Open Source for Science Fund

Request for Applications: Open Source for the Life Sciences (OS4LS)

The Open Source for Science Fund invites letters of intent from developers and maintainers of open source software projects that underpin AI and data-intensive research in the life sciences. This program will fund technical advances and address significant bottlenecks in software tools with demonstrated community adoption in the life sciences, allowing them to unlock new capabilities for scientists worldwide and evolve functionality to meet the demands of AI-native research environments.

This is a two-step application process: an initial Letter of Intent (LOI), followed by invitations to a select number of applicants to submit a Full Application.

OPPORTUNITY

Overview

Open source software has fueled every major scientific discovery of the last two decades. In the life sciences alone, breakthroughs spanning the genomics revolution, protein structure prediction, the real-time tracking of pathogen evolution and spread using genomic sequence data, or the AI-driven identification of novel drug candidates all share a common: they were all fundamentally enabled by open software tools and technology.

Yet while scientific practice races toward agentic workflows, autonomous labs, and AI-driven discovery, the open source infrastructure that powers this work, and the maintainer communities who keep it alive, remain systemically underfunded and not yet designed for AI-native use. Many foundational tools were built around manual, step-by-step workflows and need modernization to work with agents, support data-intensive pipelines for model training, inference, and evaluation, or evolve to represent, structure, and efficiently process very large datasets.

The Open Source for Science Fund is a multi-donor initiative by Renaissance Philanthropy that pools philanthropic and industry capital to sustain and evolve essential scientific software for the AI era. With seed funding from Biohub and Wellcome, and support from the Kavli Foundation, the Fund builds on the track record of the **Essential Open Source Software for Science (EOSS)** program — six cycles, $58M deployed across 230+ projects — as a successor initiative that is operationally independent and purpose-built to scale.

About this call

"Open Source for the Life Sciences" (OS4LS) is the inaugural call of the Open Source for Science Fund. It is targeted at open source software that underpins **data-intensive research and AI-driven discovery in the life sciences**.

Applications are invited for work that addresses significant technical bottlenecks or delivers critical capabilities in these software projects. We seek proposals that target a clear technical challenge that serves critical needs for a research audience, a realistic plan of work aligned with the project's own roadmap, and genuine buy-in from the core maintainer community about the proposed fundable activities.

For this Request for Applications, we seek to support domain-specific software tools across a broad range of disciplines in the life sciences. We also welcome proposals focused on foundational libraries and software dependencies as well as collaborations among related projects within the same software ecosystem.

Scope and application tracks

We're seeking proposals in these two categories:

Track 1 — Domain-specific Tools	
Open source tools for representing, analyzing, and visualizing biological data across modalities within specific disciplines in the life sciences. Software tools applying for funding in this category must have demonstrated adoption or rapidly growing traction within their target research communities. Domain-specific tools that primarily serve scientists outside the life sciences will be considered out of scope for this call. We welcome applications from various areas of the life sciences , including but not limited to the following: • **Foundational biology**: Molecular biology and genomics; Structural and chemical biology; Cell and developmental biology; Evolutionary biology; Immunology • **Enabling technologies**: Biological and Biomedical imaging: Synthetic biology; Bioinformatics; Computational biology; Predictive modeling • **Translational / application areas**: Neuroscience; Infectious disease; Therapeutics discovery and development	**Available funding:** Up to $250,000 USD total over two years (Up to $125,000 USD/year)

Track 2 — Foundational Libraries and Ecosystem Initiatives	
• Open source libraries that serve as **core dependencies** of scientific applications across multiple domains in the life sciences, OR • Collaborative proposals developing shared interoperability, integrations, or common interfaces and capabilities across a set of related tools within the same software ecosystem. Applications in this track may propose coordinated work spanning multiple software projects.	**Available funding:** Up to $1,000,000 USD total over two years (Up to $500,000 USD/year)

Across these two categories, we will give priority to applications from software tools that enable **large-scale data analysis and AI-driven applications and workflows**, including but not limited to:

- Representing, managing, curating, and structuring scientific data for use in model training
- Developing benchmarks and standards, endpoints, or protocols that unlock the use of open source tools in agentic workflows
- Scalability and performance improvements, including support for hardware acceleration
- Interoperability frameworks that make tools composable in AI-driven pipelines

Examples of proposals unlikely to be in scope and successful in this RFA:

- An early-stage software prototype that is not yet used extensively beyond its creator(s) or a narrow community of users
- A proposed, AI-assisted rewrite of a legacy tool without existing traction or adoption in the scientific community
- A proposal to fund proprietary or semi-proprietary software with the goal of open licensing it
- A proposal to fund the infrastructure to host a repository, database, or platform for sharing data or other scientific outputs
- A proposal solely focused on general maintenance (e.g. backlog reduction) or community management without significant technical goals or enhancements that serve the community
- A proposal for the development of AI/ML models themselves — the fund supports the software that enables data preparation, model training and inference, not new model development as such
- A proposal that is focused on generating new datasets

Use of funds

For both tracks, grants will be awarded for two years (24 months). Proposals will be evaluated for appropriateness of budget relative to the scope of work proposed. Indirect costs may not exceed 15% of direct costs and should be included in the maximum funding for each track. A detailed budget is not required at the LOI stage.

Acceptable use of funds includes, but is not limited to:

- Salary support for staff (full-time, part-time, or contract): developers, contributors, technical writers, community managers, product managers, project managers, user experience researchers, community educators, or other roles that directly support the software project(s)
- Hackathons, sprints, outreach, or other forms of community engagement
- Operational needs such as cloud computing, storage, networking, AI/ML infrastructure (e.g., API tokens, model hosting, tooling subscriptions), or other services
- Support for work that bridges software projects or ecosystems, including coordination across software projects that are similar, dependent on one another, or frequently used together
- Travel to maintainer or community meetings where this directly supports the proposed work

What grantees receive

Grant recipients become part of the inaugural cohort of the Open Source for Science Fund. This includes:

- Two-year grant to support the proposed work
- Participation in a cohort of funded projects, with opportunities to connect with peer maintainers and other funders
- Invitations to convenings and events bringing together grantees, technical and scientific advisors, and the software funder community. Travel and participation costs to attend these events will be provided by the Fund and should not be included in the grant budget
- Access to data and analytics tools developed by the fund, including software mention tracking and dependency impact reporting
- Recognition across all the fund's communications, including the fund website and grantee announcements

ELIGIBILITY

- Projects applying for funding must be open licensed and have a publicly available codebase in a repository. Proprietary software or software with custom / restrictive licenses is not eligible for funding.
- The software project(s) must have a mature codebase and demonstrated traction and adoption in the life sciences. Early-stage prototypes or planned software projects lacking evidence of adoption are not in scope for this call and unlikely to pass the LOI stage.

- Proposals to fund scholarly infrastructure (such as repositories or databases for sharing data and other resources) are out of scope for this call.
- The principal investigator named on the application must be a core maintainer or designated representative of the open source software project(s) proposed. Proposals must have genuine buy-in from the core maintainer community, and all proposed work must be aligned with the project's own roadmap.
- We will consider multiple applications from the same organization, multiple applications for the same software project, and applications that include the same personnel, provided the proposed work in each is distinct.
- For Track 2 applications, we strongly encourage proposals spanning multiple open source software projects (up to 5). In such cases, one individual must complete the application and a single organization or fiscal sponsor must coordinate the dispersal of funds.
- Applications may be submitted by domestic and foreign nonprofit and for-profit organizations, public and private institutions, including colleges, universities, hospitals, laboratories, units of state and local government, companies, and eligible agencies of the federal government. Grants are not made to individuals, only to organizations.
- Open source software projects operating independently must be affiliated with an eligible organization, or designate a fiscal sponsor (e.g., NumFOCUS, Code for Science & Society, or others). Applicants requiring fiscal sponsorship must secure a sponsor by the full proposal deadline.
- We welcome applications from any country, provided the proposed work is compliant with applicable U.S. laws and regulations, including the United States Treasury Department's Office of Foreign Asset Control (OFAC) sanctions program, U.S. Department of Commerce export administration regulations, and the Foreign Corrupt Practices Act (FCPA), as well as any corresponding regulations in the country where the applicant is based.

The fund reserves the right to request budget changes prior to award and to determine whether applicant organizations meet eligibility requirements. Additional information may be requested at any time.

APPLICATION REQUIREMENTS

Application process

This is a two-step process: an initial Letter of Intent (LOI), followed by invitations to a select number of applicants to submit a Full Application. The application form will be available on May 11 at 9am Pacific Time at https://os4science.org/funding_opportunity/os4ls/.

Date	Milestone
May 4, 2026	Website launch; RFA announced
May 11, 2026	LOI Application portal opens (9 am PDT / 4 pm UTC)
June 8, 2026	Letters of Intent due (2 pm PDT / 9 pm UTC)

Date	Milestone
June 23, 2026	Notification of invitation to submit Full Applications; Full Application portal opens
July 21, 2026	Full Applications due (2 pm PDT / 9 pm UTC)
October 2026	Earliest notification of decisions
December 1, 2026	Earliest project start date

Letter of Intent

LOIs do not require a full budget, finalized personnel lists, deliverables, or institutional sign-off. In the LOI, applicants will provide:

- Information about the **applicant** and **host organization**
- **Title** of the proposal
- **Short summary** of the work being proposed
- **Expected value** of the proposed work to the life sciences research community: if the proposal is successfully funded, what does success look like? What type of capabilities would this proposal unlock for the scientific community? How will upstream & downstream software be improved by the proposal? How does the proposed work support or implement novel functionality for AI enablement and large-scale data analysis?
- **Landscape analysis** briefly describing other software tools that the audience for this proposal primarily uses (including proprietary alternatives), and how the proposed software project(s) compare in terms of user base, adoption, functionality, and maturity relative to their target audience. Use of the software in AI applications should be given particular emphasis
- **List of software projects** to be supported, with links to their repositories
- **Funding track**: Track 1 (Domain Specific Tools) or Track 2 (Foundational Libraries and Ecosystem Initiatives)
- **Statement of PI involvement**: confirmation that the PI is a maintainer of the project(s) named in the proposal, and that the proposed work is aligned with the project roadmap and has support from the core maintainer community

Full Application

A subset of LOI applicants will be invited to submit a Full Application. Invitations and instructions for full applications will be communicated by email and on the RFA's website. Full Applications will require the information provided in the LOI, plus:

- Description of **proposed activities**, with **milestones** and **deliverables**
- Full **budget** with justification (inclusive of indirect costs, not to exceed 15% of direct costs)
- Key **personnel** and their roles

- Description of **recent institutional and financial support** for the software project(s) involved
- **Software project metrics** (details will be provided at the time of invitation)
- **Expected outcomes and evaluation strategy**: indicators the applicant will use to assess progress
- **Institutional sign-off** from the organization that would receive the grant

SELECTION PROCESS

Proposals invited to submit a full application will be assessed through a combination of qualitative and quantitative factors. Relevant materials will be provided by applicants and, where possible, obtained from publicly available sources (e.g., GitHub and other public code repositories).

Existing impact

Reviewers will assess the traction and importance of the software project(s) to the life sciences research community and the broader open source ecosystem to this date. The evaluation will consider:

- Demonstrated scientific impact and adoption in the life sciences
- Role of the project in the broader scientific open source ecosystem, with a particular emphasis on data-intensive and AI applications
- Adoption within the relevant research communities, including downstream users and recent growth trajectory
- Number of citations or mentions in scientific literature or comparable data sources

Quality

Reviewers will assess the maturity of the software project(s) and the health and structure of the maintainer community and its open source practices. The evaluation will consider:

- Composition and leadership of the team
- Governance structure of the project
- Diversity and breadth of contributor base
- Existence, clarity, and recency of a project roadmap
- Evidence of external contributions (code, issues, documentation)
- Quality and comprehensiveness of documentation and tutorials
- Frequency and trajectory of commits, issue resolution, pull request reviews over time

Feasibility of the proposal

Reviewers will assess whether the proposed work can be accomplished within the budget and by the personnel involved. Evaluation will consider:

- Specificity and clarity of the proposed plan of work

- Appropriateness of proposed use of funds relative to the plan
- Likelihood of completion, given team and project history
- Plan for tracking and validating progress
- Degree of unmet need given existing resources
- Sustainability: future plans for maintaining or continuing the funded work

Value of the proposal

Separately from assessing the existing impact of the software projects, reviewers will evaluate the expected value of the *proposed work* to its intended scientific audience. If the proposal is accepted for funding, what counts as success for its target audience? The evaluation will consider:

- How the outputs of the funded proposal will advance adoption among life sciences researchers or produce direct value to their work, including previously unavailable computational capabilities
- Unmet needs in the life sciences that will be addressed through the proposal
- Improvements or integrations with other tools that will improve adoption, usability, or performance in the context of research in the life sciences
- Advancement of native AI capabilities that support existing needs in the scientific community

There is no expectation of any specific number of awards for this program. Expert reviews will be treated confidentially and will not be shared with applicants.

REPORTING AND PROGRESS

Annual reports will be required from all funded grantees. Reports will include a summary of key accomplishments and progress (which may be made publicly available), along with updated indicators of adoption and community traction.

POLICIES AND TERMS

Your proposal and associated reviews will be made accessible to current and future funding partners of the Open Source for Science Fund. All funded applications will be subject to Renaissance Philanthropy grant conditions and policies. Details will be provided to successful applicants at the time of award notification.

Confidentiality Policy

No proposals or other materials or information submitted or provided by applicants in connection with the Grant process, including any proposals, documents and communications (collectively, the "Submitted Information") will be considered confidential information of the applicants, except as specifically provided in the terms of any then-current posted privacy policy. Renaissance Philanthropy may disclose any Submitted Information to the Competition Entities and each of

their employees, contractors, consultants, independent subject matter experts, judges and other organizations without restriction, including to evaluate proposals. Please carefully consider the information included in the Submission Materials. If you have any doubt about the wisdom of disclosure of any confidential or proprietary information, you should consult with your legal counsel and take any steps you deem necessary to protect your confidential information or intellectual property.

Release of Liability

Applicants agree to and hereby release Renaissance Philanthropy from and against all liability with respect to or in any way arising from by tax liabilities and/or use of your name, likeness, voice, or any materials you submit for participation in the Grant process, including, but not limited to, any claim based on publicity rights, defamation, invasion of privacy, copyright infringement, trademark infringement or any other intellectual property-related cause of action, or otherwise in connection with or related to the Grant.

CONTACT

For questions pertaining to this Request for Applications, please contact:

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For more information about the Open Source for Science Fund, including fund participation opportunities for funders and industry partners, visit the Fund's website:

os4science.org