From bench to clinic: our journey in neuroscience drug discovery with IAMA Therapeutics

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In my lecture, I will present the story of how fundamental research into the mechanisms of brain function laid the foundation for IAMA Therapeutics, a spin-off of the Istituto Italiano di Tecnologia. I will describe how curiosity-driven questions about neuronal physiology revealed a molecular target relevant to several neurological and neurodevelopmental disorders. I will then walk through the key steps that turned this finding into a drug discovery program: a multidisciplinary, collaborative effort spanning target validation, lead optimization, and eventually preclinical development. Along the way, I will reflect on the challenges and decisions involved in moving a project from academia to a biotech company, raising substantial venture capital, and ultimately advancing to clinical testing. I will discuss what this journey teaches us about the essential role of basic science and sustained investment in developing new therapies in the Italian landscape.