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The elixir of life (sciences)

The life sciences sector has so far withstood volatility. Here is what lenders and investors are saying could happen next, Rob Murray writes

traditional asset classes have faltered, the life sciences sector has emerged a stable, sought-after asset class for institutional lenders and investors. It is a relatively small asset class - with only about 150 million square feet of institutional space in a small group of core markets in the US - but the conventional wisdom is that if supply is fueled by thoughtful growth and prudent lending, the sector has the potential to produce strong returns.

Real Estate Capital USA's roundtable discussion featured a panel of four real estate industry pros active in the life science space: Sondra Wenger, head of the Americas Commercial Operator Division for CBRE Investment Management; Jason Lucas, founding partner and CEO at Deutsche Finance America; Charlie Rose, managing director and portfolio manager at Invesco Real Estate; and Adam Voelker, principal at Trammell Crow Company and market leader for Northern California.

Core markets and drivers

There is a small cluster of markets in the US with significant life sciences concentrations, including greater Boston, the San Francisco Bay Area, San Diego, Raleigh-Durham and Seattle, according to research from CBRE.

Markets with strong life sciences clusters have a specific theme that brings them together: proximity to educational institutions, says Invesco's Rose. As a lender, the firm focuses on markets that include Boston and its Cambridge submarket, the San Francisco Bay area, San Diego and, to a lesser extent, Seattle.

"These are markets with very strong educational institutions, with deep biosciences programs and which turn out thousands of graduates each year," Rose says. And Invesco's target markets are "core life science markets with existing strong economies that beget additional innovation."

Invesco, an active lender in the sector, has watched an expansion of the submarkets deemed investible for life sciences. "But our focus has really been on those core sub-markets where there's an existing base for life science tenancy, and an established demand," Rose adds.

Picking the right spot is about more than just the educational perspective, adds CBRE IM's Wenger.

"We're focused on where there's proximity to strong medical and educational anchors and we also like to focus on where there's been activity from venture funding and NIH [National Institutes of Health] funding," Wenger says. "That helps us to attract the right user and offer the right user experience."

In September, CBRE IM acquired the 95-acre Park Point life sciences



Founding partner and CEO Deutsche Finance America

Lucas co-founded Deutsche Finance America in 2018. He helped to launch the firm after serving as the president of Amstar, a \$2 billion real estate private equity firm which invested in the US and Europe.



Adam Voelker
Market leader and principal for
Northern California
Trammell Crow Company

Voelker is responsible for dayto-day operations of the office and strategic oversight of all new development and investment activity in the Bay Area. Prior to Trammell Crow, Voelker was a managing director at Tishman Speyer.



Charlie RoseManaging director and portfolio manager
Invesco Real Estate

Rose is responsible for growing and managing the commercial real estate credit lines of business, including sourcing and structuring new debt originations, managing external relationships and investor relations. Prior to Invesco, Rose was a managing director at Canyon Partners Real Estate.



Head of Americas commercial operator division CBRE Investment Management

Wenger is responsible for overseeing the execution and operation of the firm's office and retail assets in the Americas. She is a member of the Americas Direct Real Estate Investment Committee for commercial transactions and has held senior positions at CIM Group, General Electric and Equity Office Properties.



campus at Research Triangle Park in North Carolina, buying the property from Starwood Capital Group for \$288 million.

"We really like this campus because there's flexibility in what kinds of tenant we can attract," says Wenger. "We also have additional development rights which we can offer to tenants in this industry where the ability to grow is extremely important."

Wenger underscores that what tenants expect in the life sciences sector traditional, citing the property's shared and flexible spaces such as conference rooms and training centers. It also offers sophisticated features including fiber connectivity and generators that enable the smooth running of labs and high-performance computing activity.

As always, the case in real estate, location is key, albeit in a slightly different way than in other sectors. "You can build a fantastic physical asset anywhere - you could hire the best architect and all the smartest consultants, and if you don't have proximity to employment and innovative growth, and to the highly educated workforce - I mean, that's just everything," Voelker

"That's why we've seen these clusters," says Voelker. "The big clusters have continued to compound - and there's no question that there are several secondary markets sprouting up, mostly around great educational institutions. But it's really about proximity to a deep talent pool today, because the life sciences space just isn't that large relative to the size of other general sectors like office and industrial."

Growing together

Deutsche Finance entered the sector with a 2019 land acquisition in the Boston area and has operated solely in that area, Lucas says. "For better or worse, we've tried to expand outside of Boston, but we just haven't been able to find more compelling dynamics in any other market. We were a little bit

"One thing we look at very closely is making sure that supply isn't getting out ahead of demand — and that's both a macro comment and a micro comment at the property level"

> CHARLIE ROSE **Invesco Real Estate**

of a victim of our own success there," Lucas adds, noting the firm has expanded its footprint in the city as its tenants have grown.

"There are four tenants in the first building we developed, and all of them think they could take their own building over time. So we've decided to really concentrate our bets in and around our first project - and we're in the process of acquiring more land so we can offer those expansion opportunities."

While there are many up-andcoming companies filling space in life sciences properties, typical tenants are major pharmaceutical companies. The profile of the tenant changes the way Invesco approaches underwriting a potential loan.

"When major pharmaceutical companies are your tenants and your target tenants, it's much more akin to typical commercial underwriting," Rose says. "When a property is targeting earlier lifecycle companies - which has generally been the case for a lot of conversion business plans which we've historically underwritten - we need to

By the numbers

Boston, San Francisco, San Diego and Raleigh-Durham represent an outsize amount of the total volume of the sector

These areas make up a combined 93 million square feet of space and a forward construction and renovation pipeline of 33.2 million square feet, per Newmark research. Even so, the sector has a vacancy rate of 2.2 percent and is seeing rents for top-quality properties rise as high as \$130 per square foot through mid-2022.

Existing markets are continuing to grow, and only become larger as more talent and more life sciences tenants are attracted to a location. This is why the biggest markets have the largest development pipelines. The Greater Boston market, with about 28.4 million square feet of space and proximity to a plethora of prominent higher education institutions, has about 11 million square feet of space under construction and another 6.5 million square feet in the pipeline, per Newmark data.



"If you want to invest in the space, it is oftentimes through development simply because a lot of product doesn't trade hands, and there is just not a large existing inventory in Class A locations"

ADAM VOELKER Trammell Crow Company take a look at tenant credit in a slightly different way."

With earlier life cycle companies, Invesco spends a substantial amount of time thinking about the fundamental science of each tenant and understanding the viability of their products. For products that are pre-commercial, the manager works to understand the path to commercialization.

"We look at the reusability of the improvements and how those align with the dominant demand ecosystem in that particular sub-market. It does differ from a typical underwriting where we're most focused on existing tenant financials, and we're trying to take a forward-looking view on the viability of some of these earlier lifecycle companies," Rose says.

Wenger adds that it is also extremely important to get to know the investors and senior management of a potential tenant company, to understand who is involved in making sure the company succeeds. The impact of venture capital funding is also important, she adds.

"On the credit side, one thing we look at that we focus on less in other sectors is the funding: that's coming from government agencies and VC funding; the amount of government and VC dollars that are being spent in these markets is important," she adds.

Keeping the balance

There was a consensus on the panel that the relatively small size of the sector is both an advantage and a risk.

"One thing we look at very closely is making sure that supply isn't getting out ahead of demand – and that's both a macro comment and a micro comment at the property level," says Rose.

"When you see roughly 30 million square feet under construction in a sub-200 million square foot sector, there is the potential for aggregate supply to create oversupply issues more easily in a small sector."

At that point, it is important to

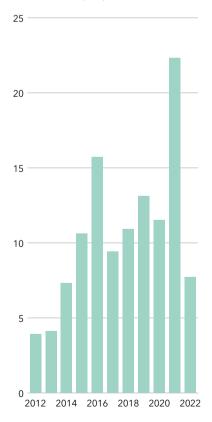
think about specific assets and where they sit in the market or submarket.

"At the asset level, we spend time thinking about how much space is being converted or delivered with lab specs on a speculative basis at any given time," Rose adds.

"Where space has not been built out as a lab, there's still the optionality to use that space as conventional office, but once you've invested the very substantial capital to convert the space to lab, there really is no alternative use that is viable. So you want to make sure you're not getting out ahead of demand."

Lucas agrees, adding it is important to ensure that a tenant's build-out is both flexible and reusable. "If you look at the renewals for lab office, usually the [tenant improvement cost] is much lower than traditional office," he says.

US R&D and life sciences investment volume, 2012-June 2022 (\$bn)



Sources: Newmark Research, Real Capital Analytics

"That's another benefit to the sector, and why arguably lab office buildings are trading at a lower cap rate today than traditional office – just because they're less capital intensive over time. There's a very heavy upfront cost, but thereafter we've seen that it tends to be relatively reusable."

Most biotech firms go through a lengthy pre-revenue development period. "What we try to do is really balance that, and we try to pair up those ones that are riskier with tenants that have more credit we can underwrite on the projects that we look at," Wenger adds.

For Deutsche Finance, the firm has set a number of internal guidelines around early stage tenants, the minimum amount of money raised, a minimum valuation and a cashflow runway, Lucas explains.

"What we've also seen in the life science space is that a lot of these startups 'fail up' – meaning that their technology works, and they're acquired," Lucas says.

"Very few of these companies just go bankrupt and give back the stake; usually they're acquired, in many cases by a big pharma company, and you actually end up with better credit than you started with – which you don't underwrite for, but we've seen it happen quite a bit."

One thing that is unique about the market is that a good portion of the Class-A ownership in the life sciences space is strategically focused on owning long-term, Voelker. "For that reason, there's not as much historic turnover in ownership of purpose-built life science buildings. And as there's been a greater lens from the capital markets on the life sciences space in the last five years – even pre-covid but especially through covid – there haven't been as many opportunities to invest as there has been interest from investors," he adds.

This has created "a good, relatively efficient capital markets environment," Voelker continues.

"But if you want to invest in the space, it is oftentimes through development simply because a lot of product doesn't trade hands, and there is just not a large existing inventory in Class A locations."

Many equity partners have become comfortable with the development risk in this space.

"I think that comes in exchange for owning what is then best-in-class, next generation product versus other product types," Voelker says. "The future life science buildings will appear as high-design office buildings - but they're turbocharged with infrastructure that doesn't meet the eye from the outside."

A typical life sciences property includes enhancements such as additional weight-bearing infrastructure in the floor, robust air conditioning, minimizing structural vibration, and increased floor-to-ceiling heights, Voelker adds.

Tenant improvement costs for life sciences properties are usually about twice that of an office's. "On renewals, a lot of that infrastructure is more reusable than a typical office tenant, but it equates to a pretty good-sized premium upfront versus an office building construction. Multi-story, purpose-built life sciences buildings are about a 15-20 percent premium in total development costs to a Class-A office building," Voelker says.

UK focus

Looking farther afield, Rose notes that despite current macroeconomic instability, the UK is the second-largest market globally for biotech innovation — and as such, Invesco has been focusing more of its time and attention there.

"There's a significant lab sector there which is getting increased institutional interest," Rose says. "So, I would anticipate that you will see us being more active in lab in the United Kingdom in future years — setting

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SONDRA WENGER CBRE Investment Management

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> **JASON LUCAS Deutsche Finance America**

Office market impact

Growth in the life sciences sector is having a positive impact on some existing office markets.

"It's no surprise that two of the best performing office markets over the last two years have been Boston and San Diego, as a result of supply being converted to life science," says Invesco's Rose. "Those are also markets that remain attractive for innovation workers outside of tech, but you've seen supply reductions in high-quality office space in those two markets, which has helped support fundamentals in Boston and San Diego."

Almost all new construction in those two cities is dedicated to life sciences, agrees CBRE Investment Management's Wenger. "There are plans for conversions from traditional office or even retail into life sciences but communal life science clusters are really attractive to other kinds of tenants," she says, adding that other office tenants are increasingly competing with life sciences for space.



aside all the current negative macro headlines."

With the spotlight trained on the sector, "the future inventory as a percentage of the existing supply has become a little intimidating," says Voelker. According to some market data, the next two to four years might see a mountain of supply hit the market.

With most of the institutional product in the life sciences space being either purpose-built or heavily renovated, financing the conversion of an existing, high-quality office results in a loan which looks fairly similar to a construction loan, Rose says.

"Particularly when you're doing conversions, there needs to be a very fine lens on the cost structure, including any potential contingencies," Rose adds.

"Compared with the balance of the credit investing we've been doing, there has been much more focus on costs in a rising cost environment, making sure those are appropriately quantified and that cost overruns are materially mitigated through proper budgeting, costing contingencies and borrower backstops. That's the biggest area where I see a difference from a lender's perspective."

It is a slightly different story on the developer side.

"Pre-covid, there just weren't a whole lot of lenders focused on the space. It probably wasn't until mid-2021 that the lending market started to behave more efficiently and there were more household banks entering the space after getting educated on the construction type."

Voelker estimates that, compared with a dozen groups bidding on a construction loan for an office deal, perhaps just four would be comfortable with a big spec life science deal.

"I just say that the lending community is a bit pickier because it's a more niche product type. But in terms of the way a deal is structured, I think it looks a lot like spec office," he adds.

Voelker anticipates a number of projects will be put on pause because equity will become that much more selective when investing that next dollar.

"There's going to be even more scrutiny on the development and the operating community by the investors that are strategically focused on deploying equity in the sector," he adds.

Tech sector convergence

Panelists also identified a coming together of the office and the tech sectors within life sciences.

"I'd say that tech and office are converging much more than they're diverging," says Voelker. "Similarly, when you think about the real estate, the life science product type is converging much more with creative office than diverging."

Ten or 20 years ago, a life science building would have been a below-average office building. "Today, a Class-A life science building is a fantastic office building. The buildings our teams are designing in Northern California look like creative tech office buildings from the outside; you wouldn't know that they were life science purpose-built, but they are. And that's new - that's a new phenomenon, in that the architecture has become higher design," Voelker says.

The quality of these developments ensures investment optionality, Voelker believes.

"From an investment thesis perspective, we're putting ourselves in purpose-built life science positions where technology also exists. I think that's key to speculative development today - deliver buildings that focus on capturing life science and biotech and pharma company growth - but design a physical product that very much caters to the future of office as well, which is highly amenitized," he

Voelker sums up this convergence between the tech sector and life sciences as 'genes and jeans.'

"This is where we want to invest our resources: where there's intermix between those two employment engines," he adds.

Looking ahead

There is a strong consensus that the coming years will be difficult for life sciences, similar to other sectors.

"In the second half of 2022 we've seen debt and equity be much more selective," says Lucas.

"There are fewer banks and debt shops quoting on deals, and it will be interesting to see whether all the announced projects will be built on the time frame they thought they would 12 months ago." Delivery dates for announced projects are already being pushed back, "and that's something we're going to be tracking closely over the next 12 to 18 months."

Growth is not just being seen in the top markets - it is also being seen among purpose-built properties, says Wenger. "We're currently tracking 11.7 million square feet of conversions in life science, so if you've got a purpose-built life sciences building in the right market, it's going to be that much more attractive."

Rose notes the life sciences sector is "going from absolutely phenomenal to something less than that, as we see macroeconomic cooling." But his outlook for the asset class remains extremely positive.

"We always say that the starting point matters," Rose explains. "You have record low vacancy rates - effectively no vacancy in the top markets, for the top product. And we're anticipating that the current slowdown in credit market activity will result in a more significant drop-off in supply past the next 24 months than originally anticipated, which will likely be beneficial in the longer term for most core markets, as we continue to see those secular trends support fundamental demand for biomedical innovation going forward."