,650,162
2012	STTR	Fast Track	32	11	34.4%	\$2,840,632
2012	STTR	Phase 1	542	110	20.3%	\$23,857,700
2012	STTR	Phase 2	71	28	39.4%	\$18,240,418
2012	FY TOTAL		5,847	1,095	18.7%	\$366,812,604
2013	SBIR	Fast Track	313	49	15.7%	\$13,981,386
2013	SBIR	Phase I	3,738	495	13.2%	\$114,040,157
2013	SBIR	Phase II	542	178	32.8%	\$136,348,846
2013	STTR	Fast Track	42	12	28.6%	\$2,542,128
2013	STTR	Phase I	583	109	18.7%	\$24,138,629
2013	STTR	Phase II	72	19	26.4%	\$10,985,373
2013	FY TOTAL		5,290	862	16.3%	\$302,036,519





STTR Eligibility Criteria



Applicant is Small Business Concern



Formal Cooperative R&D Effort

- Minimum 40% by small business
- Minimum 30% by U.S. research institution



U.S. Research Institution

- College or university; other non-profit research organization; Federal R&D center



Intellectual Property Agreement

- Allocation of rights in IP and rights to carry out follow-on R&D and commercialization



SBIR and STTR Critical Differences

- Research Partner

- SBIR: **Permits** partnering
33% Phase I and 50% Phase II
- STTR: **Requires** partnering
with research institution.
*Small business (40%) and
U.S. research institution
(30%)*

- Principal Investigator

- SBIR: Primary (>50%)
employment **must** be with
small business concern
- STTR: PI may be employed
by either research institution
or small business concern

**Award is always made
to Small Business Concern**





Research Institutions and STTR

	FY08	FY09	FY10	FY11	FY12
STTR Budget \$M	70	72	74	73	85
Phase I % \$ to SBC	53	54	55	56	53
Phase I %\$ to Res. Inst.	47	46	45	43	47
Phase II % \$ to SBC	59	55	58	59	56
Phase II %\$ to Res. Inst.	41	45	40	38	41





Universities receive the large majority of STTR Research Institution Funds

	FY08	FY09	FY10	FY11	FY12
Univ. Phase I	116	129	118	81	123
FFRDC Phase I	1	0	0	0	2
Other Phase I	25	20	24	17	22
Univ. Phase II	88	89	94	73	74
FFRDC Phase II	0	0	0	0	0
Other Phase II	18	15	16	18	15

Number of organizations receiving STTR funds
as non-profit research partner





- **NIMH Phase II STTR R42 MH076317-02**
- ***Interfacing Modalities in the Developmental Cognitive Neurosciences***
- **SBC: Perception Research Systems Inc.**
- **RI: Cornell University**
- **PI: Bruce D. McCandliss PhD**

Develops of software and hardware products for research scientists and clinicians working in the biobehavioral sciences. PRS focuses on creating products that give researchers with little to no technical background the ability to conduct ground-breaking research using cutting-edge data collection techniques.





- Used STTR to significantly improve flagship product *Paradigm*
- *Paradigm* - innovative stimulus presentation system that offers researchers a way to quickly develop and conduct a wide array of behavioral studies both in typical lab settings and remotely using our unique cloud-based experiment distribution system.





- Challenge - technical barriers being faced by scientists attempting to use brain imaging (e.g. fMRI, EEG and MEG) and eye tracking methodologies in their research
- With STTR developed line of products called *Paradigm Elements* - lower these technical barriers and training costs
- Commercialized in 2009 – first drag & drop system that does this





- > 5,000 unique downloads per year
- Sales increased 30% year over year
- > 1/3 customers have switched from competing systems due to superior usability, feature set, tech support and pricing
- Led to industrial partnerships with device manufactures
- accelerated product's adoption rates across a number of NIH funded research areas





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For More Information

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<http://grants.nih.gov/grants/guide/listserv.htm>
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