

By Paul Bubny *Editor*

The New York region's potential as a commercial biotechnology hub has gone untapped, but some developers are working to help change that

"NEW YORK CITY IS THE NEXT LEADING CENTER OF commercial bioscience," proclaims a fact sheet for the upcoming East River Science Park. With nine major academic medical centers and some of the world's largest hospitals within its borders—not to mention access to billions of dollars in venture capital—the city certainly has the potential, thus far largely untapped. However, ERSP and a few other life science-related projects could represent the first steps toward giving New York City equal footing with Boston and the Bay Area.

Along with the 3.7-acre ERSP, which could eventually represent more

Ground has been broken on what could be a trailblazing project for New York City's biotech sector. The forthcoming East River Science Park will provide more than one million of of rentable office and laboratory space on a plot of city-owned land along First Avenue. It's being developed by Alexandria Real Estate Equities, a REIT specializing in life sciences real estate.



Cannon Design aimed for a more open, airy environment in its five-story addition to South Nassau Communities Hospital in Oceanside.

than 1.1 million sf of rentable office and laboratory space, the next several years will see a biotech center at the former Brooklyn Army Terminal, a tower on the Far West Side to house medical device manufacturers and expansion at existing centers in Westchester County and the Bronx. In addition, Rudin Management is working with Saint Vincent Catholic Medical Centers on a plan that will provide St. Vincent's with new facilities and the surrounding Greenwich Village neighborhood with low-rise residential townhouses.

A centerpiece of the New York City Bioscience Initiative, a public/private partnership which aims to promote the development of the region's life sciences industry cluster, the ERSP project broke ground last October. Alexandria Real Estate Equities, Inc., a REIT headquartered in Pasadena, CA, has committed \$700 million to developing the R&D campus. It will be located on a parcel of city-owned land between First Avenue and East River Drive, bordered by East 28th and East 30th streets.

The East Side location of the new science park will place it along a corridor known as "Hospital Row." Bellevue Hospital, NYU Medical Center and Beth Israel Medical Center, among others, are all within a few blocks of the site. Further uptown along the same corridor are New York Presbyterian Hospital/Weill Cornell Medical College, Mount Sinai Hospital and School of Medicine, Memorial Sloan-Kettering Cancer Center and Rockefeller University.

It was that proximity to the city's wealth of medical institutions that helped to attract Alexandria, a developer long active in biotech clusters across the US. In addition, "The city's and state's willingness to try something out of the box to establish a biotech center was a major factor" in persuading Alexandria to submit a proposal, says Joel S. Marcus, the REIT's chairman and CEO. Indeed, the Bloomberg administration has made commercial bioscience a key priority, says Lenzie Harcum, vice president for biosciences at the New York City Economic Development Corp.

To that end, the city is providing about \$13.4 million in capital funds for the project, while the state will kick in \$27 million to be used for infrastructure

work in connection with the project. Scott Stringer, Manhattan borough president, is contributing \$500,000. In addition, the New York City Investment Fund, the economic development arm of the Partnership for New York City, will provide \$10 million in funding to be used for ERSP tenant improvements. The project will also receive about \$5.6 million through the New York City Industrial Development Agency, and about \$2 million in additional federal funds have also been secured.

"Biotech is to the 21st century what industrial grade steel and the internal combustion engine were to the 20th century," says Stringer. "New York City must be a major player in this industry, which will be the major avenue for solving today's pressing health, environmental and agricultural conundrums."

ERSP will be constructed in two phases. The first will include two towers of office and laboratory space, one of which Marcus says will be ready for occupancy in early 2009. He says he hopes to attract "small, medium and large" biotech companies along with manufacturers of MET devices. The site will also include a glass-enclosed pavilion between the two towers and contain underground parking facilities, a café, a conference center and ground-floor retail space.

ERSP joins a pair of biotech "incubators"—facilities to accommodate the R&D requirements of startup companies—within New York City. One, the Audubon Business and Technology Center is a 100,000-sf facility managed by Columbia University. It's situated in what may eventually become a one million-sf development at the eastern end of Columbia University Medical Center. The other, SUNY Downstate Medical Center's Biotechnology Park, includes an incubator currently at 24,000 sf and due for expansion. For longer-term needs, SDMC is developing BioBAT, a 486,000-sf facility for biotech expansion and manufacturing, at the former Brooklyn Army Terminal. "Once companies outgrow the incubator, they can expand into research and manufacturing space at BioBAT," says Ron Najman, director of communications and special projects at SDMC.

Najman says BioBAT "will accommodate graduates of Downstate's and other incubators, as well as more mature biotech companies. It is meant for companies that need from 5,000 to 150,000 sf of space. It complements the Biotech Park because it provides successful incubator companies with affordable space to grow and begin manufacturing their products. It will also attract companies from all over the world that want a biotech presence in New York City."

He adds that the terminal is on 97 acres in an Empire Zone on the Brooklyn waterfront. "It is a gated, secure (24/7) site accessible by all New York City medical and research institutions by subway, car or water taxi and offers free parking, ship and rail access," Najman says.

SDMC is "currently in negotiations" with Phase 3 Properties to develop the BioBAT space, Najman says. "The International AIDS Vaccine Initiative, currently located at Downstate's Advanced Biotechnology Incubator, will be the first biotechnology tenant at BioBAT. IAVI, which is being fast-tracked, expects to occupy its new space during the summer of 2008. Occupancy for additional companies is expected in 2009."

Commercial bioscience goes beyond R&D and into the manufacturing process. With that in mind, Extell Development Co. last summer signed a letter of intent to build a one million-sf tower at Eleventh Avenue and West 34th Street, the former site of the Copacabana nightclub. The development will house the World Product Centre, a "technology marketplace" intended to bring medical device manufacturers together with the practitioners who would use their products.

At WPC, the healthcare community will interact with "Medallionaires," manufacturers and distributors who have licensed space to display and demonstrate their products at the facility. Medical practitioners will be able to evaluate diagnostic tools and other medical devices not only by operating the products but also by recreating actual situations in which the products will be used, singly and in synergy with other devices. This will be made feasible via a high-tech infrastructure that is being designed and built by Hewlett-Packard.

"This is a tremendous opportunity for manufacturers to reach their prime target exactly when they are the most receptive and focused on sourcing and learning, all in a customized environment that is specifically designed for demonstration and education," says Israel Green, president of WPC. Construction is slated to begin early next year and be completed by 2012.



At NYCEDC, which is involved with BioBAT as well as ERSP, Harcum charts some of the factors that could help establish it as a national and international biotech center. "The metro area has the largest bioscience workforce in the country, according to a recent BIO/Battelle study," he says. "One hundred twenty bioscience firms recognize the advantage of locating in New York City." Along with the concentration of major academic medical centers comes funding from the National Institutes of Health—\$1.3 billion annually, Harcum says. And that's just from the federal government: life science companies in New York City also have "access to Wall Street and 125 healthcare venture capital firms."

They can also draw from 8.2 million potential volunteers for studies. "With its incredibly diverse population, New York City is the ideal location for clinical trials," Harcum says. "Over 50% of all oncology trials are conducted here." With this much going for New York City, it's little wonder that the region was called "a slumbering giant" in a *Life Science Clusters* magazine cover story last summer. Why then has this giant stayed in dreamland for so long? Marcus opines that the city's potential has gone untapped because "There has been no location where clustering could take place and enhance the technology transfer efforts," as there is in the Bay Area or Boston/Cambridge.

Closer to home, there's the example of New Jersey, which has managed to attract Merck and several other pharmaceutical giants to establish US or world headquarters there. That's a feat New York City hasn't yet managed, although Pfizer and three other major pharma companies reside here.

Marisa Manley, president of Commercial Tenant Real Estate Representation Ltd., sees other reasons that life science clustering hasn't occurred before. "We've worked with companies that would qualify for that type of use in the Boston area, in California and in Florida," she says. "Most of these folks are going to be in more suburban locations for a variety of reasons. Some of them are economic, some of them have to do with lifestyle preferences of the people they need to attract."

There are also space requirements typical among biotech companies, such as their HVAC needs. "You're talking about the need for a very controlled environment with the ambient air in the facility being free of contaminants," says Manley. "So you might be talking about a 100- or a 1,000-level clean room and that's going to require a lot of filtration in the HVAC system. It's also going to require many more air changes than is typical for office space. For the most part you need to run your labs on a completely independent HVAC system. That's not going to happen in most commercial office buildings."

Economic factors include the costs associated with leasing space in New York City. "If you read the literature on life sciences, cash flow is one of the biggest considerations," Manley says. "How do they go to market, how do they get the cash, will it be venture capital, will it be university funded, are they going to do a partnership with somebody else who's more established? And one of the key things these companies need to do once they get their



money is keep operating expenses down, because they've got a long R&D development period during which they're not generating any cash flow. The cost to build a typical laboratory—something that's not terribly exotic but will do the job—might be \$250 to \$400 per sf. It's a multiple of what's required for even an above-standard office buildout. So the expense of building that type of facility necessarily goes up in an environment like New York."

Manley agrees that the advent of centers such as BioBAT and ERSP could help overcome such considerations. However, she adds, "Certainly there's access to venture capital and institutions of higher learning—but can the scientists who will drive this have the lifestyles that they want or do they prefer some other environment? That's something that different companies have to feel out."

There's also the question of taxes—both corporate and personal—and whether the city can compete in this area with the Boston area or Research Triangle in North Carolina. "We know that there are clusters of people in the biosciences, for instance in the Boston area, who find they can develop the lifestyle they want, whether it's because of incentives or an absence of burdensome taxes," says Manley. "It's that combination that makes it work there, and so New York City would have to compete on all those levels."

With that said, the New York region's biotech industry is not limited to the city. Last spring, San Diego-based BioMed Realty Trust began construction on a \$145 million three-building addition to its Landmark at Eastview in Greenburgh. Regeneron Pharmaceuticals will lease 194,000 sf for corporate headquarters and research space at two of the new buildings within Landmark, which BioMed claims is already the largest privately owned, multi-tenant technology park in the state. The remaining 166,000 sf will be leased out to future tenants.

Long Island, too, is home to commercial bioscience. The Broad Hollow Bioscience Park at SUNY Farmingdale and Long Island High Tech Incubator at SUNY Stony Brook provide facilities for biotech start-up operations. One of the largest tenants at 1111 Marcus Ave. in Lake Success, an office park owned by Apollo Real Estate Advisors and National RE/Sources, is North Shore-Long Island Jewish Health Systems, which has both office and research space there.

Recognizing that medical institutions may have especially complex real estate needs, in early 2007 Rudin Management announced a partnership with St. Vincent's to redevelop the hospital's existing facilities. Rudin will build a 21-story, 625,000-sf "green" facility on Seventh Avenue between 12th and 13th streets, the site of the O'Toole Building owned by St. Vincent's. The new medical center will serve as the flagship location for St. Vincent's; upon its completion, the current hospital and clinic facilities will be turned into about 450 residential units along with medical offices and retail. Last fall, Rudin Management and St. Vincent's released design concepts for the project, which were to be submitted to the Landmarks & Preservation Commission at year's end.

"We liked this project for a number of reasons," says John Gilbert, vice president at Rudin Management, which St. Vincent's selected from a field of about 40 developers. "One, the Rudin family has created a legacy for itself in terms of working with major institutions in New York and trying to help them solve their problems. Two, it's a complicated project and I think that also attracted us. The third thing was the opportunity to do something meaningful in one of New York's most important neighbor-

Medical offices could account for more than one third of the 260,000 sf of rentable space at Simone Development Cos.' new addition to its Hutchinson Metro Center complex in the Bronx. About 50,000 sf of that total has already been spoken for by practitioners who were unable to secure space when the complex first opened.

hoods, Greenwich Village. Fourth, and probably most importantly, the Rudins, starting with Jack and Lewis down to the next generation, have really focused on how important infrastructure is to the city of New York and to its neighborhoods. The health care infrastructure obviously is right up there with transportation and communications."

Gilbert estimates a nine-to-10-year timeframe for obtaining the necessary approvals, demolishing the O'Toole Building, constructing the new St. Vincent's facility and finally putting up low-rise apartment buildings.



Partnerships on large-scale projects aside, healthcare and commercial real estate in the city may not always be on the same page. "The world of medical practice in New York City is pretty much a world unto its own, particularly the fact that New York City medical practitioners are still practicing, for the most part, in ones and twos," Manley says. "Elsewhere the trend is definitely toward larger group practices." M.D.s in the city frequently occupy space in the retail component of residential buildings, she adds, partly because office tower owners may balk at practitioners' requirements, including heavy-duty plumbing.

Two projects north of Manhattan represent trends that are more prevalent in other parts of the US. Simone Development Cos.' Hutchinson Metro Center, an office campus at 1200 Waters Pl., in the Bronx, has attracted a sizable number of medical practitioners. "Due to the fact that we have some major hospitals right next door to us—Albert Einstein College of Medicine, Montefiore Medical Center, Jacobi Medical Center and Calvary Hospital—we felt pretty confident that it wouldn't be difficult to attract doctors because they had been used to working there and had a big patient base to begin with," says Joe Simone, president of Simone Development. "Sure enough, it's been proven true and we've got an unbelievable medical practice going on there."

Simone cites shifts in the medical landscape to explain both the demand for healthcare space at Hutchinson Metro and his company's reasons for targeting this tenant base. "There's an awful lot of outpatient care taking place and there's not the need and the demand for prolonged hospital stays that there used to be," he says. "By the same token, hospitals have become extremely expensive places to operate. The Bronx in particular has been underserved in terms of medical facilities and treatment for outpatient care. We designed a class A facility that has a combination of public transportation and abundant parking as well as a state of the art facility. We knew early on that a portion of it would be dedicated to the medical field."

As Hutchinson Metro expands from its initial 460,000 sf, more healthcare tenants are clamoring to get in. The first 260,000-sf tower of phase two is under construction, and Simone says medical practitioners could account for 100,000 sf by the time it opens.

Because the tenant roster at Hutchinson Metro encompasses a variety of specialists, Simone says patients could theoretically make the campus a one-stop shop for their healthcare needs. This also makes communication among those specialists easier. "That's a concept that I believe in very much, and down the road you're going to see a lot more of what I call 'medical malls.' You're going to be able to go into a facility and have any sort of specialty taken care of, and they'll going to have your records in a central database."

Westchester Medical Group's recently opened facility at One Theall Rd. in Rye could serve as an example of a medical mall. The 65,000-sf facility, located in the former headquarters of Lillian Vernon Co., houses 50 physicians, advanced radiology and ancillary CAT SCAN and MRI services, a seven-day a week urgent care facility, a private pharmacy and optical store.

"The usual model is that physicians make patients their own general contractors," says Dr. Simeon Schwartz, president of WMG, a private multi-specialty group practice based in White Plains. "You go to one doctor, he sends you to a lab, you get your bloodwork, he sends you to another to get your X-rays, then he sends you to a consultant halfway across town. If you're in your 40s or 50s and you're basically healthy, you can deal with that. But if you're actually sick and you need five or six physicians to manage your care, then you need to have some system and organization that provides coordinated services."

Therefore, Schwartz says, "Patients want not only physical coordination, which is what the facility provides, but we also have an extensive technological backbone of electronic medical records that provide functional coordination of care."

Could a facility of this kind work in an urban as well as suburban setting? Schwartz thinks so. "If you were able to put together 50 doctors to operate under one tax identification number, you could certainly do this tomorrow in any of the outer boroughs," he says. "Space is available and pricing is okay. Montefiore has already done some components of this. In Manhattan, the rent would be greater, but there's nothing to prevent you from taking 40,000 sf on one floor. It's maybe \$20 per square foot more compared to a suburban location, but that's a million dollars more for a facility that can generate \$50 or \$60



Westchester Medical Group's new facility in Rye follows the "mall" format that's more common in other parts of the US.

million annually. I've actually been over to London to discuss this concept with the National Health Service; they plan to do this in London proper, and certainly their real estate prices are no better."

In fact, the UK is looking at WMG as a model, Schwartz says, with plans to close down some hospitals and open more outpatient clinics. "I think the reason this hasn't happened more in New York is that the real challenge is putting together the governance structure to manage the physicians," he says. "Look at law firms, and think of how the market has changed in the past 20 years. Twenty years ago a big law firm was maybe 50 lawyers. Now it's 500. And what are the real estate demands for a 500-lawyer practice versus 50?"

In designing the Rye facility, WMG sought to make the interiors a little easier on the eye than the typical physician's waiting room. "Like in any other project, the ambience counts, and healthcare facilities have traditionally been built to look like institutions," says Schwartz. "Office space has traditionally been built to be more inviting and has finishes that are different from the industrial-strength, indestructible finishes of a healthcare institution. Our facility is more typical of the corporate image than the institutional image."

Even so, an institutional setting can be designed with ambience in mind. For example, Cannon Design recently completed a 160,000-sf, five-story addition to South Nassau Communities Hospital in Oceanside. The addition was intended to complement the existing building, which dates from 1928, while allowing substantially more natural light to flow through the building and providing more open, airy, attractive environments. The result, says Megan Foley, a spokeswoman for the design firm, was "one of the most successful projects Cannon Design has undertaken." —RENY

