

Philadelphia Life Sciences

SERVICED LAB

DECEMBER 2024

INTRODUCTION

The Life Sciences sector has been present in Philadelphia for decades. Although within the past decade, Philadelphia has become synonymous for being on the forefront of medical discovery. The emergence and growth of cell and gene therapy as well as the creation and application of mRNA vaccines, has fueled NIH funding into the region's research institutions, notably Drexel University, Temple University, and the University of Pennsylvania (Penn). Within these institutions' academic graduate labs (grad labs), new research discoveries are made, and new companies are created.

In time, these companies matriculate from their academic beginnings to commercial spaces. Co-lab and incubator spaces are often thought of as launching pads; temporary, functional spaces that allow small companies to stretch limited cash reserves as they focus on further intellectual property.

What is left undefined is how long is "temporary". Today co-lab and incubator providers have limited vacancy, yet life science leasing activity has considerably slowed over the last 12 months. This suggests companies may be utilizing co-lab and incubator space for long term growth as well as short to mid term preservation.

THE EVOLUTION OF SERVICED LAB FACILITIES:

The serviced lab market in Philadelphia exploded approximately five years ago, driven by increasing demand for flexible, cost-effective laboratory spaces in the then thriving biotech and life sciences sectors. Facilities like CIC (Cambridge Innovation Center), B+Labs, and BioLabs have played a crucial and evolving role in Philadelphia's life science ecosystem by providing stateof-the-art laboratory infrastructure and a range of services that significantly reduce overhead costs for emerging biotech companies. By reducing capital expenditures and providing vital resources, these labs have enabled many biotech startups to focus their time and resources on raising capital and advancing their intellectual property with an eye on bringing new life saving therapies to market.

When CIC, B+Labs, and BioLabs opened their Philadelphia locations between 2019 and 2022, the intent for these facilities was clear: create a place where early-stage companies could take a small office and/or lab space and grow seamlessly through their first few years of development before "graduating" into a more permanent location. Some facilities even held term limits for how long companies could stay in the facility before graduating out to make room for the next wave of young emerging companies.

Fast forward to present day, and the current state of serviced lab facilities looks vastly different from their original intent. As the growth of the life science industry has slowed over the last few years, serviced lab facilities have become longer term solutions for companies looking to ride out the storm of challenging financial markets, while avoiding the potential pitfalls of scientific disruption that can be caused by moving facilities. This analysis examines how this transformation happened, what the impact has been for the Philadelphia Life Science community, and what it means for the future of the Philadelphia life science industry.

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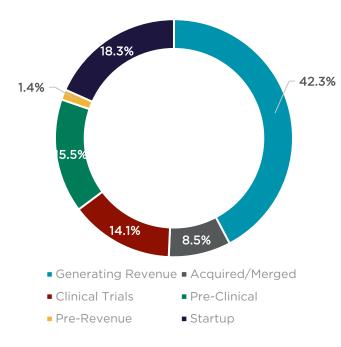
CURRENT SERVICED LAB OCCUPIERS:

Over 70 companies currently have operations in serviced lab facilities in Philadelphia. On average, these companies began operations in 2016, and have been serviced lab occupiers since their founding, still using the address of serviced lab operators as their own. As well as a shared location, these companies also share other similarities despite different funding sources or business status.

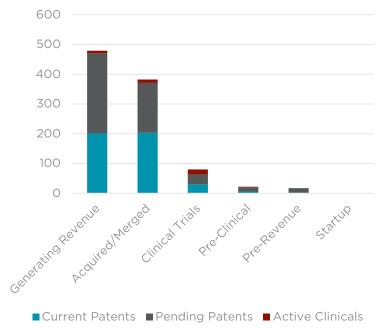
By business status, less than half (40.0%) of these companies are revenue generating companies, yet revenue generating companies represent the largest contingent of occupiers. The other half of companies are roughly split between clinical trial (14.0%), pre-clinical (15.0%), and start-ups (18.0%). The last significant contingent of occupiers is acquired and merged companies, now operating subsidiaries (10.0%).

Two thirds of all occupiers are headquartered in Philadelphia, while the other remaining one-third are headquartered in other states or countries. These occupiers are choosing to use Philadelphia serviced lab facilities presumably for research purposes. Collectively, current occupiers account for 345 current patents, 346 pending patents and 29 active clinical trials. A significant portion of this intellectual property (IP) was created by Philadelphia based companies, accounting for 70.0% of the current patents, 49.0% of pending patents and 52.0% of all active clinical trials.

For these occupiers, IP (measured by patents and clinical trials) is the key to full maturation. Of all patents owned by companies in service lab facilities, 83.0% belong to companies that are generating revenue or have been acquired. That is, if these startups can establish proof of concept, capitalization and commercialization will follow.



OCCUPIERS BY BUSINESS STATUS: IP BY BUSINESS STATUS:



SERVICED LAB OCCUPIER FACTS:



ORGANIC GROWTH:

40% have a direct relationship with Penn, Drexel or Temple

66% of occupiers are headquartered in Philadelphia



BUSINESS STATUS:

40.0% Generating Revenue
18.0% Start-ups
15.0% Pre-Clinical
14.0% Clinical Trial
10.0% Acquired/Merged



INTELLECTUAL PROPERTY: 345 Current Patents

346 Pending Patents29 Active Clinical Trials



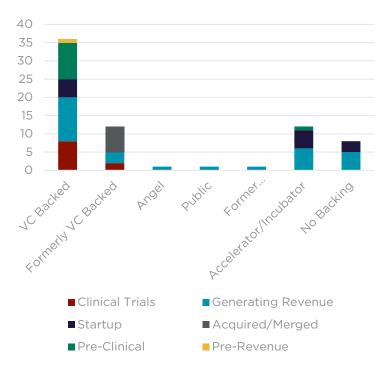
BUSINESS STATUS AND FUNDING SOURCES:

When looking at funding sources, half of all occupiers are backed by venture capital (VC) funding, while another 17.0% are formerly VC backed. Accelerator and incubator backed companies represent 17.0% of known occupiers, and 11.0% of occupiers do not have any reported financial backing.

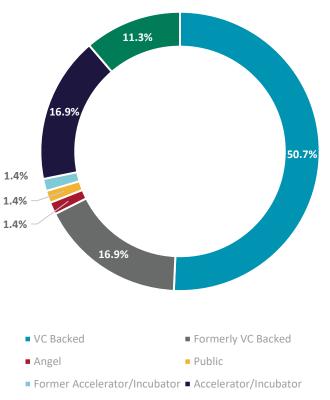
When considering both business status and financial backing together the picture becomes clearer: VC funding is driving 90.0% of the pre-clinical companies, 80.0% of the clinical trial companies, 40.0% of revenue generating companies, and 38.0% of the start-ups. 100.0% of the acquired companies are formerly VC backed. While accelerator and incubator funded companies represent 38.0% of start-ups, 20.0% of revenue generating companies, and 9.0% of pre-clinical companies.

Because VC and accelerator backed companies represent most serviced lab occupiers regardless of business status, most of the IP is VC and or accelerator funded. The vast amount of IP generated is impressive considering the average size of these companies. On average, VC backed companies have a headcount of 18 total employees. Accelerator backed companies have an average head count of six (6) total employees. Given that the average age of VC and accelerator backed companies is about eight years, suggests that the serviced lab facilities are no longer viewed as short-term real estate solutions, but rather a vital part of a viable bio-tech business model that prioritizes IP creation.

BUSINESS STATUS BY FUNDING SOURCE:

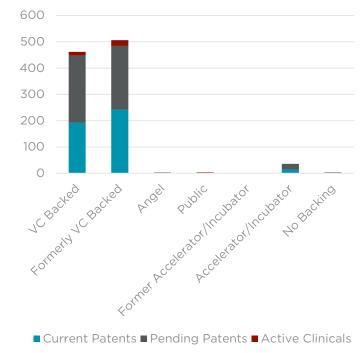


OCCUPIER FUNDING BY SOURCE:



No Backing

IP BY FUNDING SOURCE:



Sources: CW Research, PitchBook



FUNDING SOURCES:

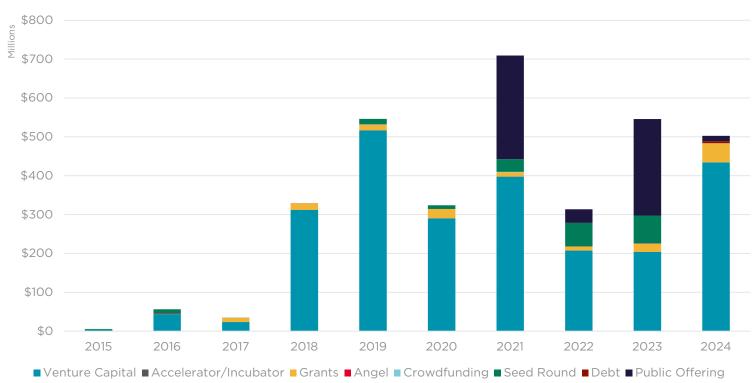
Intellectual property attracts the attention of investors. This is demonstrated as 56.0% of all funding goes to revenue generating companies. Startup and pre-clinical companies receive a far more modest 27.0% of the funding. Funding is a key component of these startup's capital stack.

VC funding received by life science companies in service lab facilities reached a post-pandemic high in 2024, just shy of \$500 million. The vast majority, \$434 million, was venture capital, while the remaining \$50 million came by way of NIH grants. The average founding year for the companies currently in service lab space was 2016. Couple this with the 8.9-year average time to commercialization, and the recent spike in venture capital funding is likely due to companies establishing themselves with successful clinicals and patents, thereby drawing the attention of investors.

VC FUNDING BY BUSINESS STATUS:



OCCUPIER FUNDING BY YEAR AND FUNDING SOURCE:



Sources: CW Research, PitchBook

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REAL ESTATE IMPACT

The original aim of service lab facilitates was to provide a brief launching pad for fresh university spinouts. The typical Life Science company currently in these service labs does not fit this mold, with an average founding date in 2016. Under the original framework, these companies would have long since transitioned to commercial space. The disconnect arises based on when these companies are receiving the bulk of their funding. Most venture capital investment has been shown to wait until the company has established proof of concept (via patents or clinical trials) before expending capital.

On average, phase I clinical trials last four to four and a half years, and later stage clinical trials (phase II and III) last closer to five years. NIH grants have an average time frame of six years. Therefore, establishing proof on concept can take, on average, anywhere from at least four to upwards of 10 years. Any delay in proof of concept leads to delayed funding, which in-turn leads to delayed relocations, resulting in a longer tenure in serviced lab facilities.

This timeline does not help to solve for the vacancy that currently exists in the market over the short-term. Vacancy is at 6.0% overall for the market., with the bulk of vacancy in the city, which can be attributed to a handful of large deliveries over the last 18 months that remain mostly vacant. This vacancy coinciding with a lull in life science leasing activity, has led to fears of oversupply.

Despite possible fears of oversupply, for context, other life science markets such as Boston and Research Triangle have been in over supply for several months with vacancy rates above 20.0% for at least one year or more. Construction in Philadelphia has not been as rampant as new construction starts slowed over the last 18 months. The next tranche of deliveries is expected soon, with 1.7 million square feet (msf) of inventory to be delivered in the city, possibly reigniting talk of oversupply. However, 45.0% of the new space under construction is already accounted for, meaning all market conditions remaining status quo, this extra inventory would only increase overall regional vacancy to 10.4%, and city vacancy to 14.9%.

One differentiator in the Philadelphia market is the presence of academic space in the city's life sciences inventory. Academic space concentrated in the city totals 4.7 msf and anchors the city's vacancy rate. Removing academic inventory would increase the current city vacancy by 840 basis-points to 17.4%. Yet, not accounting for academic space overlooks an important contributor to the region's life science ecosystem. These are functional labs, mostly controlled by private universities, which apply millions in NIH funding towards IP creation. Academic space serves as the foundation for the next life science company spin out. This organic growth directly accounts for 14.0% of all serviced lab occupiers today, and 40.0% of all occupiers having a direct affiliation to one of the city's universities.

Serviced lab and other life science commercial spaces galvanize the local academic life science ecosystem, establishing a sense of place: a Philadelphia-based research community. This place making also attracts companies to Philadelphia, evidenced by serviced lab occupiers headquartered elsewhere, yet in Philadelphia serviced labs to advance IP. This environment is vital to the long-term health of the Philadelphia life science market. Understanding the timeline and connectivity between IP creation, investment capital, and company maturation explains the elongated tenure of serviced lab occupiers and suggests a back log of new startups in academic spaces, which represent the next cycle of serviced lab occupiers.