



SBIR • STTR
America's Seed Fund

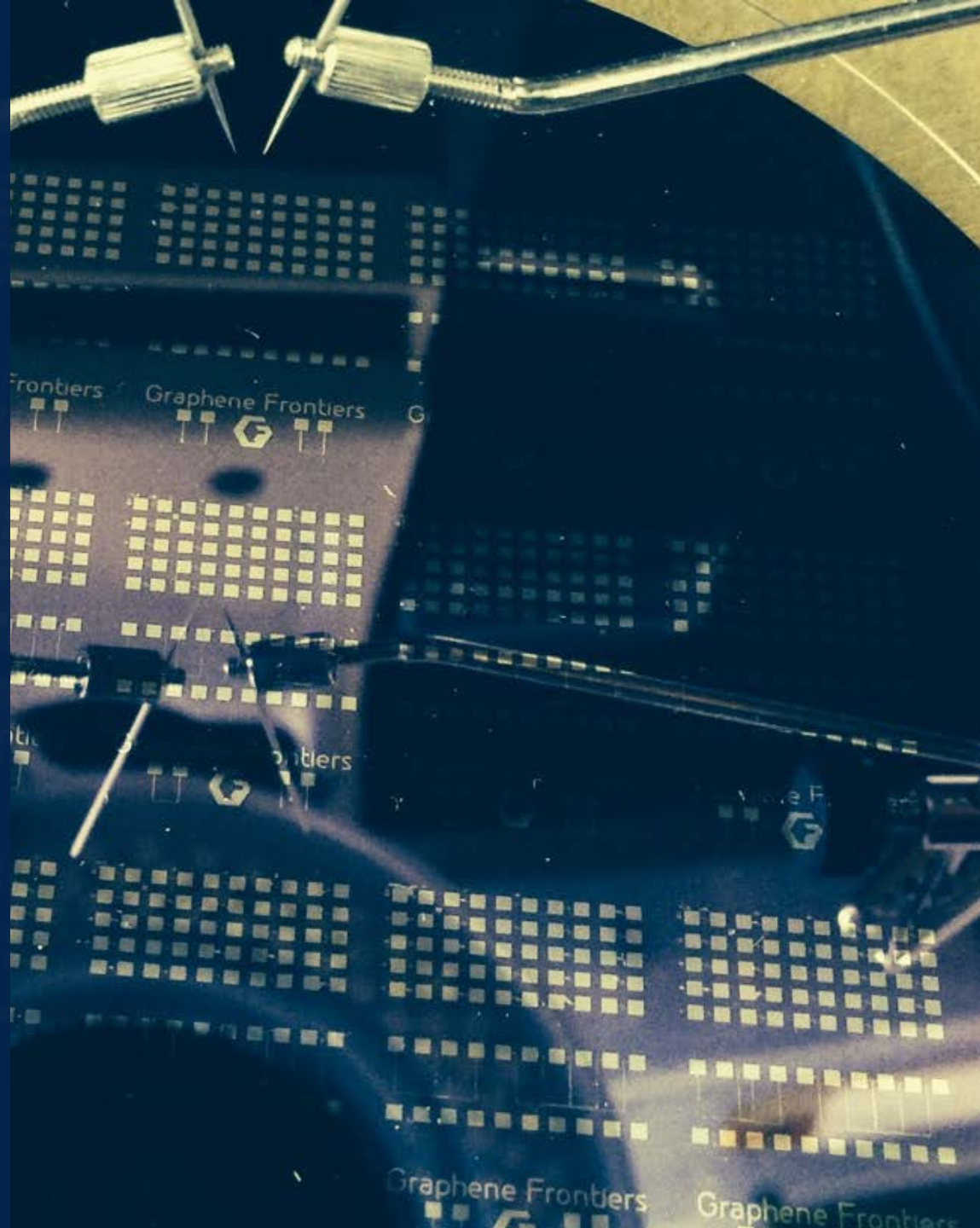
Small Business Innovation Research & Small Business Technology Transfer

at the National Science Foundation

WHAT IS THE NSF SBIR/STTR PROGRAM?

- Who We Are
- Why We Fund
- Statement

Photo Credit: Graphene Frontiers, LLC





Who We Are

The NSF is:

- A federal agency that supports fundamental research and education across all fields of science and engineering, currently with a \$7 billion budget.

NSF SBIR/STTR is:

- An approximately \$170 million program that catalyzes the commercialization of high-risk technological innovations via research and development (R&D) grants to startups and other small businesses.
- The NSF SBIR/STTR program funds roughly 400 companies each year.



Why We Fund

- The SBIR program exists at 11 government agencies.
- Congress designated 4 major goals for SBIR (broadly) in the Small Business Innovation Development Act of 1982:
 - Stimulate technological innovation in the private sector
 - Use small business to meet federal R&D needs
 - Foster and encourage participation by minorities and disadvantaged persons in technological innovation
 - Increase private-sector commercialization of innovations derived from federal R&D



Grants That Go Beyond Funding

- Recipients receive training in key business areas and mentorship from seasoned Program Directors
- Connection to other small companies performing innovative R&D
- Winning an SBIR/STTR award signals success to investors, partners and customers

FUNDING

- What We Fund
- Phase I Funding
- Phase II Funding



Photo Credit: PhylloTech, LLC



What We Fund

- R&D to overcome significant technical hurdles in order to prove feasibility/viability of a new product, process or service
- Validated market need and innovative solution that could create **significant commercial impact** if the technology is successfully developed
- Proposals in all areas of engineering and science and related education are welcome



Phase I Funding

- Grantees receive:
 - Up to \$225,000 over 6-12 months
 - These funds go toward feasibility and proof-of-concept research
- SBIR versus STTR:
 - Research institution partner is **required for STTR** (and must be allocated at least 30% of budget)
 - Research institution partner is **optional for SBIR**



Phase II Funding

- Phase II applicants must have received an NSF SBIR/STTR Phase I award.
- Focus: Prototype and scale-up development and testing.
- Grantees receive up to \$750,000 over 24 months.

TOPIC AREAS



Photo Credit: PhylloTech, LLC



Broad Technology Areas

Focus: High-risk technical R&D.

Some areas include but are not limited to:

- Biological, biomedical, environmental, and chemical technologies
- Educational technologies and applications
- Electronics, information, and communication technologies
- Nanotechnology, advanced materials, and manufacturing

IS MY COMPANY A GOOD FIT?

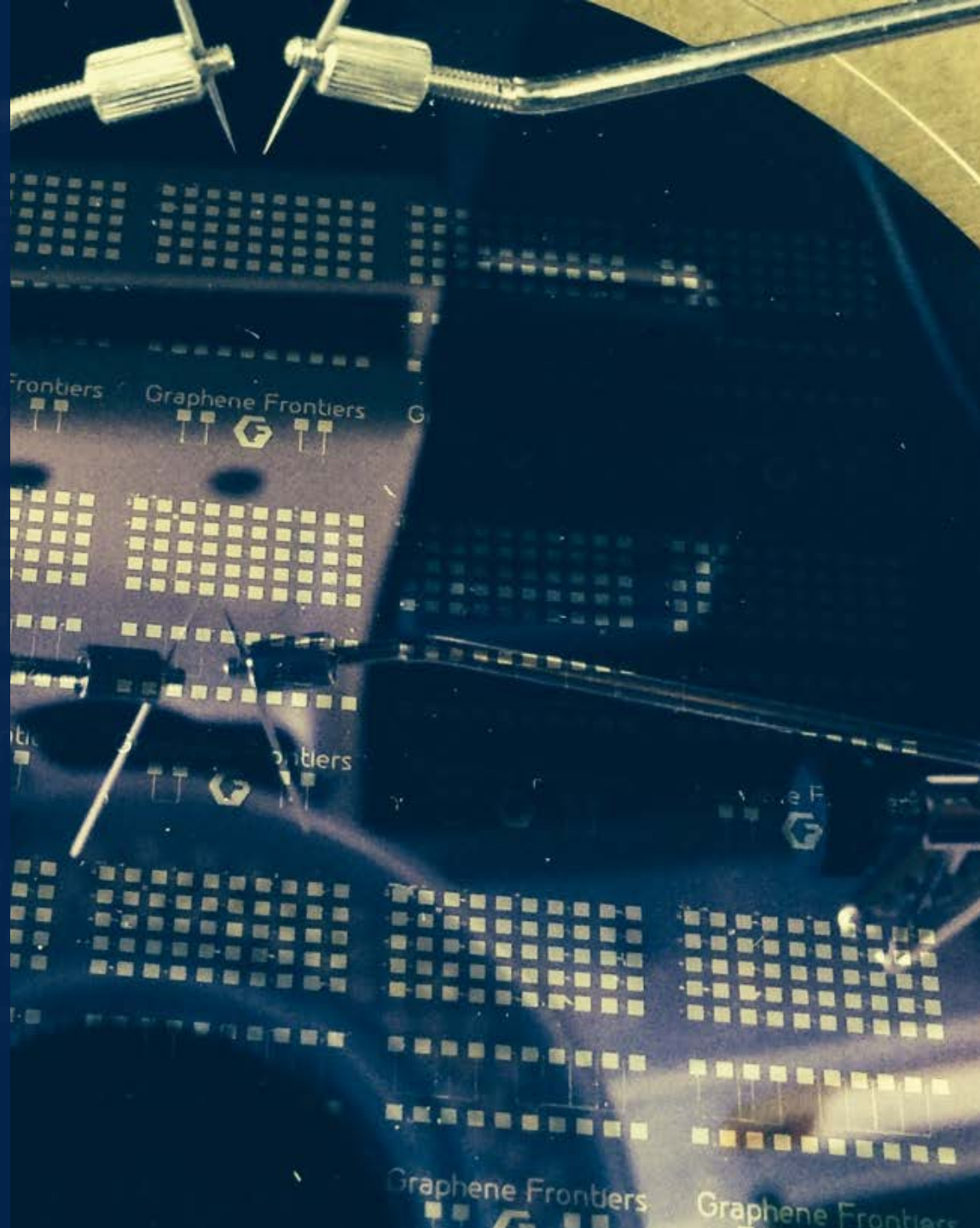


Photo Credit: Graphene Frontiers, LLC



Is NSF SBIR/STTR an Appropriate Opportunity for My Company?

- NSF SBIR/STTR assists companies with technologies that require additional R&D towards successful commercialization.
- Must be a technologically advanced or innovative product that isn't an already existing product or process
- Must satisfy a significant, validated market need



Is My Company Eligible?

- Must be a small business or startup with less than 500 employees/affiliates
- Must be located in the United States and at least 51 percent owned and controlled by one or more individuals who are citizens of, or permanent resident aliens in, the United States
- More details: www.bit.ly/sbir_eligibility.

PROPOSAL REVIEW

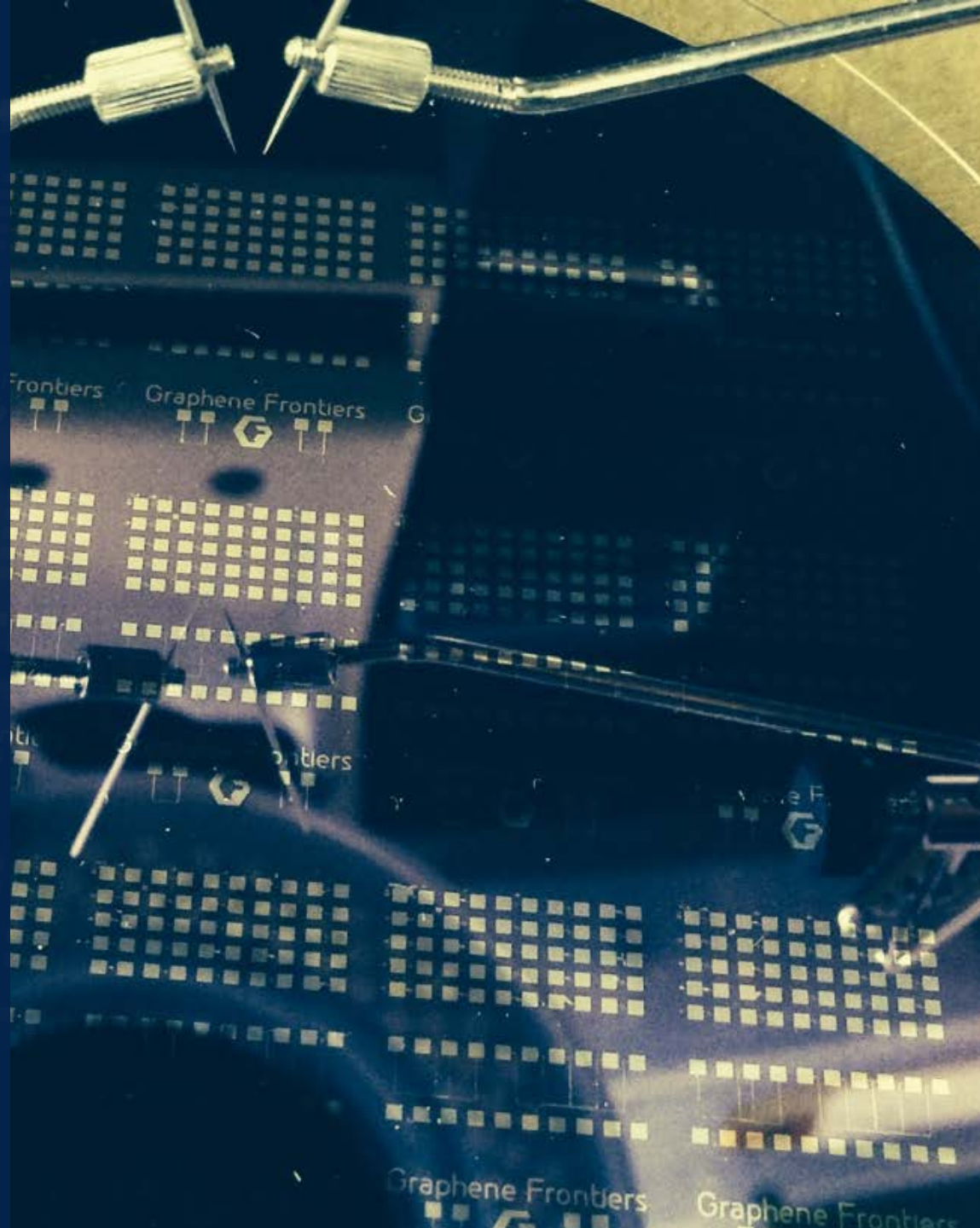


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Proposal Review

For Phase I, reviewers examine proposals for:

Intellectual Merit

- The innovation
- Company/team
- Technical hurdle(s) to be overcome
- R&D plan

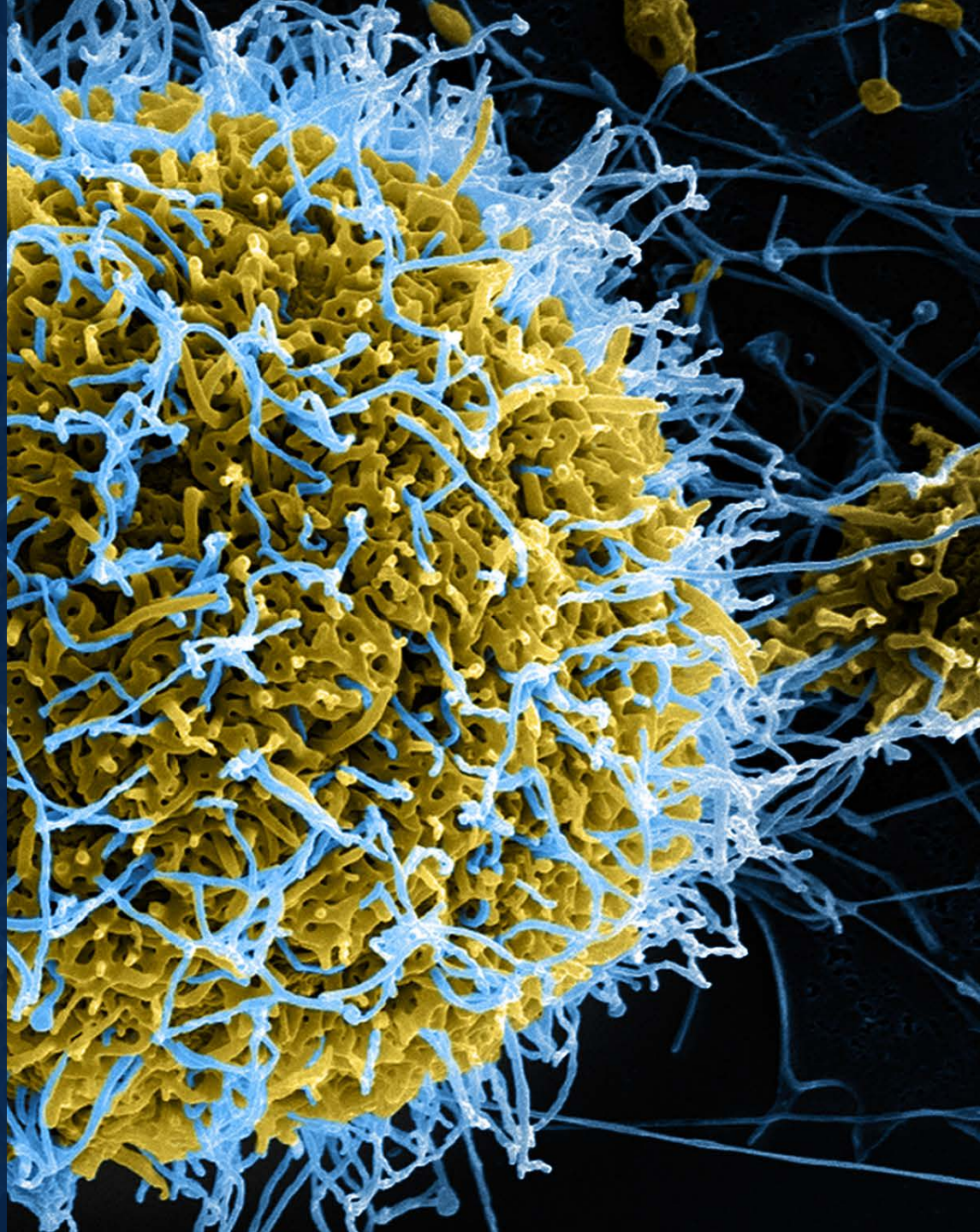
Broader/Commercial Impact

- Market opportunity
- Company/team
- Technology and competition
- Additional societal benefits?

Exact review criteria: www.bit.ly/nsfsbir_review

PROGRAM STATS

Photo Credit: National Institute of Allergy and
Infectious Diseases, NIH





Program Stats – Phase I (1 of 2)

NSF SBIR/STTR Phase I Grantees

- **Head Count:** ~ 85% of awardees have 10 or fewer employees
- **History:** ~ 75% of awardees had never had a prior SBIR/STTR Phase II award from any agency
- **Company Age:** ~ 70% of awardee companies were incorporated within the past 5 years
- **Start-up Creation:** Several dozen Phase I awardees each year incorporate based on our Phase I funding



Program Stats – Phase I (2 of 2)

- **Follow-on Investment:** Each year, active Phase II grantees raise a total of \$30-90M in sales or new third-party investment based on progress during the award
- NSF can match these third-party funds (Phase IIB program - \$1 of new NSF money per \$2 of third-party money, up to \$500k)

HOW / WHEN DO I APPLY?

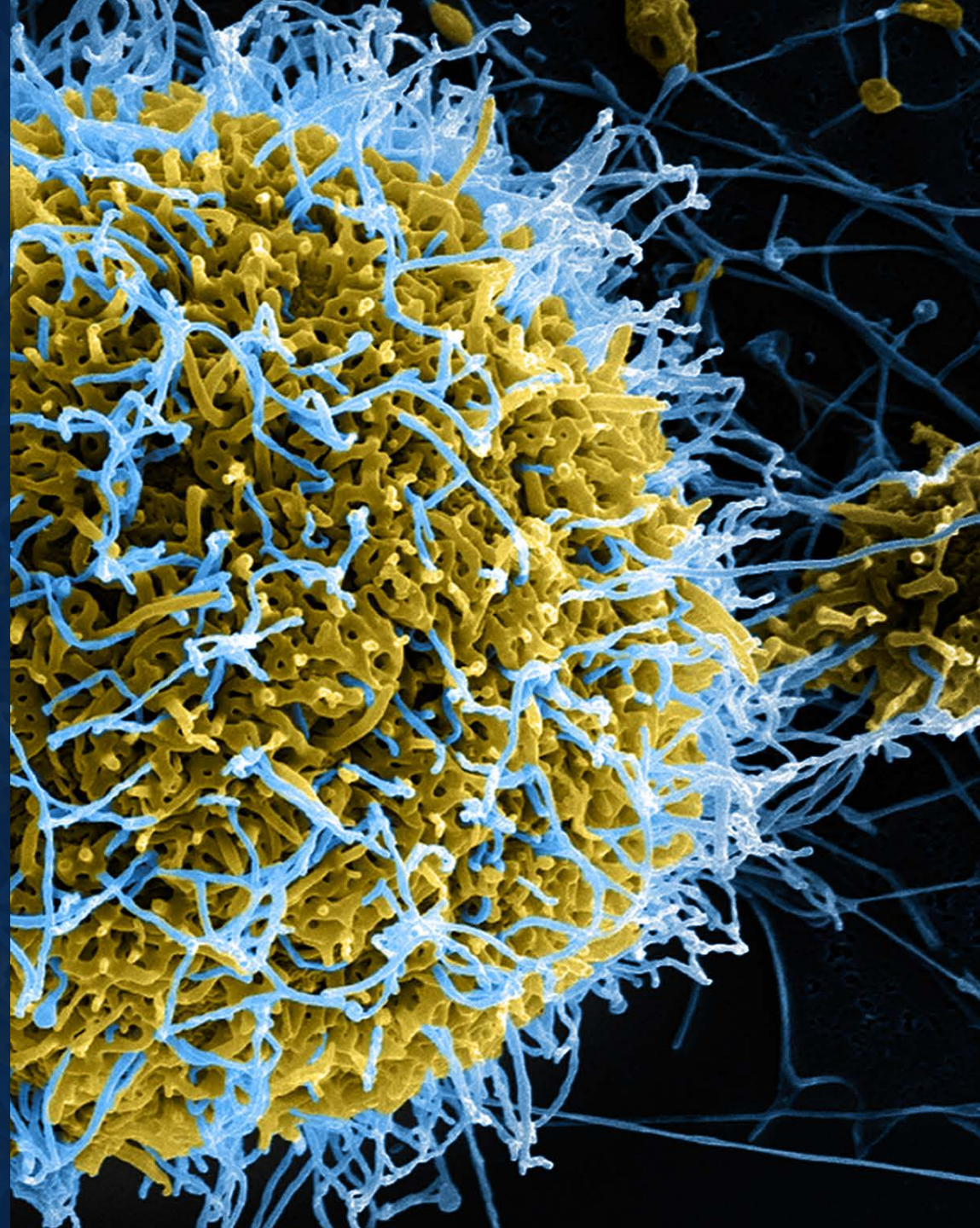


Photo Credit: National Institute of Allergy and
Infectious Diseases, NIH



How Do I Apply?

- Phase I proposal submission deadline dates are typically in **June and December**. A **program solicitation** announces the actual opportunity and exact deadlines.
- **First Step.** Register with NSF: www.bit.ly/nsfsbir_register
- **Online Application Help.** A detailed, step-by-step guide and other resources can be found here:
www.bit.ly/nsfsbir_howtoapply

QUESTIONS?

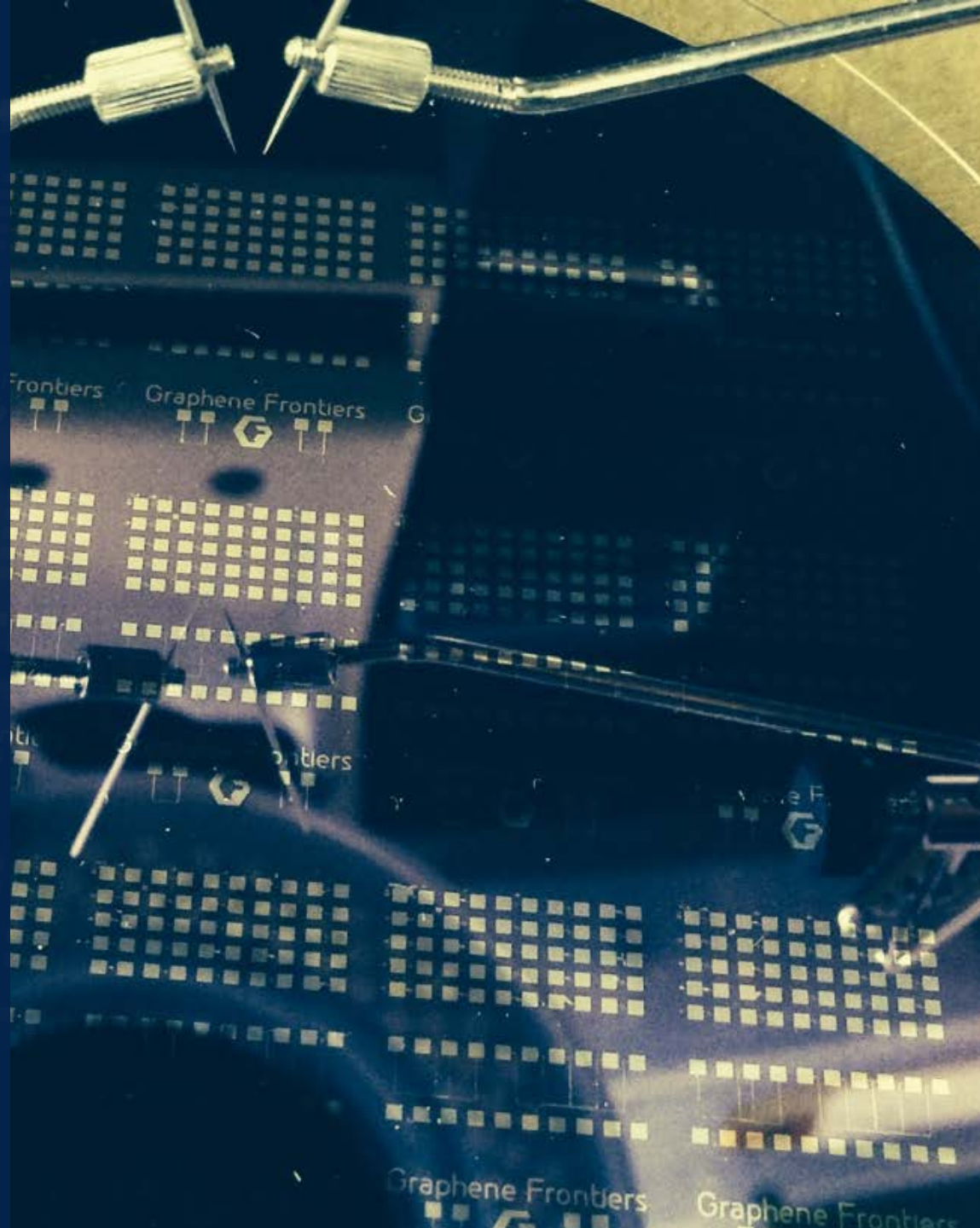


Photo Credit: Graphene Frontiers, LLC



THANK YOU

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