# Merck Research Laboratories Discovery Biologics Scientific Engagement and Emerging Discovery Science (SEEDS) Request for Proposals (RFPs) 2025

Bringing together the most promising academic research with Merck R&D capabilities to validate and advance emerging therapeutic targets, pathways and technologies that show potential relevance to treat human disease.

**About the MRL SEEDS Program**

The MRL SEEDS program seeks research collaborations with academic researchers to advance the most innovative discoveries for therapeutic targets, pathways and technologies. The MRL SEEDS program and subsequent collaborations underscore the importance of industry and academic interactions in the early discovery space. Since the program inception in 2020 MRL Discovery Biologics (DB) has funded 20 academic SEEDS proposals.

As a first step in a potential collaboration, ideas for proposed projects will be evaluated by the DB Senior leadership Team (SLT). Ideas are to be submitted to dbseeds@merck.com in the form of a **pre-proposal form (enclosed) by July 23, 2025.** Proposals will be evaluated by the MRL DB SLT and may be selected for a 1-year research grant (up to $125,000 USD in direct costs plus institutional indirect costs). The 1-year grant can potentially be extended at the discretion of the MRL DB SLT.

At the discretion of Merck, MRL scientists will work closely with investigators to make available relevant capabilities and technologies that will enhance the success of the joint research program. As part of the proposal and workplan development process, scientists from MRL will engage with lead investigators to ensure expertise and capabilities of both parties are incorporated into the project plan as applicable. During the grant period, the investigator and MRL scientists will meet at least *quarterly for updates*. Investigators will have the opportunity to present their work at the annual *Merck hosted SEEDS Symposium*. A *final report* is required, and it is expected that part or all the results generated during the collaboration are disseminated in *peer-reviewed publications*.

**Who can apply?**

MRL DB SEEDS program RFPs are open to researchers at the following universities: Stanford University, the University of California, Berkeley, the University of California, San Francisco, the University of California, Los Angeles, the University of California, San Diego, Gladstone Institutes, Boston University and Vanderbilt University. Master agreements have been put in place with these universities for this program. At the discretion of the MRL DB SLT, proposals by researchers from other academic institutions may be considered.

**Why apply?**

The MRL DB SEEDS program is an effort to jointly advance high-quality science. All proposals submitted will be reviewed for scientific merit, tractability and alignment with the published areas of interest. The strongest proposals with the most compelling cases to experimentally address areas relevant for the discovery and development of protein and antibody therapeutics will be considered for funding, collaboration and/or sharing of Merck's R&D capabilities. Please review the enclosed **Discovery Biologics Domains of Strategic Intent**.

**DB-RFP-0125**: Engineered antibody frameworks/constructs – multi-specifics (geometry, avidity, robustness of assembly); reusable design modules or mutations (e.g., cell/tissue/organ targeting); cellular barrier translocation or penetration (including oral bio availability/blood brain barrier/intracellular delivery); half-life extension, effector function modulation; diversity of hits/ starting points.

**DB-RFP-0225**: Protein expression technologies; vectors, cell lines, in-vitro transcription and translation; incorporation of non-natural amino acids: platforms and technologies to reach the top candidates faster and better.

**DB-RFP-0325:** Platforms for antibody screening utilizing miniaturization, microfluidics, multiplexing readouts – High throughput measurements to select antibody winners and rapidly eliminate hits with poor properties.

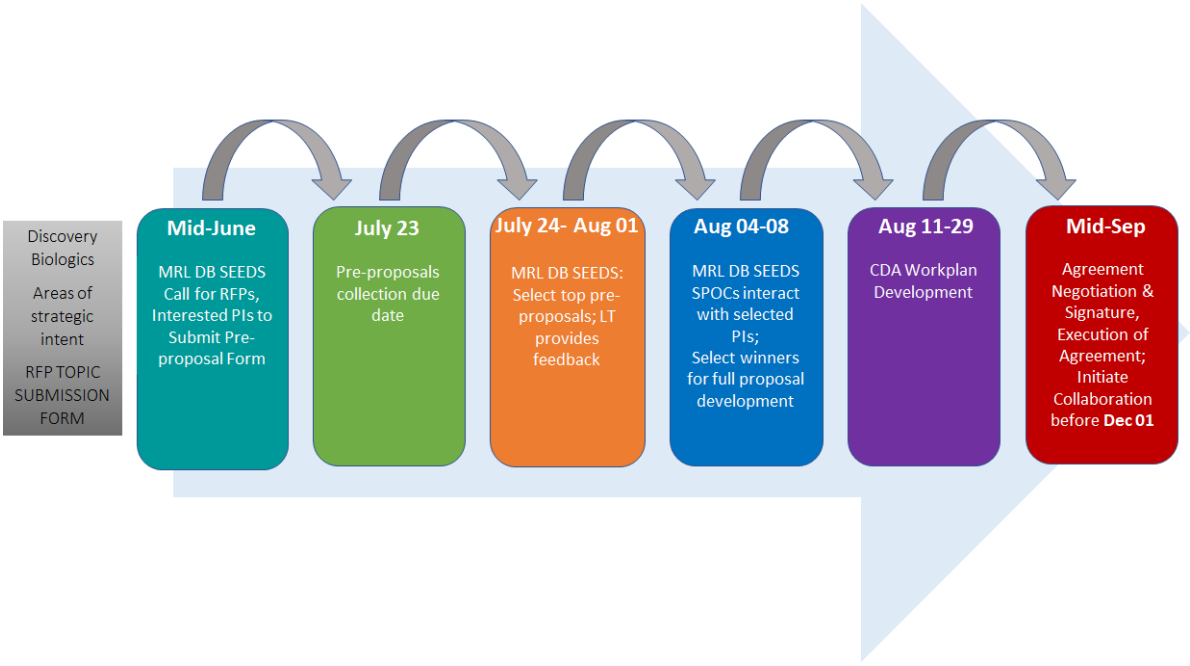
**DB-RFP-0425**: Antibody in silico design/prediction – Artificial intelligence/Machine Learning; advanced physics or structure-based methods to predict properties for leads with drug development characteristics.

**DB-RFP-0525**: Protein engineering approaches for conditionally activated biologic therapeutics.

**DB-RFP-0625**: Bioconjugate strategies addressing acquired resistance, treatment-related adverse effects including non-cytotoxic payloads.

## MRL DB SEEDS: Request for Proposal (RFP) Process

The MRL DB SEEDS RFP process involves several steps illustrated in the diagram below. The timeline is meant as a general guide.



# MRL DB SEEDS: Frequently Asked Questions

Questions and responses are divided by each phase of the MRL DB SEEDS program. To learn more or to ask a question, please contact the Merck SEEDS Program at dbseeds@merck.com. Your disclosure of information does not grant you any ownership interest in future Merck company inventions.

**Submissions**

1. Is there someone within Merck I can speak with to see if there is interest in my study idea (before submission of a proposal form) or in case I have any questions in preparing the proposal?

   *Yes. Please contact the Merck SEEDS Program.*

2. How do I submit a proposal?

   *Complete and submit the preproposal form to the Merck SEEDS Program July 23, 2025.*

3. Who should I contact if I need information about the MRL DB SEEDS program?

   *Please contact the Merck SEEDS Program at dbseeds@merck.com*

4. Will Merck contribute any capabilities to the project?

   *Access to specific capabilities will be discussed and agreed upon for accepted proposals as part of the confidential discussions and workplan development process after acceptance of the pre-proposal.*

5. Will Merck contribute any funding to the project?

   *Funding for approved collaborative 1-year pilot research projects is anticipated (up to $125,000 in direct costs plus institutional indirect costs) to facilitate execution of the agreed upon specific aims of the project in the principal investigator's laboratory or at a third-party establishment. The amount of funding will be project-specific and will be discussed and agreed upon for accepted proposals as part of the confidential discussions and work plan development process after acceptance of the pre-proposal. Our goal is to enable the specific aims of the selected proposals.*

6. How should I manage and communicate confidential information?

   *Submissions will be treated as confidential. If your proposal still requires a Confidential Disclosure Agreement (CDA), please contact the Merck SEEDS Program.*

**Review & Decision**

7. Who reviews the applications?

   *The DB SLT made up of Merck Research Scientists will review all proposals.*

8. What does Merck expect from investigators submitting a proposal?

   *The MRL DB SEEDS program funds proposals of scientific interest that can be conducted professionally and within the agreed timeline. Our expectations: 1) to receive a well-written proposal that is scientifically relevant and concise; 2) that investigators demonstrate the ability to conduct a study within the agreed timelines; 3) that, if approved, investigators agree to provide quarterly status updates and a final report of manuscript quality; 4) that part or all of the results generated during the collaboration are disseminated in peer-reviewed publications.*

9. What can investigators expect from Merck?

*Prompt and courteous response to submitted proposals; 2) thorough scientific review of the proposal; 3) prompt decision on acceptance or rejection; 4) confidentiality of information under a Confidential Disclosure Agreement (CDA) as applicable.*

**10.** What scientific points are considered when assessing a submitted proposal?

*The following scientific points are considered: 1) the study is aligned with the published Active RFP statements or areas of strategic intent; 2) the specific aims answer the scientific/medical questions with a well-organized study plan 3) a data analysis plan is included with the full proposal and work plan.*

**11.** If there are questions about the proposal, will I have a chance to address them prior to a final decision being made?

*Yes. If questions arise or clarifications are needed, you have the option of interacting with the MRL DB SLT before a proposal and work plan are completed.*

**Contract Negotiations and Terms**

**12.** How much will my lab be awarded if my full proposal is selected for collaboration?

*After a sponsored research agreement is executed between Merck and the academic institution, in accordance with standard practices and terms, Merck will fund up to $125,000 USD in direct costs for a 1-year pilot program plus institutional indirect costs.*

**13.** What are the terms of the sponsored research agreement between Merck and the academic institution if my proposal is selected for funding?

*Once your proposal is selected for contract negotiation and funding, a Merck Discovery Transactions Manager will contact the academic institution's Technology Transfer Office to negotiate a sponsored research agreement in accordance with established and reasonable practices and terms. Financial and/or reagent support of a proposal is contingent upon execution of a contract between Merck and the academic institution.*