

Schrödinger and Bayer Collaborate to Co-Develop de novo Design Technology to Accelerate Drug Discovery

1/8/2020

NEW YORK--(**BUSINESS WIRE**)--Schrödinger and Bayer (BAYN: DE) today announced a five-year technology alliance to develop a comprehensive de novo design solution with the objective to accelerate the discovery of innovative high-quality drugs. The technology is expected to be capable of enumerating, screening, and scoring billions of synthetically feasible, virtual compounds supporting the identification and optimization of potential new therapeutic candidates. Under the terms of the agreement, Schrödinger is expected to receive about €10 million.

The de novo design software will integrate the power of Schrödinger's molecular design technology, which relies on physics-based modeling augmented by machine learning, with Bayer's proprietary in silico models predicting compound absorption, distribution, metabolism, excretion, toxicity (ADMET) and chemical synthesizability. The new software will be built on Schrödinger's enterprise informatics solution, LiveDesign, and is intended to rapidly design large numbers of molecules and predict their properties.

"Underscoring our efforts in digital transformation along our value chain, our collaboration with Schrödinger is intended to leverage advanced physics-based methods and modern machine learning capabilities to increase discovery of viable drug candidates," said Dr. Karl Ziegelbauer, Head of Open Innovation & Digital Technologies at the Pharmaceuticals Division of Bayer AG. "The new co-developed technological solution is aimed at opening up new avenues for therapeutic discovery in the future, ultimately for the benefit of the patients."

"We admire Bayer's passion for innovation and commitment to leverage cutting-edge technology to overcome global health challenges," said Schrödinger CEO Ramy Farid, Ph.D. "Our mission statement echoes those goals, and we are proud to realize that vision through this collaboration. The de novo design solution, built on the complementary strengths of Schrödinger and Bayer, holds the promise of accelerating the discovery of novel medicines for important unmet needs."

About Schrödinger

Schrödinger's industry-leading computational platform to accelerate drug discovery and materials design is deployed by leading biopharmaceutical and industrial companies, academic institutions and government laboratories worldwide. In addition to this global business, Schrödinger is also applying its computational platform to a robust pipeline of drug discovery programs in collaboration with pharmaceutical companies and has co-founded leading biotech companies, including Nimbus Therapeutics. In addition, Schrödinger is using its platform to advance a pipeline of internal, wholly-owned drug discovery programs. Schrödinger's significant and ongoing investment in basic research continues to drive advances in its computational platform. Founded in 1990, Schrödinger has over 400 employees in its New York City headquarters and around the world. Visit www.schrodinger.com for more information.

About Bayer

Bayer is a global enterprise with core competencies in the life science fields of health care and nutrition. Its products and services are designed to benefit people by supporting efforts to overcome the major challenges presented by a growing and aging global population. At the same time, the Group aims to increase its earning power and create value through innovation and growth. Bayer is committed to the principles of sustainable development, and the Bayer brand stands for trust, reliability and quality throughout the world. In fiscal 2018, the Group employed around 117,000 people and had sales of 39.6 billion euros. Capital expenditures amounted to 2.6 billion euros, R&D expenses to 5.2 billion euros. For more information, go to www.bayer.com.

CONTACTS

Schrödinger Media Contact:

Stephanie Simon

Ten Bridge Communications

stephanie@tenbridgecommunications.com

617-581-9333

Schrödinger Investor Contact:

Christina Tartaglia

Stern IR, Inc.

christina.tartaglia@sternir.com

212-362-1200