

## Delivering Discoveries: Building for the Life Sciences

Six architecture, construction and development professionals came together last week to share their thoughts about Philadelphia's life sciences market and the factors that are influencing it, and information and opinions flew.

The panel was hosted by NAIOP, GBCA and AIA (and held at AIA offices) and featured Maura Hesdon, General Manager at Shoemaker Construction; John Grady, SVP – Northeast Region at Wexford Science & Technology; Mike Marone, VP – Architecture at Genesis AEC; Jose Jimenez, VP – Life Sciences at Gilbane Building Company; Leslie Smallwood-Lewis, Co-owner at Mosaic Development Partners; and Scott McNallan, Director of Architectural Design at CRB.

NAIOP Board Member and Longfellow Real Estate Partners' Managing Director of Research, Lauren Gilchrist, served as moderator. Opening the panel, she referenced how the idea of innovation districts is reshaping the landscape, allowing for life science tenants to be less "cordoned off." That, she said, is part of what is driving new approaches to development in Philadelphia at places such as the Navy Yard and UCity Square.

She opened by asking, "What makes existing buildings good and bad for adaptive reuse, assuming that speed is critical" and that often adaptive reuse is faster than ground-up development.

**Grady** noted that all the big pharmaceutical companies in the region are in the suburbs and wondered what it will take to get them to move to the city. These companies "move where the talent is; that is key" – we need to offer them "the opportunity to create a sense of community ... We are not Boston, San Diego or San Francisco ... we're the next tier" which means there's less to offer but also possibly more opportunity to create something different.

**Jimenez** noted that the stage the tenant is at determines what they need. "Before we talk with the tenant about any property, we define the program (e.g., R&D, manufacturing, etc.) and then search; while **Hesdon** added that when a tenant is looking at adaptive reuse, they have to look at not just the existing structure but infrastructure as well. **Marone** commented that the developer has to make sure the building "can support all the utility needs (across a) wide variety of programs."

**Smallwood-Lewis** compared two projects her firm is working on for context. "At the Navy Yard we have space – 103 acres we can utilize to develop the perfect core and shell," she said. "At Cheney University we are working with existing structure. But either way, we have to design for the tenant's needs and recommend the best course of action."

**Gilchrist's** next question focused on not just the end user but the idea of reuseability. "Labs in particular were historically build to suit. What would you say are key elements to consider if you're trying to develop something that could itself be reused?"

**McNallan** said “you have to build for purpose. (The project) can’t just be lab and research, but potentially manufacturing” or other uses, and often multiple tenants with different needs such as dedicated elevators. **Grady** added that even if the building has a 15-20 year lease ... Wexford focuses “a lot on core and shell” and work with the tenant to determine what is next, considering ceiling heights and floor plates, but also emergency and back-up power, roofs that can handle the weight of stacked generators, vertical circulation and loading docks.

**Gilchrist** then shifted to the changing definition of “life sciences,” noting that while a Phase 1 or 2 clinical trials might need a very small GMP suite, as small as 500 square feet, other operational requirements impact the space needed, from R&D lab, to R&D lab with GMP, to R&D lab with office, greenhouse space and other requirements.

In these buildings, “we can have an entire campus on one floor,” said **Marone**. “We have to develop (so that the tenant can) scale as the ‘recipe’ gets bigger – there are so many degrees ... and you might need clean lab space at scale.” **McNallan** said GMP is technically challenging and ... the building has to reflect that. There’s high demand because of the air exchange rate. Clean rooms have to stay in tact because a person in the trial could die.”

**Marone** added that in cell and gene therapy R&D and manufacturing, “what are the worst case scenarios? We have to try to not put up any road blocks” while planning for what could go right and wrong. **Grady** ended with referencing the Zoning Code and asking “How do we make sure Philadelphia is ahead of the curve with zoning and entitlements – because entitlements are the biggest road block right now; we have to make it faster” to compete with other markets.

**Next, Gilchrist** asked how the panelists would approach increasing Philadelphia’s attractiveness, especially in light of macro-economic roadblocks such as inflation pressure, rising costs and rising interest rates.

**Smallwood-Lewis** commented that Ensemble/Mosaic has a building under construction at the Navy Yard (1201 Normandy Place) where they worked to “mitigate risk as much as possible in this market; we pre-ordered steel, roof insulation” and other materials “even before we secured funding.” She added that “if you want to meet the customer’s need for speed to market, you have to put down deposits and pre-purchase; it’s the new normal.

**Jimenez** agreed. “You have to get ahead of the supply chain” wherever you can. “Big pharma gives us best practices – they engage the builder, architect and engineers at the same time” for a “holistic approach to human capital.” **Hesdon** noted that the supply chain won’t be fixed for between two-to-five years. “We have to have open, early and honest conversations with teams when a customer air handler takes 56 weeks (to arrive) and switching gear takes well over a year.”

**Grady** said that “while we are not Boston,” one thing we do have in our favor is contracted labor – there’s “no labor inflation. What we need here is more people in construction trades.”

**Jimenez** suggested adopting modularity to ease stress and fast-tracking the development of drawings and **McNallan** concurred: “What can you do offsite and bring already completed, ready to go?”

Lastly, the question of contract modifications came up. **Hedson** said, “Both sides of the contract have to recognize and (be willing to) share risk. **Smallwood-Lewis** added, “You don’t want to inflate pricing too much – explaining that to the lender, or borrowing too much money, or (rising) interest rates” are all risks. “Timing is key. We won’t execute GMPs until we are as close to finance as possible; especially as pricing holds only for a month and sometimes week by week.”

With that, the panel adjourned, and attendees returned to work with some new ideas and thoughts to consider for their projects in progress and in the pipeline.

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