Building Flexible (and Sustainable) Laboratory Spaces For The Future

Flexibility provides the greatest value in laboratory space design for both owners and users of life sciences real estate. Science and technology are evolving at such a rapid pace that it is difficult to predict future needs. Bespoke spaces can become obsolete before they are even occupied. Spaces that can easily adapt to changing needs not only support the science long-term, but they can provide the most sustainable solution as well. Below we explore the various interests of investors, developers, owners, and users that must be considered; as well as how these concepts of flexibility and sustainability can be realized when creating a laboratory space.

What Are The Owner/Developer/Landlord Considerations When Designing and Building a Lab Space?

Owners and developers of real estate generally have to walk the fine line between seeking to attract maximum prospective tenant interest, through things like amenities and unique spaces, and creating the highest possible return on investment based on a projection of what the future holds. Life sciences presents a unique opportunity and challenge to create a space design that can adapt to the market.

What Are The End User/Tenant Considerations When Designing and Building a Lab Space?

From a tenant or end user perspective, if a group cannot perform its science in a space, there is no point to leasing it. It is also important to recognize that regardless of the tenant improvement allowance packages being provided by landlords, the cost to develop a lab can often dwarf the numbers being provided by the landlord and require a significant capital investment by a tenant. Another reality for life sciences users is the necessity to lease for growth. Given how quickly life sciences companies can increase their employee counts, having to plan for exponential growth year over year means more square footage for say, a year or two, while a company grows into a space. If excess space can be programmed for uses from a collaboration space to a laboratory, it would provide the user with the largest amount of flexibility for a company's long-term needs, which are often an unknown when a lease is initially signed.

How Does Technology Help in Integrating Flexibility Into Such Technical Spaces?

Flexibility and adaptability can be easily achieved in lab spaces by implementing a strategic approach to design. Planning for the future through building systems, support spaces, and a flex zone will offer the greatest value for all project stakeholders. Flexible lab furniture will allow the tenant to maximize a building's potential. Building systems are typically the largest investment on a lab project, for every stakeholder. Mechanical Electrical and Plumbing (MEP) systems account for

30%-50% of total construction cost, and it is vastly more difficult and expensive to retrofit MEP systems than to build initially. Thus, it is critical to design building systems that can support the long-term evolution of a facility.