

Bridging Technologies to the Marketplace: NCI's SBIR Program

Michael Weingarten

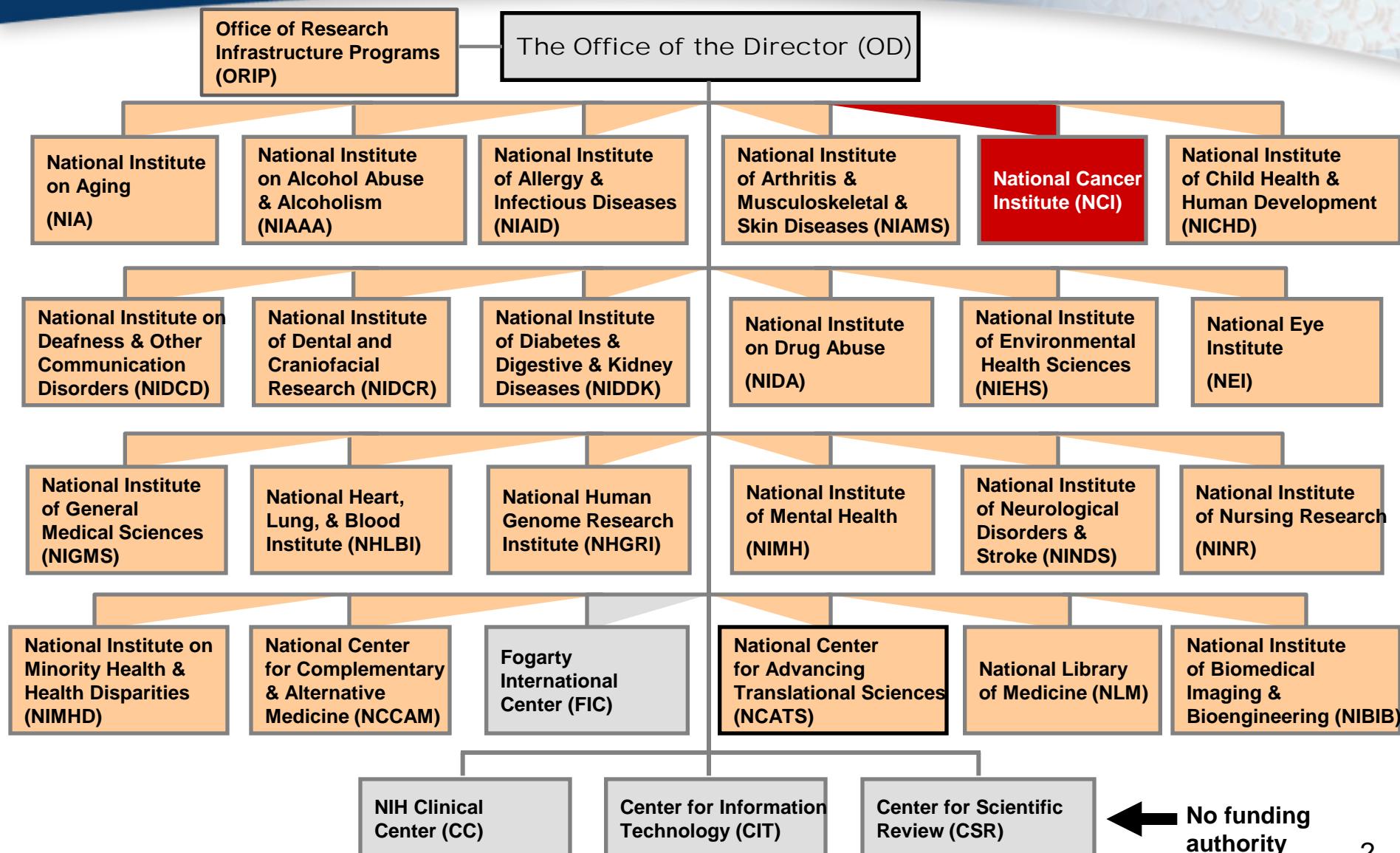
**Director, National Cancer Institute's
SBIR/STTR Program**

March 19, 2015



NIH = 27 Institutes & Centers

24 Participants in the SBIR/STTR Program



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

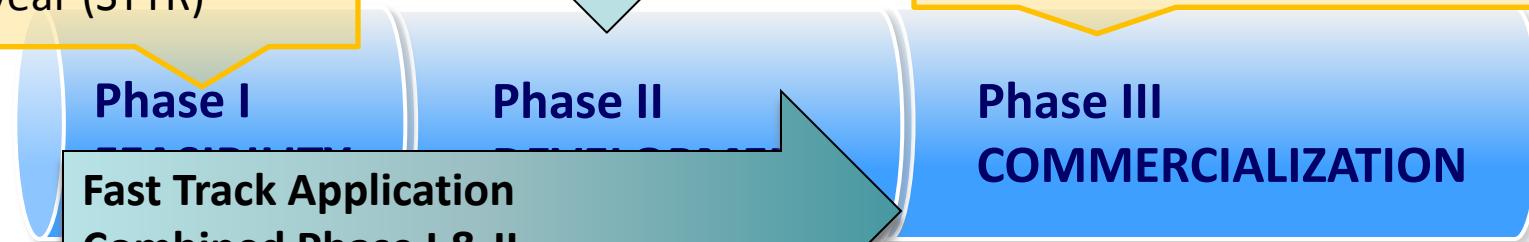
- **Small Molecules and Biologics**
- **Cancer Diagnostics**
- **Cancer Imaging**
- **Electronic Health & Education Tools**

~\$750M annually at NIH
~\$123M annually at NCI

- Proof-of-Concept study
- \$225,000 over 6 months (SBIR) or 1 year (STTR)

Direct to Phase II
• Skip Phase I

- Commercialization stage
- Use of non-SBIR/STTR funds



- Venture-backed companies can now apply

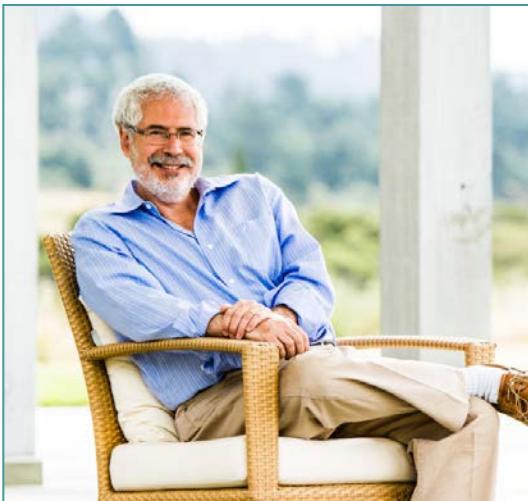
New Initiatives

- 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



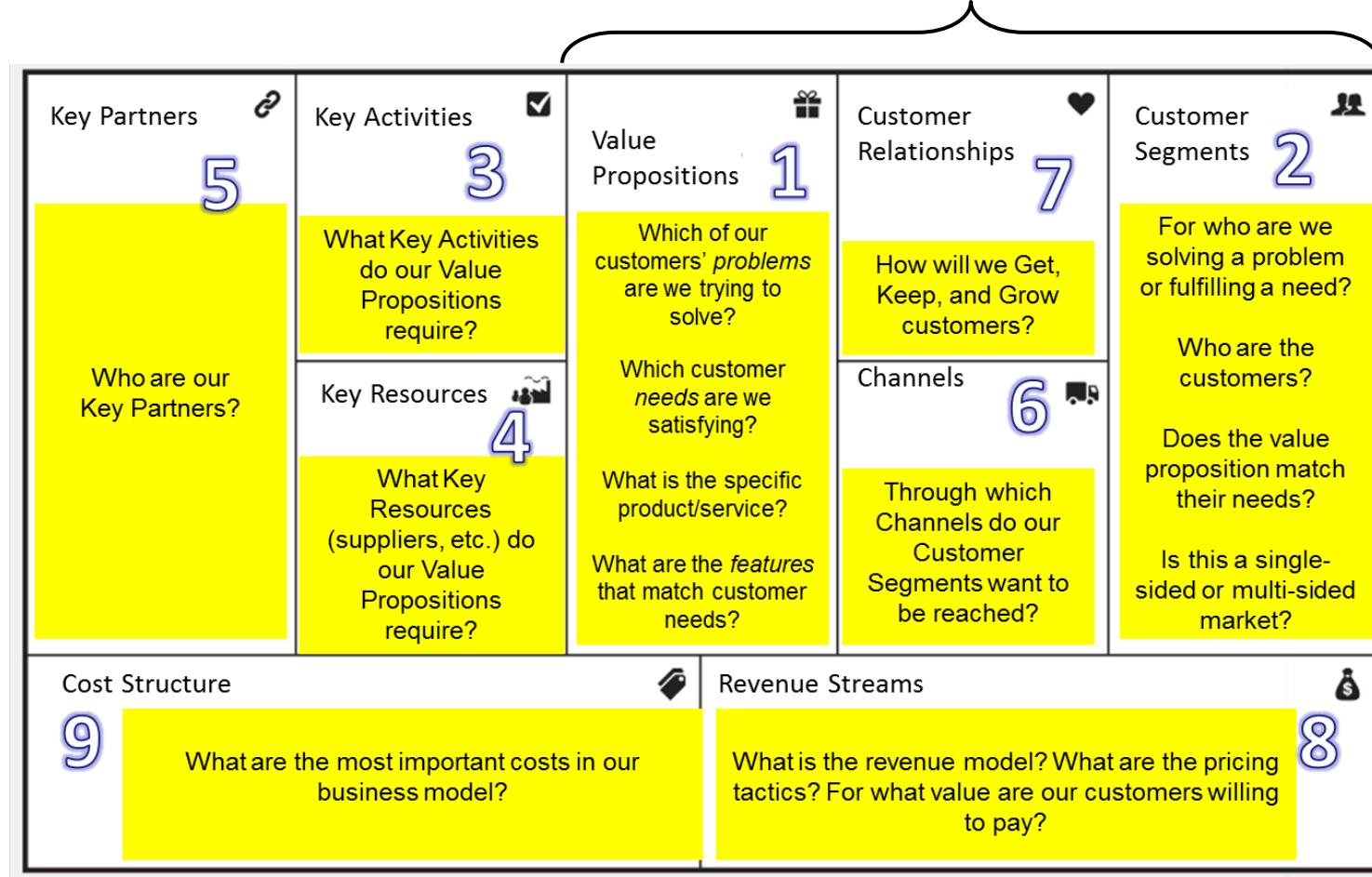
Steve Blank

- 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 ”





I-Corps™ at NIH



- 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.”

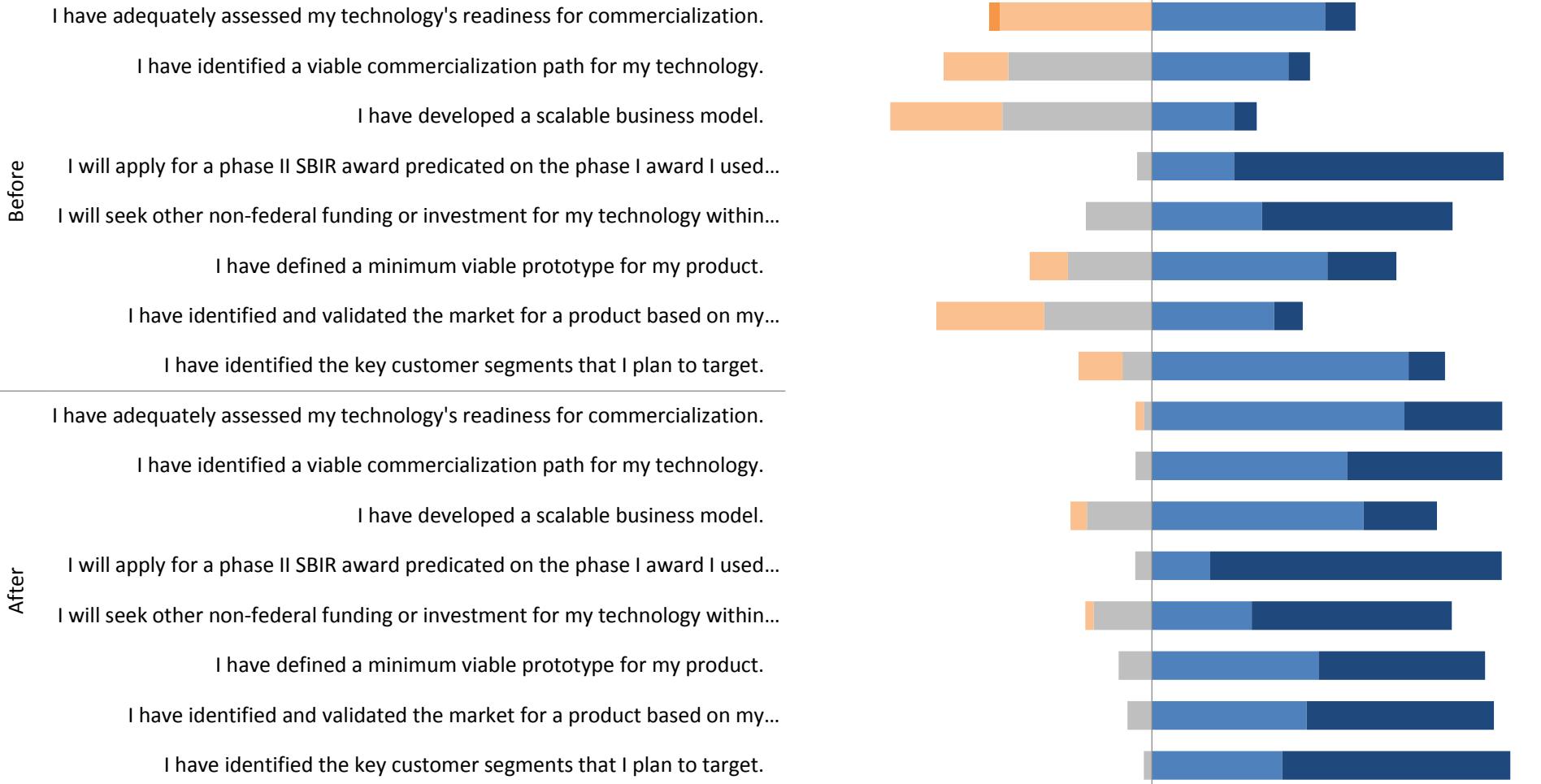
-Greg Jones, Principle Investigator at Clinacuity

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



-100% -80% -60% -40% -20% 0% 20% 40% 60% 80% 100%



Phase I
FEASIBILITY

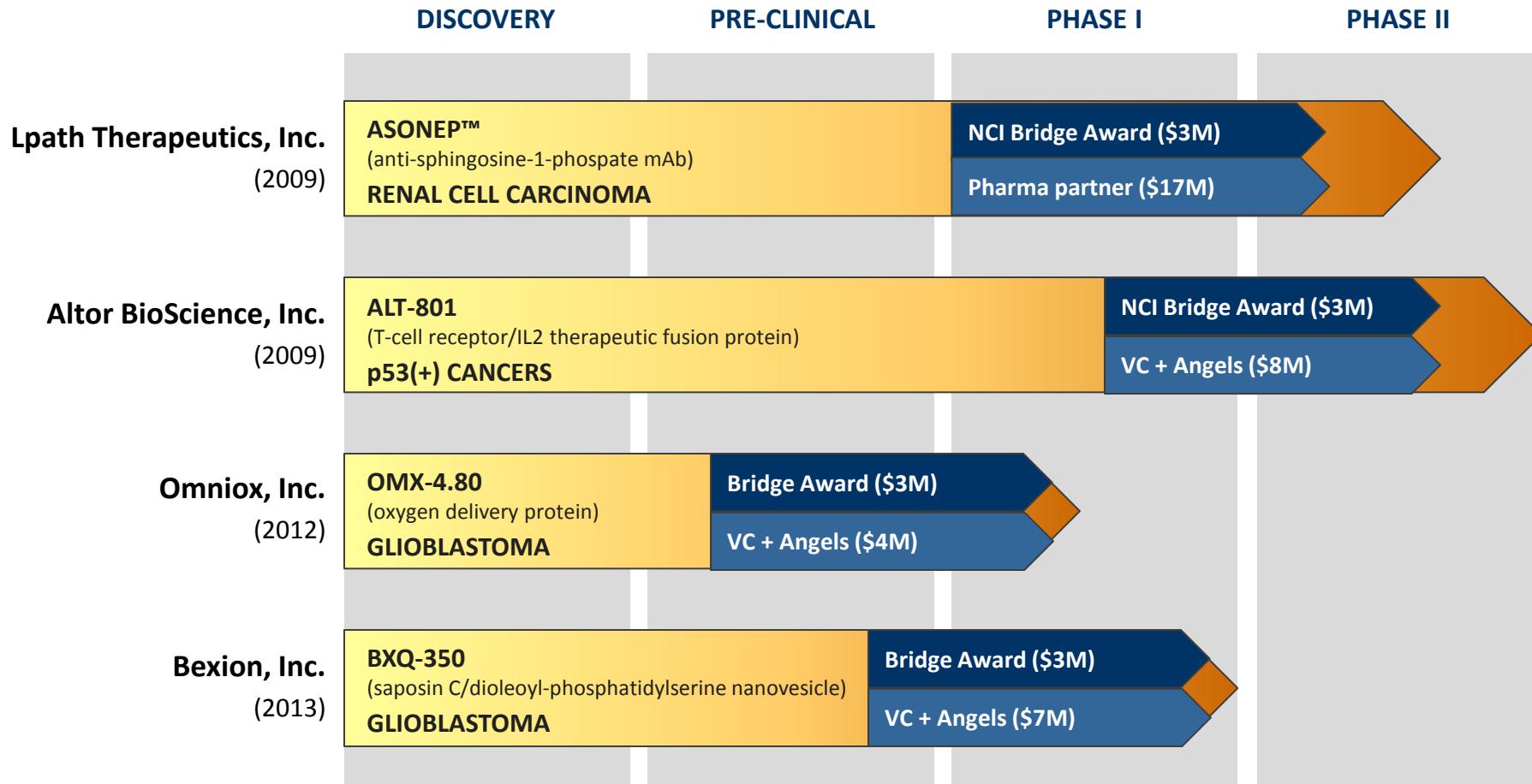
Phase II
DEVELOPMENT

NCI SBIR Phase IIB Bridge Award
CROSSING THE VALLEY OF DEATH

Phase III
COMMERCIALIZATION

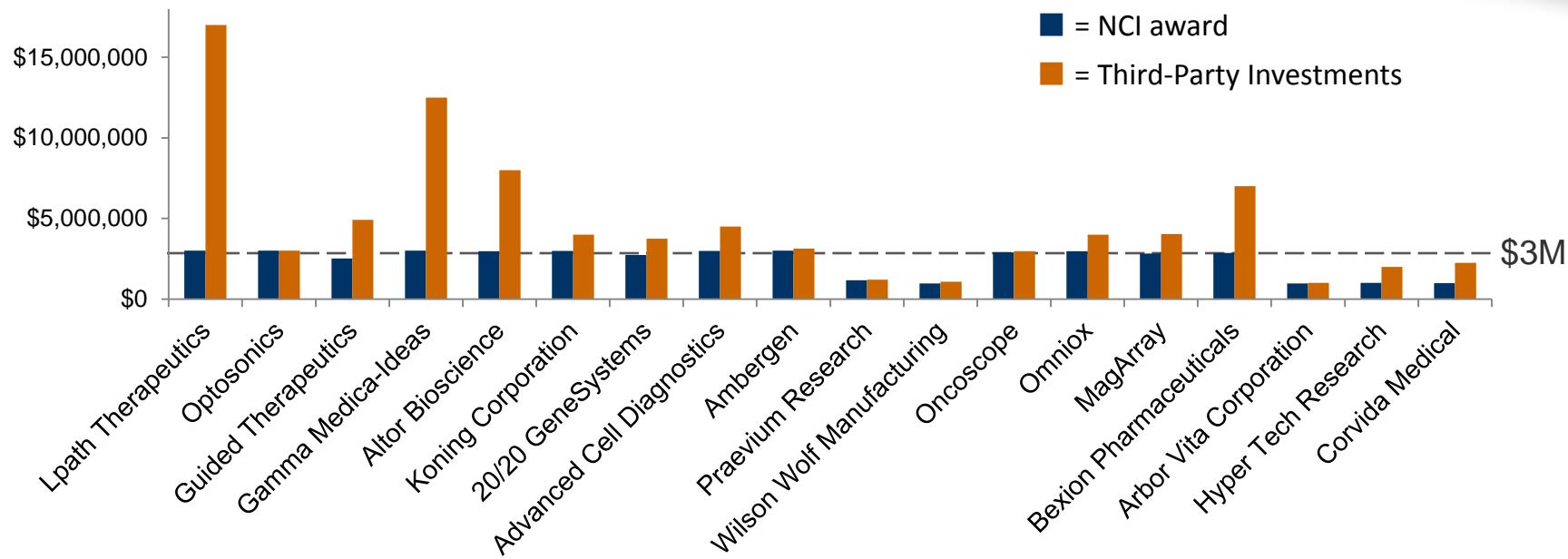
- Provides up to \$1M per year for up to 3 years
- Open to any NIH-funded Phase II awardees with projects relevant to NCI mission
- Accelerates commercialization by incentivizing partnerships with third-party investors & strategic partners earlier in the development process
- Competitive preference and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

Therapeutics Projects



18 Bridge Awards

FY2009 – FY2014



NCI Total	\$42.8 M
Third-Party Investments	\$86.3 M
Leverage	> 2 to 1



~ 40% Venture Capital
~ 35% Strategic Partners
~ 25% Angels & Individuals

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**



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