

# IISER MOHALI 'LAB TO LAUNCH' SERIES

## FROM PROBLEMS TO POSSIBILITIES: THE SCIENCE OF NEED-DRIVEN INNOVATION



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In a world where healthcare innovation is often dictated by market dynamics rather than patient needs, Gennova Biopharmaceuticals has taken a radically different approach—one driven by necessity, affordability, and impact. This talk explores how Gennova transformed critical gaps in cardiovascular, neurological, and oncological care into pioneering biotherapeutic solutions, making life-saving drugs accessible to millions.

From introducing India's first biosimilar of tenecteplase for heart attack patients to pioneering its global approval for acute ischemic stroke, Gennova has consistently led with innovation. The company's advancements in bio-manufacturing, including AI-assisted packed-bed perfusion bioreactor technology, have reduced production costs and ensured a sustainable supply of high-quality therapeutics. In stroke care, Gennova's groundbreaking research led to the world's first regulatory approval of tenecteplase for acute ischemic stroke, positioning India at the forefront of neurological treatment. Additionally, by developing an affordable version of pegaspargase for pediatric leukemia patients, Gennova has addressed a longstanding unmet medical need, ensuring that children in resource-limited settings receive world-class treatment.

Building on this legacy of need-driven innovation, Gennova has propelled India's foray into mRNA technology with the world's first self-amplifying mRNA (samRNA) vaccine platform. Developed with indigenous expertise, this next-generation technology offers low-dose requirements, first-in-the-world thermostability (2–8°C), robust immune responses, scalable production, and a novel intradermal needle-free delivery system. It is a pandemic-ready platform that underscores India's leadership in biotechnology innovation and its commitment to global health.

This talk will explore how Gennova's commitment to solving pressing healthcare challenges through scientific ingenuity and bio-manufacturing innovation has redefined possibilities in patient care—transforming problems into opportunities and making world-class treatments accessible to all.

**ALL ARE CORDIALLY INVITED**



**LECTURE HALL 7, LHC, IISER MOHALI**



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