CENTER FOR DATA-DRIVEN DRUG DEVELOPMENT AND TREATMENT ASSESSMENT

Fourth Round of DATA Research Funding Spring 2026 Call for Proposals

The Center for Data-Driven Drug Development and Treatment Assessment (DATA), an NSF-funded Industry-University Cooperative Research Center (NSF IUCRC), in partnership with DATA's industry members, is pleased to announce its 2026-27 round of research funding awards, to be distributed in Spring 2026. We are inviting proposals for projects that will apply novel computational methods, data science solutions, artificial intelligence (AI) and machine learning (ML) techniques to solve problems of interest to our industry partners within the focus research areas of the Center, including drug design, drug repositioning, drug treatment assessment, patient phenotyping, and quantitative pharma-covigilance.

Submission information

- **Submission deadline**: **Monday January 20, 2026, 11:59 pm EST**.
- **Method of submission**: Please upload all documents, as described under guidelines below, as a single PDF file using this Google form.
- **Eligible applicants**: **University of Michigan researchers** eligible to serve as a U-M Principal Investigator (PI) on sponsored projects (e.g., tenured-track or research faculty) are eligible to apply as the project lead PI or lead co-PI, i.e., the individual(s) responsible for the scientific or technical direction of the project. If a project has several lead co-PIs, the first PI listed on the proposal will hold primary responsibility for the project.
- **Research topics of interest** include but are not limited to:

Precision Medicine

- Individualized patient therapy; optimization and customization.
- Identification of safe and effective doses for each patient for optimized performance.
- Methodologies and innovations that focus primarily on patient outcomes, e.g., sepsis presentation and management.

Clinical Trials

- Improved clinical trial design (e.g., reduction of lengthy trial initiation processes, more effective identification and recruiting of patients).
    - Designing trials that account for the effects of individual differences (e.g., genetics, sex, lifetime history, concomitant conditions, and preferences for various outcomes)
- Better adverse event and safety prediction (higher clinical trial success rates).
- Digital twin approaches, e.g., designing digital twins for prediction of the study outcomes before launching trials, increasing probability of success, and managing/reduction of patient-related trial failures.
- Causality assessment in clinical trials.

Generative AI (GenAI)

- Designing GenAI for target identification.
- Designing GenAI for small molecules and large molecules research.
- Designing GenAI for prediction of patient journeys and outcomes using generative models.
- Designing GenAI for model explainability (actively a UM focus).

- Designing GenAI for multimodal model development (high-performance AI models).
- Designing GenAI for Antibody Drug Conjugate (ADC) and Lipid Nanoparticle (LNP) technologies.

Translational and Regulatory Science

- Methods to help with animal-to-patient translation (improving efficacy predictions).
- Identification of novel alternatives to in vivo studies.
- Regulatory analysis with multiomics data.
- Going beyond FDA's FAERS for safety signal detection.

Intellectual Property (IP)

- New and improved approaches to IP generation and protection.
- An informational slide deck is accessible through this link.

Content guidelines

Proposals should include:

1. **Project description** briefly discussing:
   - **Problem statement**: Description of the problem(s) within the Center's focus research areas that the project will aim to solve. Please also address the importance of solving the problem(s) to the pharmaceutical and healthcare industries.
   - **Methods**: Description of the data science, AI, and ML methods and techniques that will be used to investigate the problem(s).
   - **Innovation**: Discussion of how the proposed methodologies contribute to innovation in the field of drug discovery and/or treatment assessment.
   - **Milestones & deliverables**: Description of project milestones and proposed deliverables through the anticipated length of the project.
   - **Industry partners**: A list of industry sectors within the Center's focus areas that are expected to participate in and/or benefit from the project. DATA's industry focus includes pharmaceutical, biotech, healthcare, computing & technology (big tech, startups), AI/ML, and data standardization sectors. Proposals involving multiple industry fields and/or partners are strongly encouraged.

     DATA-funded projects should be designed to foster active research collaboration between University researchers and the Center's industry partners. While not required, applicants who have discussed their project ideas with a DATA member or affiliate should specifically identify their expected collaborators. For an up-to-date list of DATA industry partners, contact data-iucrc@umich.edu.

   Please **do not include any proprietary or confidential information** and limit your project description to **two (2) pages** in length.

2. **References:** Please limit your references to **two (2) pages**.

3. **Budget**

   While a detailed budget is not required at the time of submission, proposals should include the estimated funding needs by expense category.
   - **Eligible expenses** include support for research personnel (e.g., students, trainees, post-docs, non-tenured faculty), lab resources (e.g., high performance computing and storage, consumables).
   - Tenured faculty effort or funding for travel **may not be included** in the budget.

   Awards are limited to **$40,000**/project/year, including a **10% indirect cost rate**.

4. **Biosketch** of the lead PI and each lead co-PI (if any), no more than **two (2) pages** in length.

Limit on number of proposals

Multiple submissions by the same applicant will be accepted, with a cap of **two (2)** proposals for which an applicant may serve as a PI or a co-PI.

Selection process & review criteria

A two-tiered evaluation process will be used to select funded projects:

1. Proposals satisfying the content and submission guidelines will be evaluated by members of the Center's Industry Advisory Board (IAB) using criteria including (i) significance & relevance of the problem(s) to DATA's mission, (ii) novelty of the suggested methodological approach, (iii) project team & resources, (iv) a member's preference for funding the project & interest in active collaboration, (v) the extent to which the project will involve or benefit multiple industries and/or multiple DATA industry partners.
   Results of the first round of selection are expected in early March 2026.

2. Applicants with top-rated proposals will be invited to give a brief, 10-minute presentation at DATA's Spring 2026 IAB meeting, which will be held on March 30-31, 2026, in Ann Arbor, MI (U-M North Campus Research Center). The IAB will make its funding decisions at this meeting or shortly afterwards. **Please be available for in-person participation on Monday, March 30, to deliver the project presentation, and in the morning of Tuesday, March 31, for a discussion & review session with the IAB**.

Award information

- Please review the full DATA award terms and the supplemental RFP FAQs.
- Proposed projects may be designed for multiple years; however, award decisions are made on a year-by-year basis.
- Proposed projects may not duplicate projects funded by other awards received by the researchers.
- **Intellectual Property**: DATA is a pre-competitive consortium of academia and industry. In accordance with NSF rules, DATA's industry members receive a non-exclusive royalty-free license to intellectual property derived from inventions conceived or first actually reduced to practice within the Center. If you wish to receive more details on the nature of this license, please contact U-M Innovation Partnerships at alliances-team@umich.edu. If intellectual property created prior to, or outside the scope of, a Center project is required for a research project selected for funding, U-M Innovation Partnerships will negotiate appropriate agreements as necessary.

Questions?

Please contact DATA staff at data-iucrc@umich.edu.

About DATA

Established in 2022, the Center for Data-Driven Drug Development and Treatment Assessment (DATA is part of the Industry-University Cooperative Research Center (NSF IUCRC) program of the National Science Foundation hosted at the University of Michigan. DATA advances U.S. competitiveness by working with industry to solve current, emerging, and industry-relevant challenges in drug design, drug repositioning and repurposing, treatment monitoring, assessment and optimization, patient phenotyping, and quantitative pharmacovigilance using novel computational and data science techniques such as metrology, machine learning (ML), and/or artificial intelligence (AI), including generative AI, and by training the next generation of talent in this field. DATA seeks to produce new methodologies and infrastructure for industry-wide collaborative drug discovery and treatment assessment, with the goal of significantly accelerating the pace of drug development to help target the

right drug to the right person at the right safe and effective dose while reducing R&D costs.

The advent of generative AI has created an urgent need for stakeholders in all stages of the drug life cycle to come together, share experiences with this revolutionary technology, and jointly address its implications for health care. Thanks to its cross-industrial and cross-disciplinary nature designed to bring together data scientists, mathematicians, biomedical researchers, pharmaceutical companies, healthcare providers and payers, and government agencies, DATA is ideally positioned to catalyze these conversations, identify best practices, and develop solutions to the challenges generative AI brings to the health care sector.