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Venomics AI raises $2.7 M to advance venom-based drug discovery

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Venomics AI will build its multidisciplinary team across venom biology



Venomics AI, a biotechnology company spun out of the Indian Institute of Science (IISc), Bengaluru, has raised $2.7 million in its first institutional funding round. The pre-seed round was co-led by Speciale Invest and South Park Commons, with participation from Operators Studio.

The company combines venom biology, artificial intelligence (AI), and experimental screening to discover and develop venom-derived molecules into therapeutic leads.

The funding will support the expansion of the Venom Atlas, the company's growing molecular dataset, and strengthen its AI and laboratory screening capabilities. Venomics AI will also build its multidisciplinary team across venom biology, computational science, and drug discovery, and support the validation and optimisation of promising molecules.

Animal venoms contain diverse molecules shaped by millions of years of evolution to act on biological targets. Understanding how these molecules evolved and how they function can help researchers identify promising starting points for medicines. Existing drugs such as captopril – inspired by snake venom peptides – and ziconotide – derived from a cone snail venom peptide – illustrate this potential. Much of the molecular diversity across venomous species remains unexplored.

Venomics AI aims to investigate this diversity at scale. Its platform combines molecular sequencing and venom biology to build the Venom Atlas, uses AI to prioritise candidates, and tests those predictions through functional screening in the laboratory. Experimental results feed back into subsequent predictions and molecular design, connecting computational discovery with evidence of how molecules perform.

By combining India's venom biodiversity with its scientific and computational expertise, Venomics AI aims to build a drug discovery platform in India for global therapeutic development. The company has established the initial architecture of its platform, joined the NVIDIA Inception programme, and been selected among the Top 5 finalists for the 2026 Indo-Boston Biotech Bridge Award.