

Schrödinger, Bayer focus on accelerating drug discovery

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Schrödinger and Bayer have announced a five-year technology alliance to develop a *de novo* comprehensive design solution with the goal of accelerating the discovery of innovative and high-quality drugs quality.

The technology should make it possible to list, select and rate billions of virtual compounds, synthetically feasible, and promoting the identification and optimization of potential new candidate therapies. Under the terms of the agreement, Schrödinger is expected to receive around EUR 10 million.

The *de novo* design software will be equipped with Schrödinger's molecular design technology, which is based on physics-based modeling and augmented by machine learning, and proprietary *in silico* models by Bayer predicting absorption, distribution, metabolism, excretion, toxicity of compounds and chemical synthesizability. The new software will be based on Schrödinger's enterprise computing solution, LiveDesign, and will aim to rapidly design large numbers of molecules and predict their properties.

"Underlining our efforts in digital transformation across our entire value chain, our collaboration with Schrödinger aims to exploit advanced methods based on physics and machine learning capabilities in order to optimize the discovery of viable drug candidates," says Dr. Karl Ziegelbauer, head of open innovation and digital technology in the pharmaceutical division of Bayer AG. "The new co-developed technological solution aims to create new horizons for the therapeutic discovery of tomorrow, with the ultimate goal of bringing benefits to patients."

"We admire Bayer's passion for innovation and its commitment to using cutting-edge technology to meet global health challenges," says Ramy Farid, CEO of Schrödinger, Ph.D. "Our goals are reflected in our mission, and we are proud to make this vision a reality through this collaboration. The *de novo* design solution, which builds on the complementary strengths of Schrödinger and Bayer, promises to accelerate the discovery of innovative drugs that respond to important unmet needs."