



# NCI SBIR PROGRAM OVERVIEW

**Michael Weingarten**  
Director  
NCI SBIR Development Center

# NCI SBIR - CORE ACTIVITIES

## CENTRAL OVERSIGHT

- Administer all 400+ SBIR/STTR awards at the NCI

## GUIDANCE

- Help applicants prepare for application, resubmission, and discuss funding options

## OUTREACH

- Attend conferences and workshops & visit state-based organizations and universities to raise awareness of the program

## NETWORKING

- Maintain a network of investors, and facilitate connections between NCI SBIR portfolio companies and potential investors/strategic partners

## FUNDING

- Seed emerging technology areas by developing targeted funding opportunities either as grants or contracts

## TRAINING

- Provide entrepreneurship training, as well as webinars on key topics such as IP, regulatory strategy, and how to build a strong team.

# NCI SBIR Program Staff



**Michael Weingarten, MA**  
*Director*  
NCI SBIR Development Center



**Greg Evans, PhD**  
*Lead Program Director*  
Cancer Biology, E-Health, Epidemiology, Research Tools



**Patricia Weber, DrPH**  
*Program Director*  
Digital Health, Therapeutics, Biologics, FRAC Workshop



**Deepa Narayanan, MS**  
*Program Director*  
Imaging, Clinical Trials, Radiation Therapy, Investor Initiatives, FRAC Workshop



**Ming Zhao, PhD**  
*Program Director*  
Cancer Diagnostics & Therapeutics, Cancer Control & Prevention, Molecular Imaging, Bioinformatics, Stem Cells



**Christie Canaria, PhD**  
*Program Director*  
Cancer/Biological Imaging, Research Tools, Devices, I-Corps at NIH, Scientific Communications



**Kory Hallett, PhD**  
*Program Director*  
Monoclonal Antibodies, Immunotherapy, Biologics, and Program Analysis

***Let's discuss your project!***  
***Send Specific Aims to [ncisbir@mail.nih.gov](mailto:ncisbir@mail.nih.gov)***



**Andrew J. Kurtz, PhD**  
*Lead Program Director*  
Biologics, Small Molecules, Nanotherapeutics, Molecular Diagnostics, Bridge Award



**Jian Lou, PhD**  
*Program Director*  
In-Vitro Diagnostics, Theranostics, early-stage drug development, Bioinformatics, Investor Initiatives



**Amir Rahbar, PhD, MBA**  
*Program Director*  
In-Vitro Diagnostics, Biologics, Therapeutics, Proteomics



**Jonathan Franca-Koh, PhD, MBA**  
*Program Director*  
Cancer Biology, Biologics, Small Molecules, Cell Based Therapies



**Ashim Subedee, PhD**  
*Program Director*  
Cancer Therapeutics and Diagnostics, Imaging, Cancer Prevention and Control, Digital Health, Investor Initiatives

# FUNDING MECHANISMS

## GRANTS

### Omnibus Solicitation: Investigator initiated

- 3 receipt dates (January, April, September)

### Targeted Solicitation:

Focused/NCI gap/  
priority areas

- Variable receipt dates

## CONTRACTS

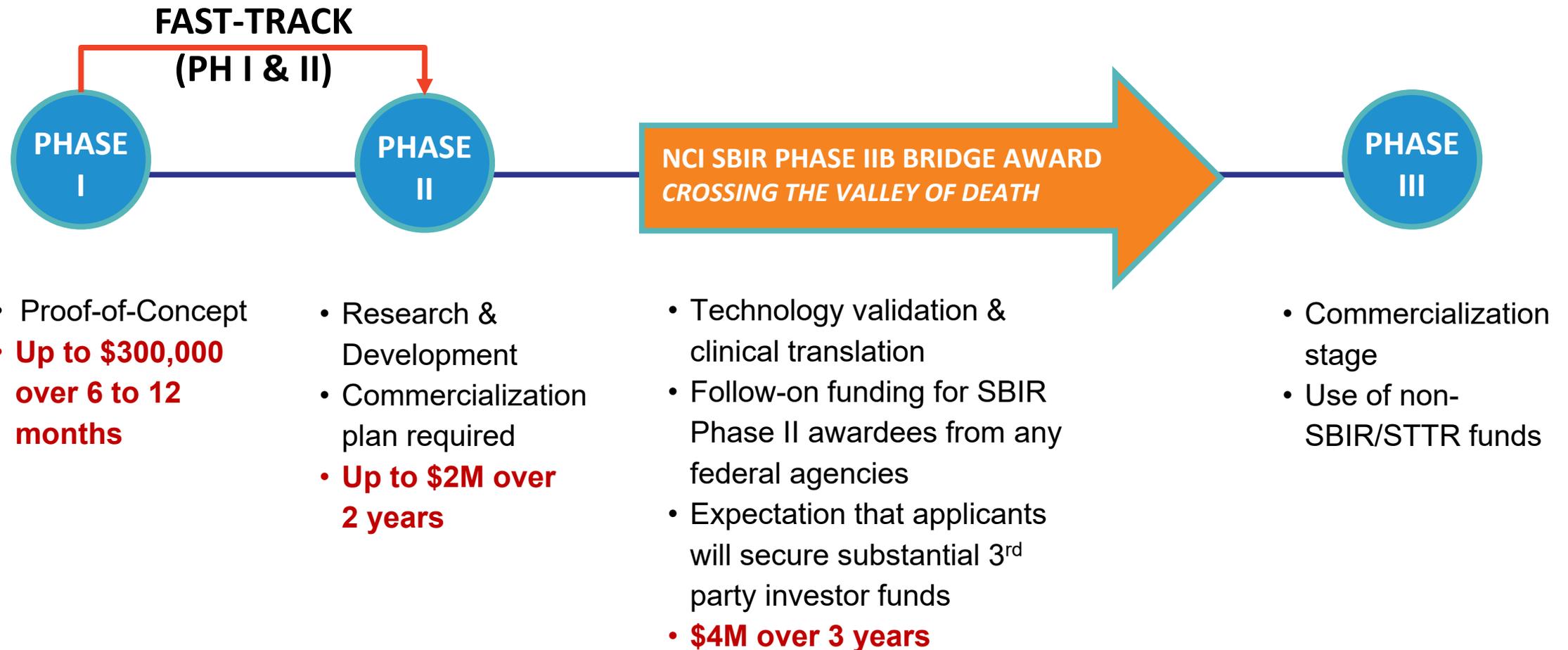
NCI scientific  
& technology  
priorities

**Contract  
Topics**

Areas of interest  
to commercial  
sector

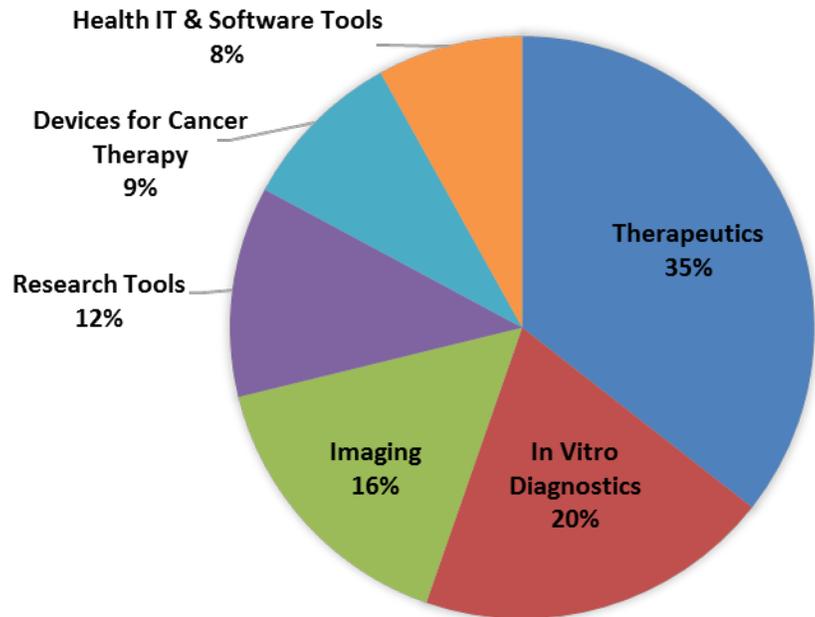
- NCI priority areas
- strong potential for commercial success
- significant NCI oversight
- 1 receipt date

# THREE-PHASE PROGRAM



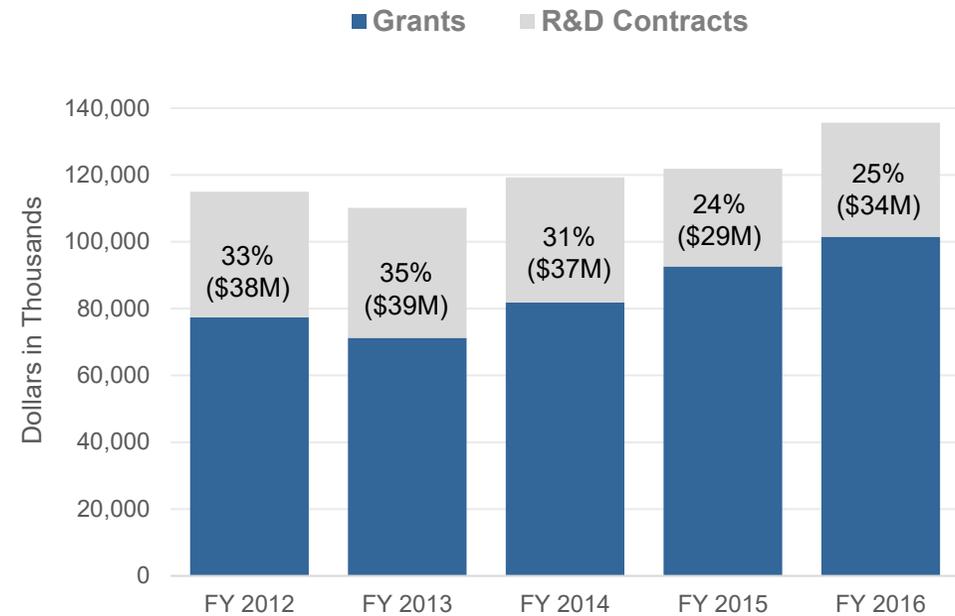
# PORTFOLIO DISTRIBUTION

**Major Portfolio Areas (FY2016)**



**~400 Total  
Ongoing Projects**

**NCI SBIR Funding Mechanism**



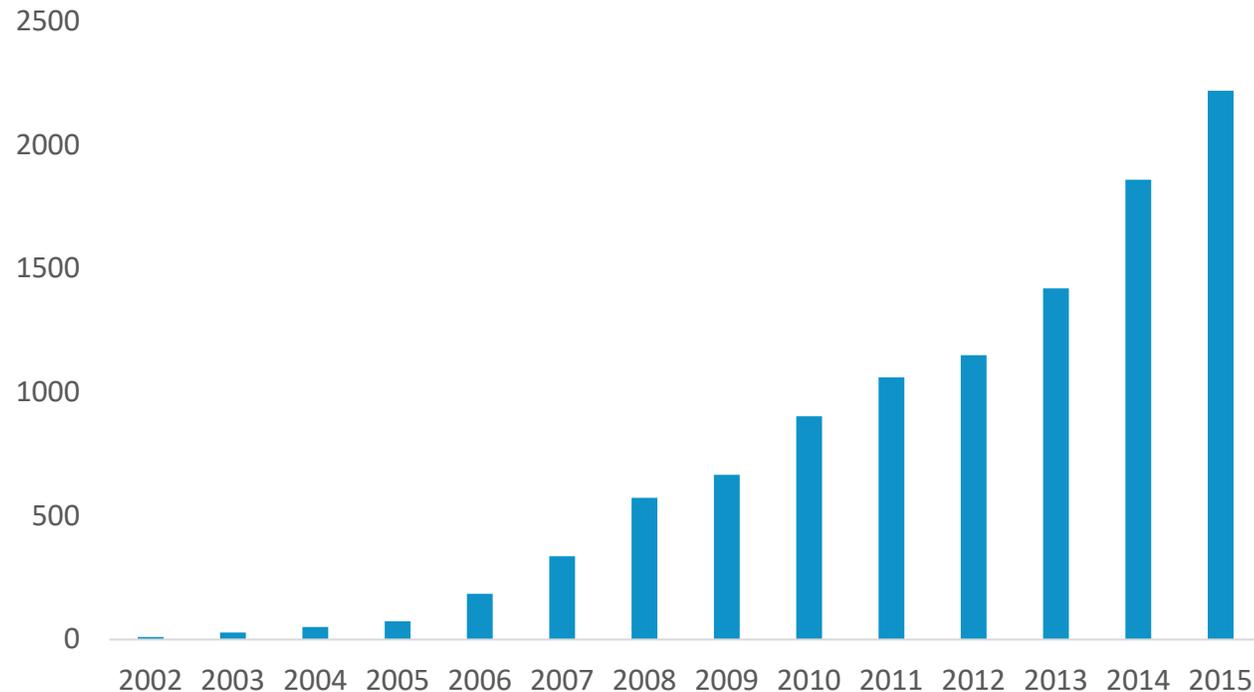
# FOAs & Receipt Dates

For more info: [sbir.cancer.gov](http://sbir.cancer.gov)

TITLE	FOA		RECEIPT DATES
Omnibus Solicitation	SBIR PA-18-574 (General) PA-18-573 (Clinical Trial)	STTR PA-18-575 (General) PA-18-576 (Clinical Trial)	September 5; January 5; April 5
SBIR Technology Transfer (technology transfer out of NIH intramural labs)	PA-18-705		
<b>SBIR IMAT (Innovative Molecular Analysis Technology) Development</b>	<b>PAR-18-303 (SBIR only)</b>		
Development of Highly Innovative Tools and Technology for Analysis of Single Cells	PA-17-147 (SBIR) PA-17-148 (STTR)		
Tools for Cell Line Identification	PA-16-186 (SBIR only)		
Cancer Prevention, Diagnosis, and Treatment Technologies for Low-Resource Settings	PAR-18-801 (SBIR) /PAR-18-802 (STTR)		
Phase IIB Bridge Award Open to federally-funded Phase II awardees	RFA-CA-18-011 (SBIR only)		August 16, 2018
Contract Solicitation	Program Solicitation PHS 2019-1 out now		October 22, 2018
Administrative Supplement to Support Ongoing Awards	PA-18-591		Throughout the project period
Administrative Supplement to Support Diversity	PA-18-837		Throughout the project period

# CASE STUDY: ILLUMINA, INC.

ILLUMINA REVENUE GROWTH FROM 2002 TO 2015  
(in USD million)



Source: Illumina Annual Reports

## SBIR and Illumina

### Areas SBIR grants helped advance:

- Genotyping
- Parallel arrays
- Gene expression profiling

Genotyping and parallel arrays are “integral parts of Illumina’s main product lines. They have returned many times the original investment in revenues for the company.”

(An Assessment of the SBIR Program At the National Institutes of Health, National Research Council of the National Academies, 2009)

# I-CORPS AT NIH

- Intensive ***Entrepreneurial Immersion*** course aimed at providing teams with skills and strategies to reduce commercialization risk
- Curriculum emphasizes ***Reaching out to Customers*** to test hypotheses about the market(s) for the technology
- Teams are expected to conduct over ***100 interviews*** in 8 weeks
- Format is focused on ***Experiential Learning***
- Goal is to analyze where their technology can provide the greatest value in the life sciences ecosystem and meet a need not currently being met
- NCI SBIR designed, launched, and manages the program for 17 Institutes at NIH



#ICorpsNIH 

# I-CORPS CASE STUDY

The logo for GigaGen, featuring a circular icon with a DNA helix pattern to the left of the word "GigaGen" in a serif font.

*NIH launched a new program called “I-Corps.” This program is a commercialization accelerator based on a methodology called Lean Launchpad [...] The Lean Launchpad process literally saved us tens of millions of dollars and several years by homing in on a product that customers actually wanted, versus what we thought they would want. [...] Clearly, the Lean Launchpad process...brought our impactful innovations to a Big Pharma that saw future commercial value.*

(Excerpt from CEO David Johnson’s [op-ed](#))

Leveraging the learnings from I-Corps at NIH, GigaGen recently:

- Raised **\$50 million** investment
- Secured licensing partnership
- Launched a fee-for-service product
  - *Surge* is an ultra-fast, ultra-comprehensive antibody discovery platform
- Launched spin-off company GigaMune
  - Active applicant for new SBIR funding based on commercial direction identified during I-Corps

# INVESTOR INITIATIVES PROGRAM



- Current and recent SBIR/STTR awardees can apply (80-110 per year)
- **ALL** applicants receive constructive feedback from investor reviewers
- Feedback strengthens development efforts and future investor outreach
- Selected companies receive coaching, give pitches at investor forums and conferences, and meet one on one with investor attendees
- Selected companies are profiled in an investor-oriented booklet
- **Each year, several investors ask for direct introductions to SBIR awardees based on their profile in the investor booklet (15 introductions in 2017)**

**NCI was the first Institute to develop a program aimed at connecting investors with companies**

# INVESTOR INITIATIVES - 2017

## ON + TARGET LABORATORIES

- Investor Initiatives 2016
- Presented at J&J-organized showcase of NCI SBIR awardees
- Secured **\$40 million** in funding from J&J's venture arm.
- Met with J&J's venture arm at the showcase & recently announced the major investment.

## CELLSIGHT TECHNOLOGIES

- Investor Initiatives 2017
- Secured a collaboration partnership/investment from Boehringer Ingelheim at a showcase presentation supported by NCI through Investor that is funding a clinical trial of the SBIR-funded technology

## JBS SCIENCE

- Investor Initiatives 2016
- Met with an investment firm at two industry showcases through participation in Investor Initiatives which culminated in an agreement for a collaboration and validation study funded by the external investment.

**69%** of the selected awardees in 2016 are either still in discussions or already completed an investment or partnership and half of those specifically credited NCI's contribution to the deal

*NCI SBIR collects both short-term and long-term feedback from selected companies as the time from presentation to a secured deal is often 18 months or longer*

## Peer Learning and Networking (PLAN) Webinar Series

- Goal is to improve peer learning and & provide more networking opportunities.
- 2-4 presenting companies share their experience and expertise and discuss potential areas of collaborations
- 2-4 webinar per year, including an upcoming one on IP strategy and the Bridge award
- Past webinars on building a successful team and I-Corps lessons learned

## Application Assistance Program

- For New or Previously Unawarded Small Businesses .
- Application deadline to be announced in next month
- Provide support for preparing a Phase I SBIR or STTR application, submission process and appropriate market research
- Specific interest in assisting SB that are owned or operated by individuals who are underrepresented in the biomedical sciences

## Regulatory Assistance

- Provide structured opportunities for awardees to learn about federal regulations (e.g., workshops and meetings with FDA)
- Planning Regulatory 101 Webinars by FDA/NCI to NCI SBIR companies.
- Working with FDA to develop a resources page/list of key guidance documents that would be most applicable to awardees
- Fellow with regulatory background hired

## Mentoring Programs

- Peer-to Peer C-level Officer Mentoring
  - Structured meetings between chief executives
  - Tap into our network of successful serial entrepreneurs

# THE END

Michael Weingarten

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