

2022

# MIND THE GAP

## THE TECHNOLOGY AND STARTUP GAP FUNDING AND ACCELERATOR PROGRAM REPORT

PRESENTED BY

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# REPORT SUMMARY

The innovation system that transitions breakthroughs in research from the lab into the marketplace is constrained by the lack of available early-stage capital and development support. This “gap” extends from where the government funding of basic research ends to where existing companies or investors are willing to accept the risk to commercialize or invest in the technology or startup. The negative result is that a large portion of economic creation and commercial potential is left unrealized because it isn't funded and supported.

This shortage of early-stage development capital and support must be recognized and addressed as a serious threat to future innovation and associated societal benefits. Left without a solution, many promising technologies and startups will stall or struggle to develop on a path of least resistance towards a sub-optimal end.

To address this challenge, research institutions and partners have created technology and startup gap funding and accelerator support programs as a capital and innovation support mechanism. These programs are uniquely positioned to address critical elements of technology development and startup formation from research institutions.

Over the past 20 years, gap fund programs have evolved from simple vehicles for injections of money into sophisticated programs that match much-needed capital with a full suite of accelerator support programs to evaluate and develop tech and startups.

This advancement has demonstrated increased commercialization through spinouts and licenses to existing companies and the attraction of public and private capital and partnership back into early-stage innovation. Additionally, smart companies and investors are leveraging these programs for insights, future technology, and attractive opportunities through direct investment, advisory, and mentorship support.

The Mind the Gap Report, now in its sixth iteration, has tracked the evolution of translational research, proof of concept, startup, and venture gap funding programs associated with these leading research institutions over the past 17 years. The report now includes 176 gap funding programs affiliated with 97 research institutions and details their sources and sustainability, processes and management, focus and intent, and ultimately, their impact on the innovation community and its capabilities.

## Report Content

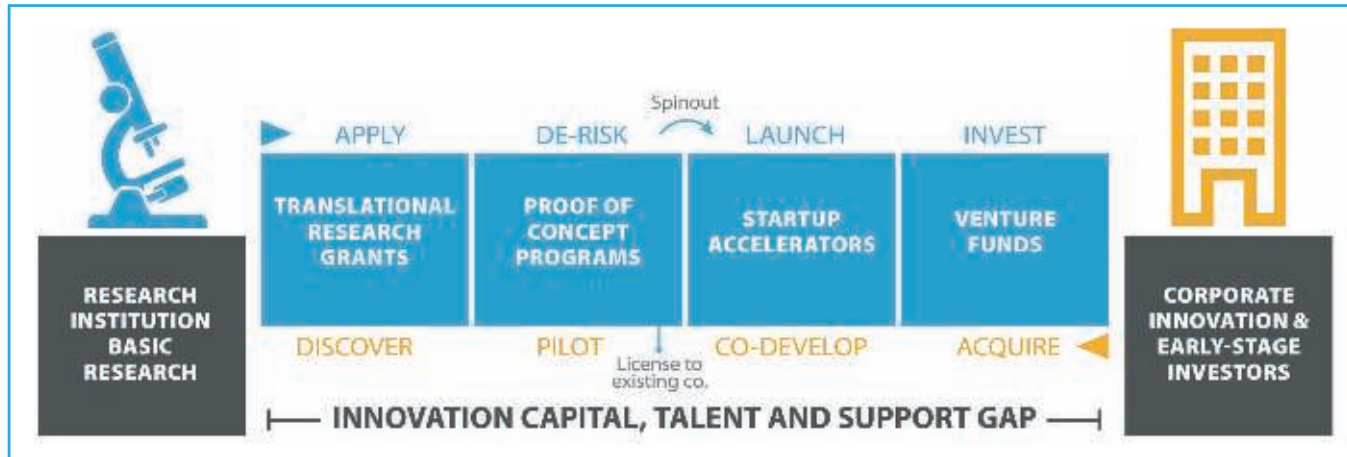
- Analysis of Early-stage Capital Continuum
- Defining and Positioning the Role of Gap Funds
- Raising and Sustaining Gap Funds
- Structuring the Gap Fund Model
- Managing the Gap Fund Process
- Defining and Benchmarking Gap Fund Impact

## Report Highlights

- 176 Gap Funds Affiliated with 97 Research Institutions
- 37 US States and Eight Countries Included
- \$665M into 7,370 Gap Funded Technologies/Startups
- \$8B in Outside Attracted Capital
- 1,469 Startups Created and 16,757 New Jobs
- 992 Projects Licensed to Existing Companies
- Engaging Thousands of Faculty, Students, Entrepreneurs, Investors, and Industry Members

Figure 10: Defining Gap Fund Types

# Defining Gap Fund Types



| TRANSLATIONAL RESEARCH PROGRAMS  | PROOF OF CONCEPT PROGRAMS   | STARTUP ACCELERATORS  | VENTURE FUNDS  |
|--|---|---|--|
| +  | +   | +   | +  |
| <b>FOCUS</b>   | <b>FOCUS</b>  | <b>FOCUS</b>  | <b>FOCUS</b>   |
| <p><b>Translational Research Gap Funds</b> support the applied development and validation of basic research efforts to a point where it can be assessed for commercial potential. Research institutions often form or direct translational research gap funds around emerging technology priorities or institutional scientific strengths.</p> | <p><b>Proof of Concept (POC) Gap Funds</b> evaluate commercial potential, demonstrate the value, and generally de-risk the project, real or perceived, to commercial partners or investors. Milestone-driven projects like prototype development, validation testing, and commercial assessment help to identify routes to commercialization or find major weaknesses that save further investment.</p> | <p><b>Startup Gap Funds</b> assist in the formational stages of spinouts, often prior to legal incorporation and as an extension of a proof of concept program. These programs may combine gap funds with other start-up accelerator support like mentorship and space to develop the business application to a stage where it can attract third party interest, capital and development support.</p> | <p><b>Venture Gap Funds</b> invest in scaling and growing established spinouts. Research institutions have created, spun out, or partnered with seed funds and accelerators, both public and private, to fill this void in early-stage startup capital. Through these funds, institutions can invest into the early venture rounds and maintain their relationships and equity positions in portfolio companies.</p> |
| +  | +   | +   | +  |
| <b>MANAGEMENT</b>  | <b>MANAGEMENT</b>   | <b>MANAGEMENT</b>   | <b>MANAGEMENT</b>  |
| <p>Often pre-disclosure and managed at college-level or research center/lab in particular technology focus areas. Technology transfer or research administration may also support a campus-wide initiative or in work in concert with public and private programs.</p>   | <p>These funds are often administered centrally through the technology transfer office, research foundation, central research administration, or the equivalent at the college-level. Externally-partnered public funds, accelerators, and corporate funds run independently or in close collaboration with the research institution.</p>   | <p>These funds are primarily administered by the technology transfer office and associated venture centers. External public-private arrangements to support business creation are managed by a sponsoring agency or through close collaboration with the research institution.</p>  | <p>University-managed Venture Gap Funds are limited based on the required capital, often at institutions with sizeable internal reinvestment capability or donor base.</p> <p>To overcome this challenge/mitigate risk, research institutions may partner with existing venture firms or investor groups.</p>  |
| +  | +   | +   | +  |
| <b>FUNDING APPROACH</b>  | <b>FUNDING APPROACH</b>   | <b>FUNDING APPROACH</b>   | <b>FUNDING APPROACH</b>  |
| <p>Grants: oversight and continuation of projects depend on achieving technology development milestones.</p>   | <p>Grants: generally, no direct repayment expectations; however, in some cases may be set up with repayment terms.</p>  | <p>Grant or investment: Investment is often structured to entice third party interest and limit financial constraints on company in the formative years.</p>  | <p>Investment: Equity, convertible debt, or repayment directed at maintaining a stake in the company and realizing a return.</p>   |
| <b>TRL 1-2</b>   | <b>TRL 3-8</b>  | <b>TRL 7-9</b>  | <b>STARTUP SCALING</b>   |
| <b>31 FUNDS SURVEYED</b>   | <b>91 FUNDS SURVEYED</b>  | <b>34 FUNDS SURVEYED</b>  | <b>20 FUNDS SURVEYED</b>   |