

# Bridging Technologies to the Marketplace: NCI's SBIR Program

**Michael Weingarten**

**Director, National Cancer Institute's  
SBIR/STTR Program**

March 19, 2015



# NIH = 27 Institutes & Centers

24 Participants in the SBIR/STTR Program



Office of Research Infrastructure Programs (ORIP)

The Office of the Director (OD)

National Institute on Aging (NIA)

National Institute on Alcohol Abuse & Alcoholism (NIAAA)

National Institute of Allergy & Infectious Diseases (NIAID)

National Institute of Arthritis & Musculoskeletal & Skin Diseases (NIAMS)

**National Cancer Institute (NCI)**

National Institute of Child Health & Human Development (NICHD)

National Institute on Deafness & Other Communication Disorders (NIDCD)

National Institute of Dental and Craniofacial Research (NIDCR)

National Institute of Diabetes & Digestive & Kidney Diseases (NIDDK)

National Institute on Drug Abuse (NIDA)

National Institute of Environmental Health Sciences (NIEHS)

National Eye Institute (NEI)

National Institute of General Medical Sciences (NIGMS)

National Heart, Lung, & Blood Institute (NHLBI)

National Human Genome Research Institute (NHGRI)

National Institute of Mental Health (NIMH)

National Institute of Neurological Disorders & Stroke (NINDS)

National Institute of Nursing Research (NINR)

National Institute on Minority Health & Health Disparities (NIMHD)

National Center for Complementary & Alternative Medicine (NCCAM)

Fogarty International Center (FIC)

National Center for Advancing Translational Sciences (NCATS)

National Library of Medicine (NLM)

National Institute of Biomedical Imaging & Bioengineering (NIBIB)

NIH Clinical Center (CC)

Center for Information Technology (CIT)

Center for Scientific Review (CSR)

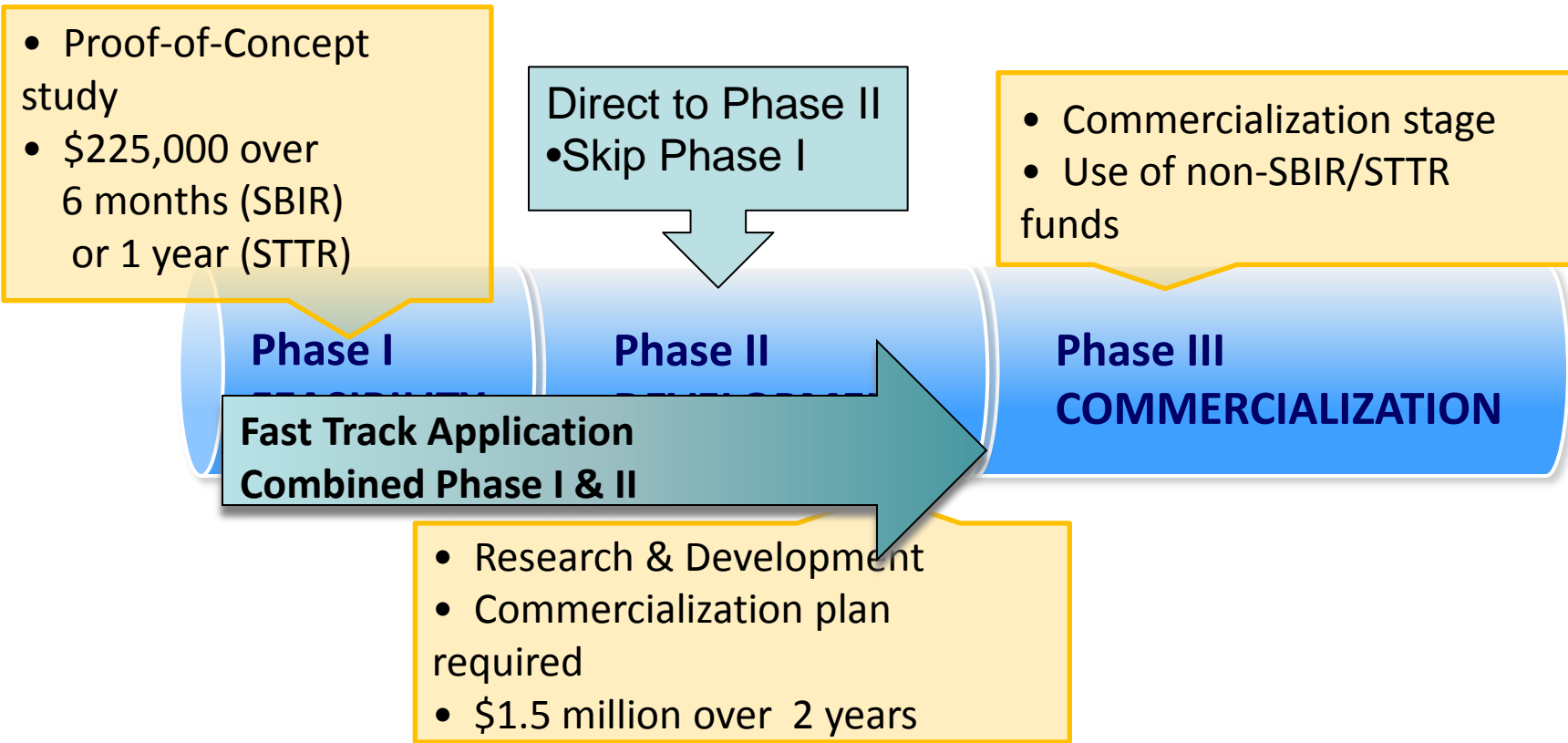
← No funding authority

**NCI's primary resource for enabling commercialization of high impact technologies that can benefit patients, such as:**

- **Small Molecules and Biologics**
- **Cancer Diagnostics**
- **Cancer Imaging**
- **Electronic Health & Education Tools**

**~\$750M annually at NIH**

**~\$123M annually at **NCI****



• **Venture-backed companies can now apply**

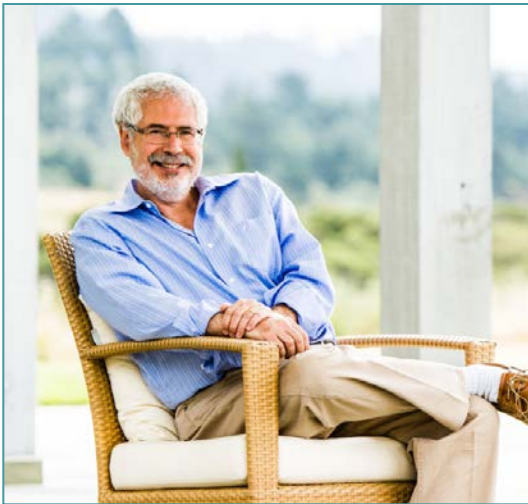
## New Initiatives

- I-Corps™
- Bridge award
- Investor Forum
- Workshops

- **10-week *Entrepreneurial Immersion* course to reduce commercialization risk for Therapeutics, Diagnostics and Devices**
- **A pilot program that's a partnership between NSF and NIH.**
  - 4 participating NIH Institutes
  - NCI, NHLBI, NINDS, NCATS

## I-Corps™ is based on a curriculum called Lean LaunchPad

- Developed by Steve Blank as a graduate course at Stanford
- Brings together customer development, agile development, business model generation, and pivots



### Steve Blank

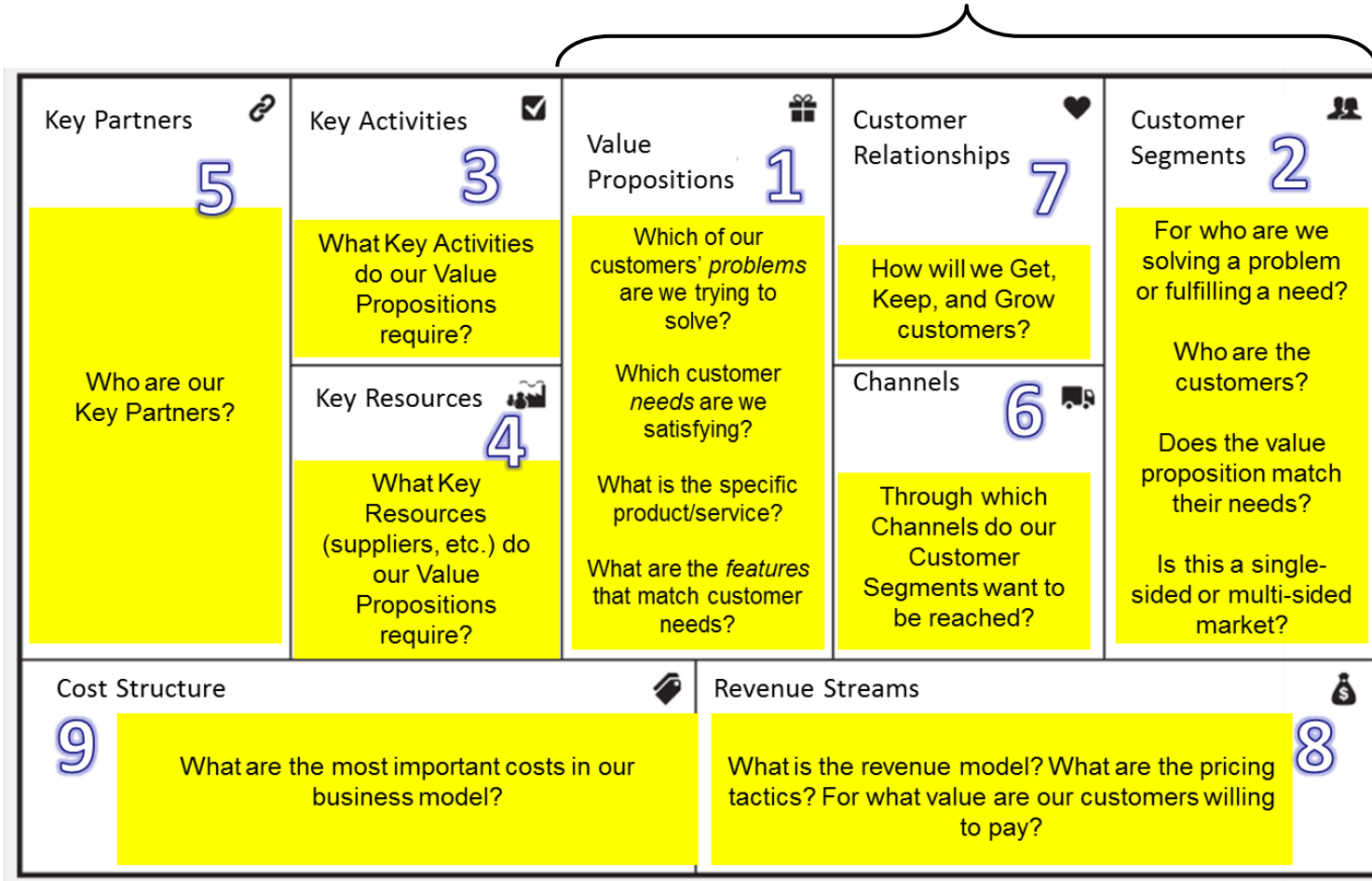
- Serial entrepreneur
- 21 years / 8 startups
- 13 years @ Berkeley, Columbia, Stanford, & UCSF

- **Teams are “taught” and guided by a group of experienced faculty (e.g., serial entrepreneurs, VCs)**
- **Develop a viable business model around their technology focusing on key questions like their value proposition and revenue model.**
- **Assess IP and regulatory risk before design and build**
- **Define core customers and how purchase decisions are made.**



- **Process: gather as much information and insight as possible by conducting 100 interviews with potential customers and partners.**
- **Adjust business strategy based on direct customer feedback.**
- **Use of “Business Model Canvas” provides a framework for analyzing information to determine if there is a product/market fit.**

## “ Product-Market Fit ”





NATIONAL  
CANCER  
INSTITUTE

NIH National Heart, Lung,  
and Blood Institute

NIH National Institute of  
Neurological Disorders  
and Stroke

NIH National Center  
for Advancing  
Translational Sciences

- Pilot program offered to NIH SBIR Phase I awardees
- October-December 2014
- 19 teams conducted 2, 128 customer discovery interviews
- 82% found the program “very good” or “excellent”
- 82% would recommend I-Corps™ at NIH to other companies
- Modified curriculum including life science domain experts

“We interviewed and talked to enough people to realize that what we thought we knew, we didn’t know well enough.... [I-Corps] really helped us understand not only our product but our customer, and how we’re going to channel that product to the customer and where that customer is going to see value in the product.”

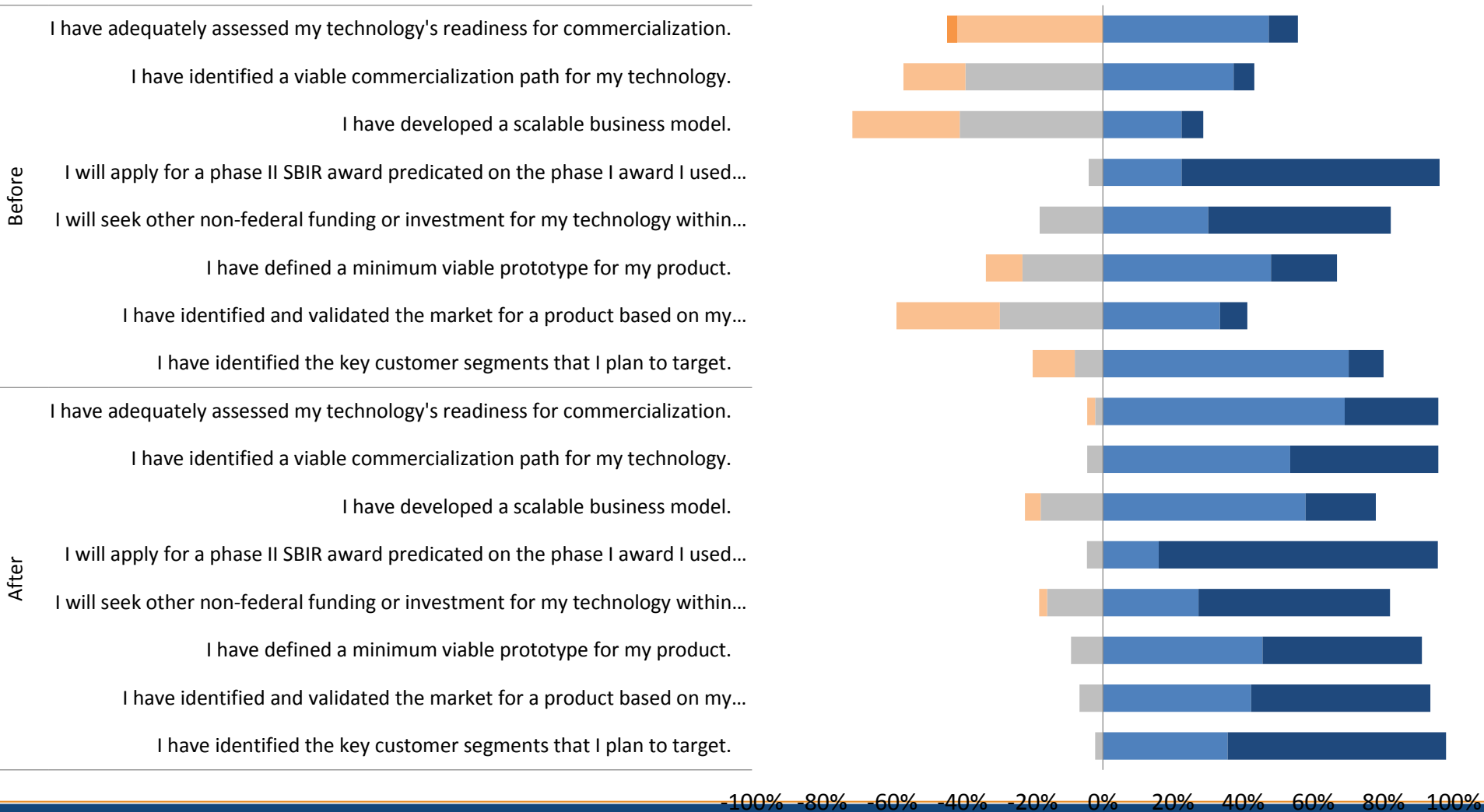
-Greg Jones, Principle Investigator at Clinacuity

# Status of Technology and Future Plans



Indicate your level of agreement with the following statements about the current status of your technology and future plans.

■ Unsure 
 ■ Disagree 
 ■ Totally disagree 
 ■ Agree 
 ■ Totally agree



# NCI SBIR Phase IIB Bridge Award

Phase I  
FEASIBILITY

Phase II  
DEVELOPMENT

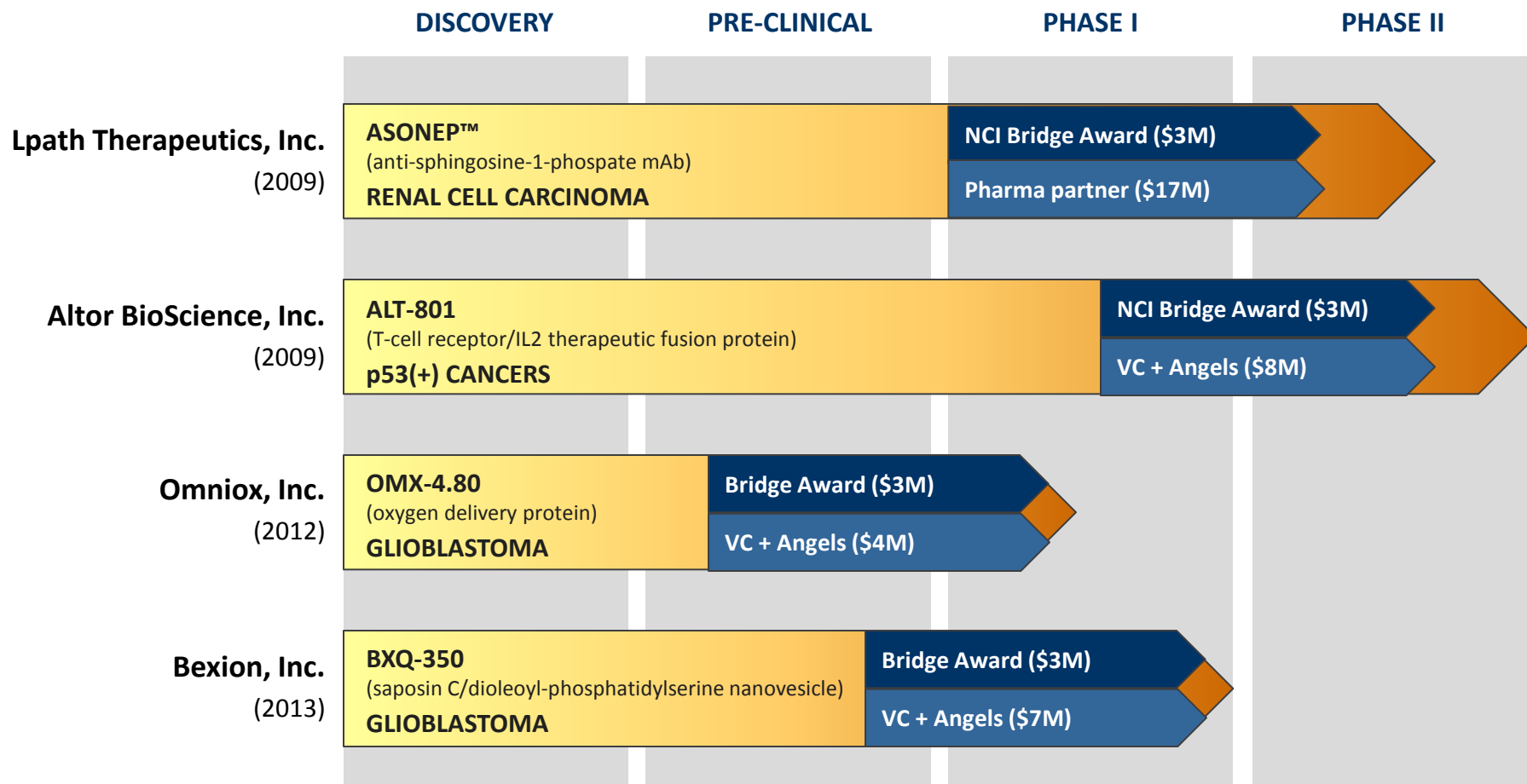
NCI SBIR Phase IIB Bridge Award

CROSSING THE VALLEY OF DEATH

Phase III  
COMMERCIALIZATION

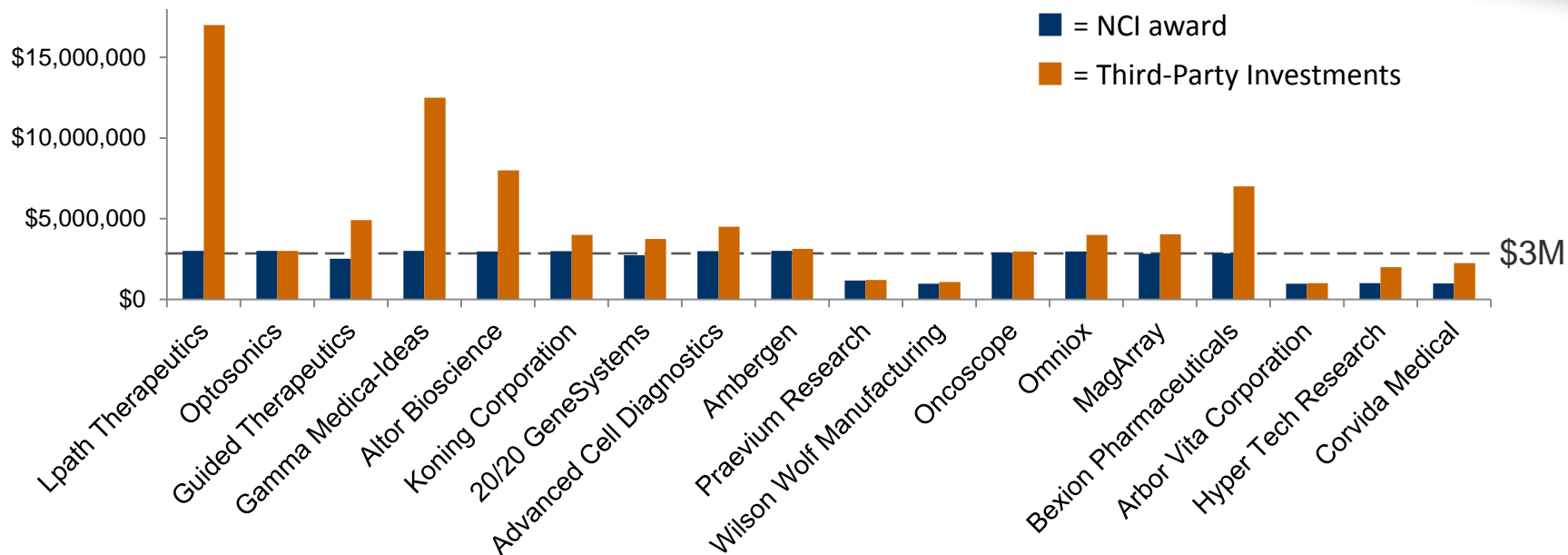
- Provides up to \$1M per year for up to 3 years
- Open to any NIH-funded Phase II awardees with projects relevant to NCI mission
- Accelerates commercialization by incentivizing partnerships with third-party investors & strategic partners earlier in the development process
- Competitive preference and funding priority to applicants that can raise substantial third-party funds (i.e.,  $\geq 1:1$  match)

# Therapeutics Projects



# 18 Bridge Awards

FY2009 – FY2014



<b>NCI Total</b>	<b>\$42.8 M</b>
<b>Third-Party Investments</b>	<b>\$86.3 M</b>
<b>Leverage</b>	<b>&gt; 2 to 1</b>



*Exclusive opportunity for some of the most promising NCI-funded companies to showcase their technologies*

<http://sbir.cancer.gov/investorforum/>

- Showcases top SBIR-funded companies presented
- Convenes 200 life science investors & leaders
- Facilitates 150+ one-on-one meetings
- **Previous forums closed deals collectively valued at more than \$300M**

The logo for SBIR & STTR, featuring a stylized blue and orange circular icon to the left of the text "SBIR & STTR" in blue and orange.

NCI SBIR **Investor Forum**

**November 13, 2014**

Agilent Technologies  
Santa Clara, CA



An exclusive event designed to connect the strongest and most promising NCI SBIR-funded companies with life science investors and strategic partners.



## *Bringing together NCI SBIR/STTR awardees to move funded technologies from bench to bedside*

<http://sbir.cancer.gov/FRACWorkshop>

- **May 7, 2013 at NCI Shady Grove**
- **Speakers from FDA, CMS, USPTO, and White House OSTP**
- **Panels on other sources of federal funding, resources & collaborative programs at NIH, and unique life science investment organizations**
- **One-on-one meetings with program directors and speakers**