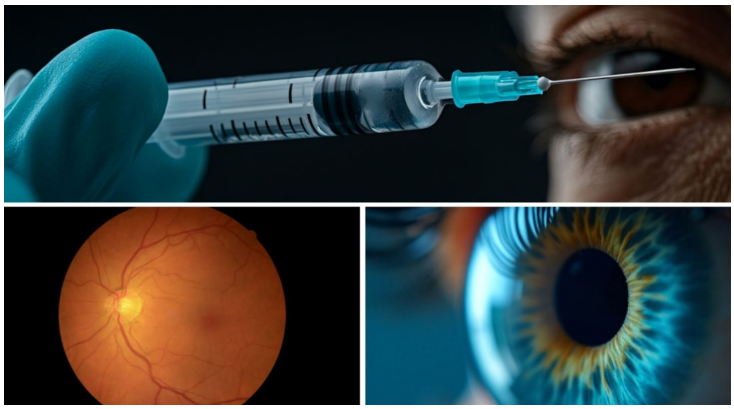
BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

BioMed X and Boehringer Ingelheim expand joint XSeed labs incubator in the US

20 May 2025 | News

For developing a fundamentally novel biologics design principle



The BioMed X Institute has announced the launch of a new global call for research proposals in collaboration with Boehringer Ingelheim to establish an independent research group focused on the development of a New Platform for Next-Generation Intraocular Biologics.

This new initiative marks the second research initiative at the XSeed Labs incubator, located at Boehringer Ingelheim's research and development site in Ridgefield, Conn.

While current biologic therapies have significantly improved the treatment of retinal diseases, the burden of frequent intraocular injections remains a substantial barrier to patient adherence. This joint effort will address critical unmet needs in ophthalmic drug development: the challenge of creating biologics with long intraocular half-life and deep retinal penetration.

To overcome this bottleneck, BioMed X and Boehringer Ingelheim are seeking innovative and interdisciplinary research proposals aimed at developing a fundamentally novel biologics design principle: one that combines long-term intraocular activity with deep and efficient retinal tissue penetration. The selected research team will be tasked with building a robust, innovative platform for the design and validation of next-generation intraocular biologics that can modulate targets within the retina while significantly reducing injection frequency.

Once identified, the new research group will tackle three main scientific challenges:

Development of a novel human organotypic in vitro platform for the screening of tens to hundreds of biologics for extended intraocular half-life and increased retinal penetration.

Exploration of novel and elegant design principles for long acting and tissue-penetrating intraocular biologics.

Validation of the most promising candidate technologies in vitro and in vivo.