



Supply-demand imbalance makes life sciences sector ripe for investment

Tom Parker, executive vice president and publisher of Institutional Real Estate, Inc., recently spoke with **Zachary Gauge**, head of European Research and Strategy Europe ex DACH at UBS, about the life sciences sector. Following is an excerpt of that conversation.

Why is now a good time to be investing in European life sciences real estate?

Life sciences is seeing strong growth given the huge supply and demand imbalance in the sector. On the demand side, we've seen phenomenal growth in life sciences companies globally during the past decade. That growth has been driven by a number of factors, but one of them has been a significant increase in venture capital [VC], which has been deployed into university spin-out companies to help accelerate their growth and discovery of new treatments. This originally started in the United States. We've seen it in more recent years in the United Kingdom, particularly in the markets around London, Oxford and Cambridge, which form the Golden Triangle. And we're seeing the same sort of positive dynamics start to develop across a number of European markets. These markets are still a long way behind the United States and some way behind the United Kingdom, but we're starting to see the same positive drivers on the ground that we've seen in those markets. Also driving the demand are some very strong universities, a high number of scientists and Ph.D. students, tax incentives, and now an increase in capital, which is starting to target these companies and help them grow.

On the supply side, there is basically no purpose-built modern laboratory space for growing companies across Europe. Any existing space is predominantly within university or hospital campuses, or in dated laboratories. There hasn't been institutional-grade investment into developing life sciences space in Europe. We've seen from the United States and the United Kingdom that when capital comes into these companies and they need to grow, they have very little space to expand into. It creates a problem because they can't continue to research and manufacture their products. It creates a bottleneck for the advancement of these treatments. Meanwhile, it creates a very strong opportunity for rental growth and high occupancy.

How, specifically, does life sciences real estate differ from traditional commercial real estate?

Life sciences space has much higher specifications than office space, which is probably the closest traditional commercial property type. When you're dealing with laboratories, there is a host of specifications and health and safety considerations that need to be factored into the design of the building. We have seen some instances in Europe and the United Kingdom where existing office buildings have been retrofitted to become laboratory space. What we've generally found with those buildings is they're not quite fit for purpose for modern-day occupiers. There are a host of considerations for a laboratory building, including suitable floor-to-ceiling height, hazardous-waste disposal, the provision of clean rooms, and heating and cooling systems. The chance of an existing office building having the right configuration

to accommodate all these requirements is slim, and when conversions happen, they tend to be inefficient. This is why we see a huge potential for developing purpose-built laboratory space. That's what occupiers prefer. When we're dealing with companies that are handling live matter and biohazardous material chemicals, it's absolutely critical that all those considerations are taken into account in the building design.

One of the defensive things about life sciences occupancy versus traditional office occupancy is that you cannot do life sciences research and development from your computer at home. You have to be in the lab working with the material and doing experiments. That really positions it differently from the issues the office market is facing. The other part of the market we're developing is good-manufacturing-practice – or GMP – facilities. These provide manufacturing space for the production of pharmaceutical products, which have evolved considerably. The traditional sort of pharmaceutical manufacturing buildings would have been more like a manufacturing unit developing pills and dry medicines. But as the treatments being developed have advanced, we're now talking about very sophisticated treatments, often creating bespoke treatments for individual patients using blood or genetic codes.

The manufacturing units have become very advanced, and they need to be closer to the research and development hubs and closer to the scientists who developed the treatments and oversee the process. The safety considerations when you are handling someone's personal blood transfusion are paramount. Because the building requirements are so high, the build costs are also very high, and that's been a barrier to entry for a lot of developers. As we've seen in the United States and the United Kingdom, as new treatments come through from the funding that helps the research, and as those products get close to their trial phase and commercialization, they must have that manufacturing piece alongside. We think that's a key area of the market that has to grow in tandem with the laboratory space.

How else do European markets compare with the more mature U.S. and U.K. markets?

Europe is much more spread out in terms of where life sciences hubs are. The United States market is very clustered around Boston, with the universities there, and that's the global center of excellence for life sciences research. In the United Kingdom, there is the Golden Triangle of Oxford, Cambridge and London in very close proximity and in an ecosystem of research hospitals and universities. We've identified about 14 potential hubs across Europe, but these are much smaller in scale than in the United States and the United Kingdom. In some sense, that is a challenge because we don't just have one or two core markets. On the other hand, we do see growth potential in all those markets, and because Europe is some years behind, the space in those markets hasn't been developed. We see this as an early-mover opportunity to go into some of these markets in Europe, where we're seeing the same dynamics develop in terms of the research excellence at a university or a hospital.

In which European markets do you think we'll see the strongest growth in the coming years?

One clear choice is Leiden, which is a market to the south of Amsterdam that has the key dynamics we would expect to see in a growing life sciences hub. A strong university forms the core center of the campus and has strong life sciences fields. It has an established system of incubators and growth space for spin-out ideas to develop within that ecosystem. There are commercial real estate developments and laboratory spaces where companies can expand. On top of that, it's a very well-connected market, close to the Schiphol International Airport, close to Amsterdam, and it's on the map for VC funders. In terms of scale, it's still relatively small, but it has all the right ingredients, and we're seeing key occupiers moving there. We expect that market to grow in strength.

Another market on a different scale is Paris. Within Paris, there is a key cluster emerging to the south of the city in Saclay around a leading university with expertise in life sciences. Because of the attraction of living and working in Paris with its access to professionals across the world, this is becoming a large ecosystem within its own right. There are also globally renowned research hospitals in the area, including Gustave Roussy, the leading European cancer research hospital.

Finally, Germany as a whole is a key growth area for the pharmaceutical industry. What's tricky about Germany is, because you have so many competing centers, it's hard to pin down which one is going to be a key growth area. There are seven main office centers and some very strong university towns, which spreads the funding and the intellectual capital across those locations.

How has VC funding been affected by rising interest rates in the wider financial market?

In 2021, when the cost of capital was near zero, investors were still hunting for yield, and the pandemic was shining a light on life sciences. What followed was phenomenal investment from VC funds into European life sciences companies. According to PitchBook data, the total raised was just over \$11.0 billion, which was nearly 25 percent above the level raised in 2020, which was itself a record year. The financial market turmoil and the impact of rising rates have clearly had an impact. The VC funding volumes have fallen back to around \$6.5 billion, but 2022 was still the third-highest year of VC funding for life sciences companies in Europe. When capital was coming in very quickly, VC funders were more patient with their portfolio companies and willing to inject further capital if results took longer to come through. Today, the money is still available but only for companies that have a much clearer path to the next data point or the next trial phase.

Is there a particularly exciting area of research tenants are focused on right now?

One ground-breaking area is cell and gene therapy. CAR T-cell therapy is a very advanced form of treatment that essentially takes a patient's cells and modifies them in an advanced manufacturing unit. T-cells are programmed or modified to detect and fight a disease the patient has. That process typically lasts about 30 days, after which that blood transfusion is shipped back to the patient, reintroduced into cells, which then multiply and teach other cells within the patient's body to identify the illness and attack it, ultimately curing the disease. Early forms of these treatments have been geared towards blood cancers. But the growth potential for

these treatments is huge, and regulatory approvals are now being obtained to treat different forms of cancer and other illnesses in the same way.

Gene therapy works in a similar way. It ultimately works by altering the underlying genetic deficiency to prevent or cure genetic diseases. Genetic research is also being used to identify previously undiagnosed developmental disorders by analyzing genetic codes – enabling better understanding and treatment of the illnesses. A recent study in the United Kingdom identified 60 new diseases through this technique.

How easy is it for investors to access this niche sector? How big do you see it growing in the future?

Life sciences is going to remain a very niche sector. In the United States, which is by far the most mature market, life sciences real estate investment accounts for about 2 percent of total investment volumes in the past 12 months, according to RCA. In Europe, it could potentially reach 1 percent of total volume. The market is very location specific. It has to be around the universities and hospitals. It's not as simple as trying to be the highest bidder for a site or a building. Most of the land around the hospitals and the universities where life sciences companies want to be located are owned in some way by the hospital or by the university. They want to make sure the buyer shares a vision for the long-term development of science-park facilities in collaboration with them to deliver space that will help their companies and their university spin-outs grow and develop. You need to have a strong reputation. Specialty and investment experience will be critical to anyone who is planning on deploying into the sector.



CONTRIBUTOR

Zachary Gauge

Head of European Research and Strategy Europe ex DACH

UBS Asset Management, Real Estate & Private Markets

UBS ASSET MANAGEMENT

UBS Asset Management's Real Estate & Private Markets business actively manages investments of around \$114 billion globally and regionally within Asia Pacific, Europe and the United States, making it one of the largest asset managers in real assets worldwide. Our capabilities reach across the risk/return spectrum, ranging from core to value-added and opportunistic strategies. We offer both direct real estate, infrastructure equity and debt, and food and agriculture investments, as well as indirect exposure to leading real estate, infrastructure, private equity and private credit managers. Investors can access our diverse product range across open- and closed-end private funds, investment trusts, listed funds, REITs and bespoke separately managed accounts. (Data as of Dec. 30, 2022, unless otherwise stated.)

For more information, please contact:

Pat O'Sullivan

Head, Investment Specialists

+1 212 821-6093

patrick.osullivan@ubs.com

www.ubs.com/am-privatemarkets