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Specialty real estate spotlight: Life sciences

Distinctive and timely characteristics create significant tailwinds for investing

What is life sciences real estate?

Broadly speaking, life sciences real estate represents a subsector of "specialty" real estate, which is a unique mix of properties that fall outside of the four traditional categories of residential, retail, office and industrial. While life sciences real estate could be perceived as a subsector of office, it has several distinct characteristics and key features.

More specifically, life sciences real estate is property dedicated to tenants in the biotechnology, pharmaceutical or medical-device industries. In this article, we discuss why investments in life sciences may offer a promising opportunity based on secular demand drivers benefiting the asset class, coupled with the properties' select physical and geographic attributes, which have driven income growth and pushed vacancies lower.

Unique property, geography and tenant characteristics

Three fundamental elements stand out that differentiate institutional life sciences real estate from other property types: (1) the structural and physical requirements demanded by the properties' tenants, (2) geographic concentration or "clustering," and (3) underlying tenant characteristics.

1 / Physical property requirements

Like most other real estate sectors, such as industrial or office, life sciences real estate must meet certain requirements. However, unlike these other sectors, the requirements are many, extremely specific, and not easily translatable, such as attempting to convert a traditional office building into a biotech research center.

A single illustration of this concept is the higher load capacity required for maximizing a building's load and reducing vibration. Biotech companies often have DNA sequencers on site, which are tabletop or floor-mounted instruments used to "read" (or sequence) strands of DNA. This is an extremely precise task, where highly sensitive instruments have limited tolerances for how much the floor can reverberate, even when an employee is merely walking by.

This example, along with a multitude of other physical requirements, e.g., 16-foot ceilings versus 12-foot office ceilings, HVAC requirements (12x air circulation per hour for labs), and power requirements (redundant back-up generators), among others, make for both a challenging office-to-lab conversion, and for a steep learning curve for real estate developers unfamiliar with the space, who must be highly specialized in this subsector and understand the needs of the tenants.

2 / Geographic concentration

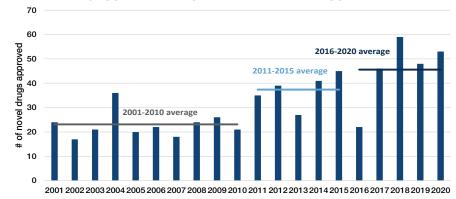
Another unique trait of life sciences real estate is its significant concentration in a handful of geographic hubs. The clustering effect is a result of pharmaceutical and biotech organizations targeting talent pools and markets supported by elite universities and healthcare systems, such as in Cambridge, Mass.; San Diego and the San Francisco Bay Area. Additional markets are emerging as leading centers for life sciences companies, including the New York/New Jersey region and Seattle, among others. These five metropolitan

markets alone represent the vast majority of the industry, accounting for approximately 85 percent of the total life sciences venture capital raised in the four-quarter period ended in Q2 2020.¹ Given the significant regional concentration, there is limited supply of viable real estate to adequately meet the growing demand for dedicated life science space. This stands in stark contrast to traditional office and retail properties, which exist in abundance in most every market in the United States and can more readily meet any potential uptick in demand.

3 / Tenant characteristics

Given the specific physical property requirements and concentration in higher cost regions previously discussed, life sciences real estate development typically sees higher build-out costs of around 10 percent to 20 percent more than traditional office. However, they also see lower leasing costs and lower ongoing capital expenditures. As a broad tenant category, life science companies tend to have higher retention rates, in part because of the multiyear cycle surrounding drug development and subsequent trials, which makes companies more reluctant to interrupt prolonged and intricate research in progress to move into a new building.

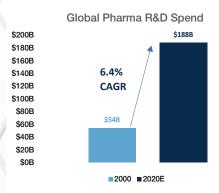
FDA novel drug approvals: The pace of research and approval is accelerating

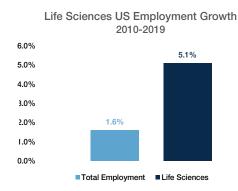


Number of drugs approved by the U.S. Food and Drug Administration (FDA) for use in the United States Source: National Institute of Health. FDA

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Compound annual growth rate of global pharmaceutical R&D spend, and life sciences growth rate





Sources: U.S. Bureau of Labor Statistics, Evaluate Pharma World Preview 2020 forecast.

Life sciences industry tailwinds driving real estate demand

The life sciences sector has been growing significantly in recent years and, going forward, we believe that it may benefit from several demand drivers and prolonged tailwinds in the sector.

First, the pace of biologics-based innovation and research is accelerating. Drastically improved and lower-cost genomic sequencing has driven a significantly improved understanding of disease mechanisms and has also improved the drug development process to combat them. Both factors translate into a record number of new drugs approved in the United States. As shown in the "FDA novel drug approvals" graph, on average in the past five years, the FDA has approved twice as many drugs as it did on average during 2001-2010. The percentage of approved drugs is also increasing, which also points to the increased understanding of disease mechanisms.

Second, hand in hand with the explosion in innovation, is the major investment into the life sciences sector — not only from private investment, but also from federally backed sources. Global pharmaceutical research and development has been growing at a 6.4 percent annual rate since 2000. Additionally, the National Institutes of Health (NIH) funding for life sciences research grew by an annual average of 6.7 percent from 2015–2019 and is expected to maintain a similar pace in the future. This, in turn, has driven significantly

higher employment growth rate versus the general U.S. population (see chart above).

Lastly, the aging of the population will continue to drive a need for therapeutic treatments. According the to the Kaiser Family Foundation,² people over age 55 account for 56 percent of total health-care spending — despite representing only 29 percent of the U.S. population. As the U.S. population continues to age, healthcare and medication spending will continue to rise.

The property and geographic constraints previously described may lead to demand for real estate space significantly outstripping current supply, which should drive continued income growth and price appreciation in this subsector. Lab rents continue to rise, by double digits in some markets, pointing to the need for additional supply.

Accessing investment opportunities: Private vs. publicly traded life sciences real estate

Investors can access life sciences real estate through public markets, though there are very few options solely dedicated to the sector. In addition, while the public market opportunities are available, publicly traded life science REITs have historically traded at premiums to their underlying net asset value (NAV), and are also subject to broader market sentiment and price volatility. As an example, Alexandria Real Estate (ARE), a publicly traded REIT dedicated to life sciences real estate, trades at a 20 percent premium to its underlying property values as of Q1 2021, according to Greenstreet Advisors. The attractiveness of the sector is, therefore, undermined by the higher price of entry.

Private market investments may present a more attractive opportunity as investors are able to gain exposure to underlying properties at the net asset value - eliminating the risk of price differential vs. investor sentiment and the unintended volatility that can occur in the public market. Private fund managers may also be more targeted in selecting only particular investment opportunities, deploying capital from investors for the most compelling prospects. The main challenge with private markets is the limited investor access and multimillion-dollar minimums these investments typically require.

Fortunately, there are select investment opportunities with specific structures, such as interval funds, which may offer access to private, institutional life sciences investments, at investment terms and minimums geared toward individual investing.

Life sciences real estate is an exciting and rapidly growing category of institutional real estate investing, and we encourage you to learn more about the opportunities and the investments offered therein.

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100+ years of investing experience, have been involved with over \$13 billion in investments, and have helped launch leading private and public company platforms.

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CBRE U.S. Life Sciences Report, October 2020
 www.healthsystemtracker.org

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