SCHRÖDINGER®

Transforming Drug Discovery and Materials Research

## Transforming Drug Discovery with Advanced Molecular Modeling

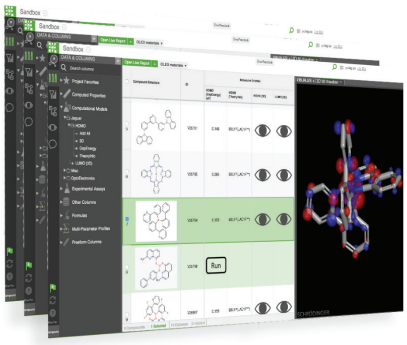
Our computational platform is validated across hundreds of real-life projects and deployed broadly by the biopharma industry globally. The platform is also adopted by life science researchers worldwide to accelerate innovation in a range of applications such as food, fragrance, crop science, and more.

## Schrödinger Online Course

We are excited to announce the launch of a brand new online course, ***Introduction to Molecular Modeling in Drug Discovery***, which will show how industry-leading computational molecular modeling tools are used to aid in drug discovery and design and how to incorporate these tools into your research project.

## Solution Spotlight:

LiveDesign, a linchpin of our platform, breaks down traditional silo walls to unleash the power of real-time collaborative design and project management.



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# Introduction to Molecular Modeling in Drug Discovery

## A Schrödinger Online Course

Computational molecular modeling tools are changing the world of drug discovery and design. And yet while managing automated systems is anticipated to be an expectation of chemists going forward,[1] employers are having a hard time finding workers skilled in the tools they need.[2]

Schrödinger's online course, ***Introduction to Molecular Modeling in Drug Discovery***, will show how industry-leading computational molecular modeling tools are used to aid in drug discovery and design and how to incorporate these tools into your research project.

Whether you are looking for professional development or expanded skills for your CV, this course will provide practical applications of computational modeling using active learning strategies and multiple types of content. At the end of the course, you will have a chance to apply the concepts you've learned to a VEGFR2 case study in new cancer treatments using cutting-edge technology.

1. The Human Element, Chemistry World, August 2016.
2. Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Computer and Information Research Scientists (accessed May 10, 2019).

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## Course Outline

Broken up into 7 modules, this course is entirely self-paced. It will take approximately 20 hours for someone new to computational modeling to complete (actual time may vary depending on experience). The modules can be done on your own schedule.

## Modules

**Module 1** - Applying Molecular Modeling to Drug Discovery

**Module 2** - Creating Computational Molecules with Maestro

**Module 3** - Viewing Protein-Ligand Interactions

**Module 4** - Modeling Protein-Ligand Poses in Hit Identification and Optimization

**Module 5** - Ligand-Based Virtual Screening in Preparation for SAR

**Module 6** - Combining Modeling and Experimental Data for SAR

**Module 7** - Drug Discovery Case Study on VEGFR2

## Get Started!

Ready to start learning? Simply visit **schrodinger.com/modeling**

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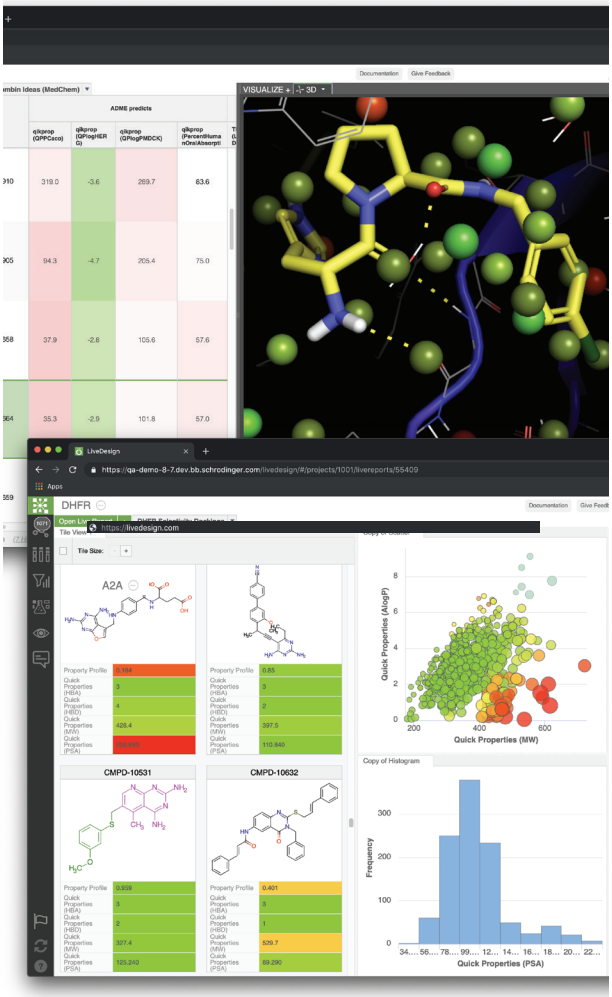
# LiveDesign™

## Cloud-based Enterprise Informatics for Accelerated Drug Design




### BETTER CANDIDATES, FASTER

- Capture, analyze, and test new ideas and data in a centralized platform to accelerate the lifecycle of discovery.
- Customize sophisticated cheminformatics and powerful data analysis across federated databases to increase the odds for success.
- Use machine learning-based methods to drive predictions and assist novel design approaches.

### EXPERT MODELING FOR ALL

- Understand SAR faster for both structure and ligand-based drug design through integrated computational modeling approaches with inclusive Schrödinger tools or any scriptable third party tool.
- Share the results of advanced computational modeling with a rich API, side by side with all other data.
- Accelerate the pace of discovery by empowering users to run their own models and automate common modeling tasks running them on the fly as new ideas are added.

### EMPOWERED COLLABORATION

- Overcome the obstacles of time and location with team members working concurrently in a live, cloud-based, single-source platform.
- Never miss an update—status, changes, and reports are live and automatic, with alerts to keep everyone informed and engaged during the entire lifecycle.
- Capture hypothesis and SAR with a wide variety of annotations.

**REQUEST A DEMO**

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**www.schrodinger.com**