



Call for collaborative research proposals

Overview

Schrödinger is transforming the way therapeutics are discovered with its proprietary physics-based computational platform. Schrödinger's therapeutics group has worked on eleven clinical-stage and approved programs with biotechs like Nimbus Therapeutics, Morphic, and Structure Therapeutics, biopharmaceutical companies and on our own internal pipeline.

We are inviting proposals from the academic community for innovative approaches to target and treat human diseases with small molecule drugs. Our industry-leading computational platform, coupled with our scientific expertise in drug discovery, can facilitate the rapid acceleration of your novel structure-function insights, hit or lead identification discoveries to the clinical development candidate stage.

The goal of this Request for Proposals (RFP) is to support translational research from breakthrough academic research, which has identified novel and differentiated drug targets, binding pockets, or ligands for the treatment of diseases with clear unmet needs.

This funding mechanism enables successful projects to benefit from unlimited access to Schrödinger's proven platform and drug design team to advance novel and validated drug targets discovered in academia.

What are the benefits of applying and collaborating with Schrödinger?

The selected project(s) will have the opportunity to directly work with Schrödinger's therapeutics group in a collaborative research program. Working with us offers an array of benefits, including:

- 1. Access to industry leading computational tools:** Schrödinger's software suite utilizes physics-based computational methods, such as molecular modeling, molecular dynamics simulations, free energy methods and quantum mechanics to predict properties of small molecules and macromolecules, accelerating the drug discovery process. As part of a collaborative research agreement, you will receive licenses to our software, as well as direct access to our own computational scientists and their expertise. Where relevant, we will seek to perform virtual screening campaigns with our in-house virtual libraries, and enable physics-based and machine learning models to guide an optimization campaign.
- 2. Expertise in drug discovery:** The collaboration will provide access to a wide-ranging team of experts in disciplines that complement the work from your group, as required. We have extensive expertise in drug discovery, with a team of scientists able to support a project from target identification through drug candidate nomination. This includes biochemistry, biophysics, computational chemistry, in vitro and in vivo pharmacology, structural biology, synthetic and medicinal chemistry, process chemistry, DMPK and toxicology.
- 3. Reliable partner with a successful track record:** Schrödinger has a history of successful partnerships with major pharmaceutical companies and biotechnology companies. Furthermore, Schrödinger has a track record of helping to create successful companies since our founding in 1990; these include Nimbus Therapeutics, Morphic Therapeutic, Relay Therapeutics, Ajax Therapeutics, and Structure Therapeutics. A number of drug candidates born of these collaborations are in clinical development, demonstrating the value that our approach brings to drug discovery.
- 4. Publication opportunities:** Schrödinger has a long history of publishing high-impact papers in top-tier scientific journals. Our collaboration agreement will provide full transparency about each partner's rights, including intellectual property rights. As part of the agreement, you will be encouraged to publish at a suitable juncture during/after the collaboration. This will be negotiated in good faith and with mutual agreement.
- 5. Direct research funding:** Selected proposals will obtain funding from Schrödinger for experimental work to advance the project; the exact amount awarded will be based on the nature of the proposal, budget requested and strategic fit to Schrödinger's mission. During the full application stage you will be asked to provide a budget proposal for funding of up to \$250,000 for Year 1. Based on progress, additional funding may be available, especially if a mutual path is clear towards advancing the program.

Sponsored Research

This funding could include, but is not limited to, research that will:

- ✓ Structurally enable targets with ligand/protein complexes
- ✓ Identify or validate novel drug targets
- ✓ Fund wet-screening approaches to complement virtual hit-finding strategies
- ✓ Optimize chemical matter to achieve enhanced potency, selectivity and/or properties, as required
- ✓ Develop or test in relevant *in vitro* and in vivo disease models to assess the efficacy of new chemical matter
- ✓ Identify or develop clinical biomarker strategies to select patients, predict efficacy or safety, and/or demonstrate pharmacodynamics and target engagement

What will not be funded:

- ✗ Indirect costs
- ✗ Staff salaries

In addition, there is the opportunity for a key trainee to engage in a funded internship position at one of Schrödinger's offices in a technology exchange / training environment.

What projects would qualify?

Schrödinger's therapeutics group is focused on small molecule drug discovery. Given the nature of the Schrödinger platform, we will prioritize projects with structural enablement (X-ray or cryo-EM), or those with feasible strategies to structurally enable a target in the early stages of the project.

We will evaluate proposals based on scientific merit, feasibility, novelty, clinical need, and ability of our technology to help attain project goals. Similarly, we will prioritize programs targeting areas of high unmet medical need, including but not limited to:

- Precision oncology
- Inflammatory disease
- Genetically-defined rare diseases

What criteria are used to assess proposals?

This RFP is intended to support translational research derived from breakthrough academic research. As such, we expect that preliminary data has already been performed to support pursuit of the program. A submitted proposal should meet a majority of the following criteria:

1. There is a clear scientific rationale on the effect(s) of modulating the proposed target with a small molecule drug
2. The target addresses an unmet need in oncology, immunology or a rare genetic disease; a clinical hypothesis, based upon genetic or prior clinical data is highly desirable
3. The mechanism of action is novel and differentiated from current clinical approaches
4. Proof of concept studies have validated the target preclinically
5. The target is druggable; experimental or computational determination that a small molecule will be able to bind to the target with likely therapeutic effect
6. Screening assays are available (not required, but desirable)
7. Tool compounds or antibodies are available (not required, but desirable and can accelerate computational validation)
8. Biomarkers are available (not required, but desirable)



In addition, consideration of the following will increase the value of the proposal:

1. An outline of any existing data or prior publications that support the proposal, and disclosure of established techniques or assays that will be required to drive the project forward
2. Proposed achievable milestones in a 12 month timeframe

If you have any further questions, please email:

external-innovation@schrodinger.com



How to Apply

Letter of Intent (LOI)

Please provide a maximum two-page executive summary of your project proposal. Please outline the goal of the project, including the target and indication, a summary of target validation, and an overview of the key resources, capabilities and expertise of the submitting scientist(s) and organization(s). You are invited to include rationale for why you want to collaborate with Schrödinger on this project.

A non-confidential slide deck that could provide further key information for consideration is optional.

Deadline for submission: February 18th, 2024.

Full Application

We will review the submitted LOI for scientific rationale, suitability of the target to our platform, and alignment to our therapeutic mission. Successful proposals will be invited to submit a full application for review.

Please only provide **non-confidential information** in your proposal. If confidential information would strengthen your proposal, please indicate that this information is available to share under a Confidential Disclosure Agreement (CDA). After initial review of the non-confidential application, we will put in place a CDA for confidential discussions where a project requires further consideration.

APPLY

The following documentation are all optional, and can be uploaded as supporting documents during the application process:

- A cover letter, CV and/or NIH Biosketch (US-based applicants)
- Up to 3 key publications or reviews related to the project/target of interest should be provided as a list of DOI addresses, or can be attached during the application in PDF format
- Non-confidential figures and/or key data that will support your application
- If required by your organization for a collaboration, please upload any template Material Transfer Agreement and/or Sponsored Research Agreement. This will accelerate any negotiation that may be required during the application process