

Nucleus – Biopolis Phase 5 Singapore

Completion 2014

Biopolis is Singapore's premier biomedical Research & Development hub located at One-North in Singapore built to house key public and corporate biomedical research institutes and organizations and key biomedical players from the private sector. The buildings on the Biopolis Campus will accommodate headquarter spaces for single tenant users as well multi-tenanted speculative laboratory facilities for users as small as 200GSM in some cases. The Biopolis master plan was developed by Zaha Hadid in 2001. Begun in 2003, Biopolis is being realized in phases and at full build out will be research community of 5,000 scientific researchers.

Nucleus is Phase 5 in the Biopolis Expansion and totals 678,000 GSF (63,000 GSM). In order to fully understand this project, it must be considered as a unique piece or rock-like chunk of this powerful, three dimensional, highly interactive master plan composition. The design and development of Nucleus was ruled by the rigorous urban design guidelines established for the overall campus. A fundamental design challenge was the development of a viable multi-tenant and flexible laboratory facility within these irregular geometries.

The overall plan promotes a flowing ground form, geo-rock-like, undulating terrain and a dramatic profile against the skyline. The building forms are never rectilinear and the narrow streets strategically induce natural to cool the public space creating a comfortable outdoor environment amidst the humid tropical climate. Public space is treated as a three-dimensional volume (versus a two dimensional plan).

The Biopolis campus spearheads innovations in environmental performance and sustainability and serves as a test-bed for promising environmental technologies including a district cooling system, pneumatic waste conveyance, intelligent building automation systems to optimize energy usage and skygardens/ "green" balconies.

Nucleus targets a Greenmark Gold sustainability goal.



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