

BOSTON BIOTECH MARKET OVERVIEW

Despite vacancies inching up over the quarter, Greater Boston's lab market remains as fervent as ever. Cambridge lab vacancies are non-existent, with rates in East Cambridge falling to a statistical 0.0% in the first quarter, new construction is nearing it's 15-year peak and activity continues to expand across the metro area. With few options, tenant demand has been focused on new construction or recently completed lab space. The lack of availabilities and offmarket transactions are also limiting asking rents observations throughout the market. That said, topline rents are reaching \$95/SF NNN in Cambridge and the low \$60's/SF NNN in select Route 128 submarkets.

Following a banner year, funding in the Massachusetts life science industry remained steady during the first quarter of 2019. Venture capital funding for local biotech companies totaled a solid \$783 million during the first three months of 2019. Some of the largest funding rounds included Beam Therapeutics (\$135 million), Karuna Pharmaceuticals (\$68 million) and Ribon Therapeutics (\$65 million). Four Massachusetts life science companies went public during the first quarter as well. Avedro, TCR2 Therapeutics, Kaleido Biosciences and Stealth Biotherapeutics raised a combined \$298 million in their initial public offerings. While biotech funding is expected to remain positive this year, it will likely be difficult to match the break-neck pace of last year.

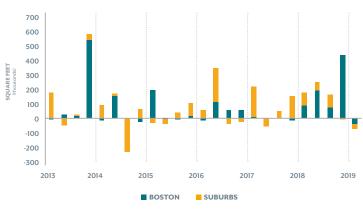
New development as well as conversion projects are adding to Greater Boston's lab inventory. Ground broke on Sanofi's 900,000-square-foot office and lab buildings at Cambridge Crossing; bringing total square feet underway to nearly 2.2 million. Developers are also looking to bring to product on line in several markets outside of Cambridge, including Watertown, the Seaport and South Boston. Boston Properties is actively working on repositioning several assets in key suburban life science clusters, including 195 and 200 West Street in Waltham and 33 Hayden Avenue in Lexington. Tight market fundamentals will ultimately lead to more activity outside of the traditional biotech nodes.

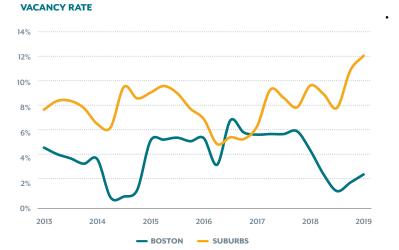
Such heated market conditions over the last several years have led to interest from institutional capital. As a result, commercial lab space has transformed from a niche product type to a core asset class in the Greater Boston market and investors are paying a premium to own these lab properties. Most recently, Clarion Partners acquired a 60% interest in 75-125 Binney Street in Kendall Square for \$438 million or \$1,880/SF. In January, The Carlyle Group sold its interest in 87 Cambridgepark Drive in West Cambridge to HCP, Inc. for \$71 million or \$1,110/SF. King Street Properties retained its ownership position in the building. Look for capital to continue to flow into the local lab market as strong tenant demand is expected to continue to drive positive fundamentals.

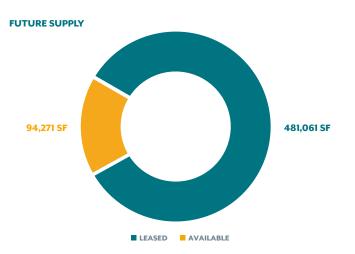


BOSTON/SUBURBAN LAB









- Life science activity continues to expand outside of Cambridge. Demand for modern commercial lab space appears to have no geographic bounds with tenants actively looking for space in markets like Watertown, Waltham, Bedford, Brighton, Lexington, Boston and Framingham. While first-quarter net absorption was negative across the Boston and suburban lab markets, Eisai Co.'s relocation from 200,000 square feet at 4 Corporate Place in Andover accounted for the majority of this activity. The future remains bright for life science clusters outside of Cambridge as demand for lab space far outstrips supply. While tenant preferences will remain focused on Kendall Square, the lack of space and frothy pricing will push growth out along Route 2 and the Route 128 Corridor, and into Boston.
 - Is the Seaport Boston's next big biotech hub? With development potential, more availabilities and asking rents in the mid-to-high \$60/SF NNN, it's not surprising tenants are giving this neighborhood a hard look and activity is gaining momentum. During the first quarter, Foundation Medicine subleased 64,000 square feet of office space from PTC at 121 Seaport — giving credence to the firm's rumored one million-square-foot development (with 300,000-400,000 square feet of lab use) in Seaport Square. Akouos also leased 37,500 square feet at the newly renovated 645 Summer Street during the quarter. Alexandria Real Estate is betting big on the Seaport as well. In addition to the 210,000-square-foot proposed lab at 99 A Street, the life science developer recently purchased a parking garage at 10 Necco Street and will presumably execute a redevelopment on the property. Related Beal, who is repositioning the remaining space at 451 D Street to lab, also has roughly one million square feet of lab capable space in the Seaport. This area's life science footprint should grow as continued constraints in Cambridge drive demand elsewhere.
- Boston's Metrowest region is quickly becoming a destination for biotech companies as well. Biomanufacturing and medical device are just two industries of growth here. Olympus Corp., Candela and Lykan Biosciences all recently announced plans to expand in the Boroughs and Hopkinton. Look for continued growth in this area given its central location between Boston and Worcester, as well as proximity to skilled labor.

	TOTAL INVENTORY (SF)	TOTAL VACANT (SF)	TOTAL VACANCY RATE	Q1 NET ABSORPTION (SF)	YTD NET ABSORPTION (SF)
Boston	6,247,698	169,090	2.7%	(40,836)	(40,836)
Suburban	8,516,258	1,035,125	12.2%	(28,679)	(28,679)
Total	14,763,956	1,204,215	8.2%	(69,515)	(69,515)

EAST CAMBRIDGE LAB

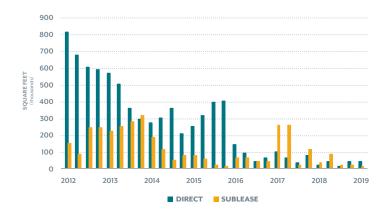
TOTAL VACANCY AND NET ABSORPTION



LAB DELIVERIES



AVAILABLE SPACE



- If you thought lab vacancies couldn't get any tighter in East Cambridge you'd be wrong. Reaching a statistical 0.0% in the first quarter, the supplydemand imbalance continues to weigh on activity here. Yet, lab users aren't deterred and tenants remain resolved on trying to enter this market. While new construction has provided some relief, much of the space currently underway is already committed. Off-market deals are becoming more common as tenants line up to backfill any large block of space before it can hit the market and tenants are taking a hard look at lab clusters outside of East Cambridge.
- Consistent tenant demand has supported new construction in East Cambridge. Bayer AG recently signed a lease for the top two floors of MIT's lab building underway at 238 Main Street and there are reportedly commitments on other floors of the building as well. Cambridge Crossing has more development potential, but Sage Therapeutics is said to be in the early stages of negotiation for up to 350,000 square feet of space on the site. BioMed Realty will likely bring new product on line in Kendall Square after purchasing land on Third Street. While the construction pipeline is expected to grow given these market conditions, vacancy relief for lab users is likely several years away.
- In one of the largest transactions of the quarter, Cyclerion Therapuetics (a spin-off of Ironwood) took over 104,000 square feet from Ironwood Pharmaceuticals in a direct deal with the landlord. The base rent on the deal was \$90/SF NNN, which more than doubles the base rent on Ironwood's original lease signed in 2012.
- East Cambridge landlords are finding little issue with backfilling lab availabilities. Momenta has reportedly put 80,000 square feet on the sublease market at 320 Bent Street. However, much of the space is already spoken for, highlighting just how frothy market conditions are in this submarket.
- Asking rent observations are nearly impossible to find in East Cambridge as few availabilities exist and many leases are being negotiated off-market. That said, first-year rents for newly signed leases are in the \$90's/SF NNN and asking rents are topping out at \$95/SF NNN here. New construction will garner a premium compared to existing space.

	TOTAL INVENTORY (SF)	TOTAL VACANT (SF)	TOTAL VACANCY RATE	QI NET ABSORPTION (SF)	YTD NET ABSORPTION (SF)
East Cambridge	9,922,597	3,404	0.0%	13,900	13,900

MID CAMBRIDGE LAB

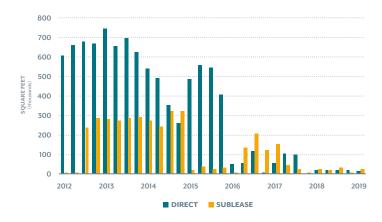
TOTAL VACANCY



NET ABSORPTION



AVAILABLE SPACE



- Slightly negative absorption pushed vacancies in the Mid Cambridge submarket up by 10 basis points to end the first quarter at 0.3%. There is now less than 20,000 square feet of vacant lab space here, and all of it is in the sublease market. Tenants looking to expand here will struggle to find space, especially given that new construction is concentrated elsewhere in Cambridge. While rent growth has slowed and observations are scant, asking rents in the first quarter are roughly \$80/SF. Look for fundamentals to remain tight and upward pressure on lease rates throughout the remainder of 2019.
- Despite such tight market fundamentals, several small-to-mid sized life science companies are expanding in Mid Cambridge. Agios Pharmaceuticals is moving into 13,000 square feet at 38 Sidney Street later this year. Infinity Pharmaceuticals will occupy 10,097 square feet at 1100 Massachusetts Avenue later this year as well.
- Following its 53,000-square-foot lease at 35 Cambridgepark Drive in West Cambridge, and subsequent relocation later this year, Syros Pharmaceuticals will vacate roughly 55,000 square feet at 620 Memorial Drive in Mid Cambridge. However, several lab users located in Mid Cambridge are out in the market; many of which are spinning out of coworking spaces like Lab Central. Syros' space should easily be backfilled by tenants looking to remain in this market.
- Funding momentum as been strong in Mid Cambridge. During the first three months of 2019, Beam Therapeutics raised \$135 million in a Series B round. This represents the largest life science venture capital funding event of the quarter. Apic Bio, located at 700 Main Street, also raised \$40 million in a Series A round during the first quarter.
- Lease rates remain near peak levels in the Mid Cambridge lab market, but observations are limited due to the lack of available spaces. Historically there has been a much larger delta between lease rates in this submarket and East Cambridge. As space has become scarce and Mid Cambridge's status has grown, landlords have been able to push through outsized rent gains here. While peak growth is likely behind us, look for modest gains in the near future.

	TOTAL INVENTORY (SF)	TOTAL VACANT (SF)	TOTAL VACANCY RATE	QI NET ABSORPTION (SF)	YTD NET ABSORPTION (SF)
Mid Cambridge	5,220,833	17,393	0.3%	(7,489)	(7,489)

WEST CAMBRIDGE LAB

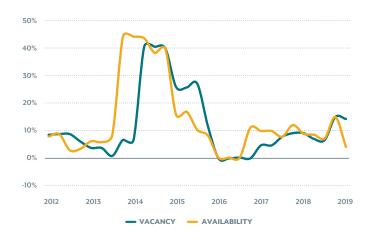
NET ABSORPTION



ASKING RENTS



AVAILABILITY VS. VACANCY



- While West Cambridge boasts the highest vacancy rates in Cambridge, this market remains a key relief valve for the more established life science nodes in East and Mid Cambridge. Positive net absorption pushed vacancies down to 14.4% during the quarter and lease rates are nearing \$70/SF NNN at the high-end of the market. Moreover, first-quarter leasing activity was solid, especially among growing, mid-sized biotech companies. As a result, lab availabilities are well below current vacancies, at 4.4% in West Cambridge. Vacancies should continue to decline through 2019 as these new tenants take occupancy of their space. Look for continued movement into the West Cambridge market as space constraints and historically high rents push tenants out of Cambridge's core lab markets.
- Supply growth in this lab market remains steady. Completion of The Davis Company's 220,000-square-foot Alewife Research Center pushed West Cambridge's lab inventory above one million square feet. This represents a historical high. Over the last 10 years this market's lab inventory increased by 34%; falling just shy of growth in Mid Cambridge and well behind East Cambridge. Moreover, West Cambridge still accounts for only about 6% of the Cambridge markets' lab supply. That said, there is more lab supply on the horizon here. The Bulfinch Companies is developing a 250,000-squarefoot spec office and lab building at the Cambridge Discovery Park, which is expected to deliver by the end of 2019. Following their success at The Arc and 75 Moulton Street, the Davis Companies is repositioning 10 Wilson Road to lab as well.
- On the leasing front, Sirion Biotech opened a subsidiary in West Cambridge with 30 employees. Three major leases were executed at 35 Cambridgepark Drive (The Arc) during the first quarter; bringing the building to full occupancy. Codiak Biosciences inked a deal for 68,300 square feet, Syros Pharmaceuticals signed a lease for 52,859 square feet and Glympse Bio took the remaining 22,712 square feet in the building.
- As lab space has become scarce throughout Cambridge, tenants have been willing to move further out from Core Kendall Square and into this market. As a result, landlords have been able to push through stronger rent gains over the past few years, with lease rates rising by 54% since the end of 2014. Existing lab space boasts a mid-\$40s to high-\$60s-per-square-foot price tag in West Cambridge.

	TOTAL INVENTORY (SF)	TOTAL VACANT (SF)	TOTAL VACANCY RATE	QI NET ABSORPTION (SF)	YTD NET ABSORPTION (SF)
West Cambridge	1,007,904	145,212	14.4%	7,327	7,327

NOTABLE TRANSACTIONS

301 BINNEY STREET CAMBRIDGE





Company Cyclerion Therapeutics

Size 114,500 SF

Submarket East Cambridge

35 CAMBRIDGEPARK DRIVE CAMBRIDGE





Company **Codiak Biosciences**

Size 68,300 SF

Submarket West Cambridge

485 ARSENAL STREET WATERTOWN





Company SQZ Biotech

Size 63,477 SF

Submarket Route 128 West

238 MAIN STREET CAMBRIDGE





Bayer AG Company Size 62,100 SF **Submarket** East Cambridge

35 CAMBRIDGEPARK DRIVE CAMBRIDGE





Syros Pharmaceuticals Company Size 52,859 SF

Submarket West Cambridge

645 SUMMER STREET BOSTON





Company Akouos Size 37,500 SF Submarket Boston

35 CAMBRIDGEPARK DRIVE CAMBRIDGE





Glympse Bio Company Size 22,712 SF **Submarket** West Cambridge

117 KENDRICK STREET **NEEDHAM**





Route 128 West

Candel Therapeutics Company Size 16,000 SF

Submarket

257 SIMARANO DRIVE MARLBOROUGH

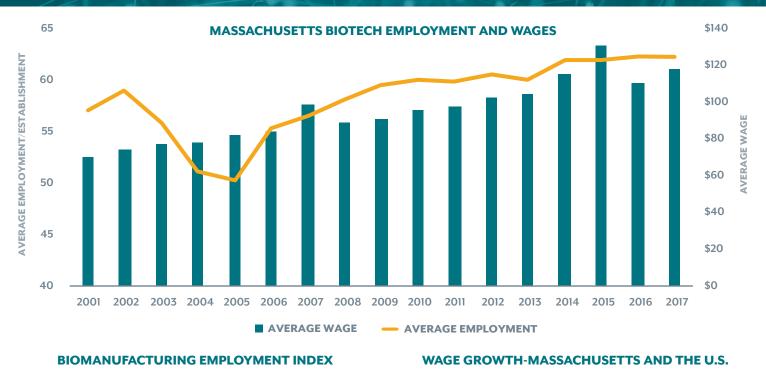




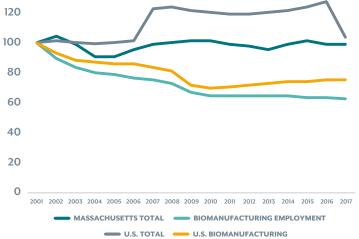
Company Phio Pharmaceuticals

7,500 SF Size **Submarket** West

RESEARCH SPOTLIGHT



200 190





LARGEST BIOTECH COMPANIES IN CAMBRIDGE

COMPANY NAME	ADDRESS	NUMBER OF EMPLOYEES		
Shire/Takeda	40 Landsdowne St, Cambridge	5,759		
Sanofi	50 Binney St, Cambridge	4,800		
Biogen	225 Binney St, Cambridge	2,400		
Novartis	181 Massachusetts Ave, Cambridge	2,337		
Pfizer	1 Portland St, Cambridge	2,226		

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BIOTECH RECAP

	TOTAL INVENTORY (SF)	UNDER CONSTRUCTION (SF)	DIRECT VACANT (SF)	SUBLEASE VACANT (SF)	TOTAL VACANCY RATE	QI NET ABSORPTION (SF)	YTD NET ABSORPTION (SF)
Boston Total	6,247,698	125,000	135,596	33,494	2.7%	(40,836)	(40,836)
East Cambridge	9,922,597	1,349,600	3,404	-	0.0%	13,900	13,900
Mid Cambridge	5,220,833	-	-	17,393	0.3%	(7,489)	(7,489)
West Cambridge	1,007,904	250,000	145,212	-	14.4%	7,327	7,327
Cambridge Total	16,151,334	1,599,600	148,616	17,393	1.0%	13,738	13,738
Route 128 North	1,272,349	-	19,834	11,338	2.4%	16,528	16,528
Route 128 Northwest	2,555,082	213,890	262,053	65,707	12.8%	26,000	26,000
Route 128 West	2,387,691	107,442	278,999	-	11.7%	47,628	47,628
Route 495 North	1,050,831	-	296,102	-	28.2%	(109,645)	(109,645)
South	308,209	-	3,757	-	1.2%	-	-
West	942,096	129,000	36,576	60,759	10.3%	(9,190)	(9,190)
Suburban Total	8,516,258	450,332	897,321	137,804	12.2%	(28,679)	(28,679)
Market Total	30,915,290	2,174,932	1,181,533	188,691	4.4%	(55,777)	(55,777)

