



COMMISSIONED RESEARCH / FOR TECHNICAL TEAMS

FOUNDING RESEARCH PROGRAM / AP-02

Applicant Guide

Independent research for hard problems.

Detailed eligibility, process, economics,
publication, and partnership guidance.

1. Laboratory scope: what PRISM is

Metriq PRISM Laboratory is a computational research laboratory. We investigate scientific, engineering, mathematical and technical questions primarily through software and computation: mathematical analysis, modeling, simulation, optimization, statistical analysis, machine learning, algorithm design, software-systems research, literature and prior-art synthesis, and reproducible computational studies.

PRISM is not a wet lab, clinical lab, animal-research facility, field station, accredited testing laboratory or physical test facility. Under the standard program, PRISM does not culture organisms, handle specimens, synthesize chemicals, conduct human- or animal-subject experiments, collect field samples, fabricate experimental hardware, or run destructive or other physical tests. A project may still concern biology, ecology, manufacturing or another physical-world domain; PRISM works from existing, public, partner-generated or qualified third-party evidence.

Hybrid projects

When a strong project needs new physical-world evidence, PRISM can help define the computational research design, specify the measurements needed, analyze resulting data and integrate third-party findings. The application must identify who will generate that evidence. Physical experimentation is outside PRISM's execution scope. It must be performed by a qualified external organization under its own approvals and arrangements; PRISM's scope remains computational.

Standard research modalities

- Mathematical and formal analysis.
- Modeling, simulation and numerical experiments.
- Optimization and operations research.
- Statistics, uncertainty quantification and data science.
- Machine learning, predictive modeling, calibration and robustness analysis.
- Algorithm design, protocol analysis and software-systems research.
- Reproducibility, benchmarking and technical due diligence.
- Literature, prior-art and source-grounded evidence synthesis.

Physical-world domains are allowed; physical experiments are not assumed

A project may concern corals, wildfire, machinery, robotics, health-related data, environmental systems or other physical phenomena. That does not mean PRISM will conduct the physical experiment. The statement of work must distinguish PRISM's computational tasks from evidence generated by the applicant or another qualified party.

2. Program purpose and research standard

The initial program is designed for U.S.-based organizations. Any international collaboration requires separate legal, data and operational review; PRISM's work remains computational.

The Founding Research Program is designed to create serious collaborations around questions that are worth resolving. PRISM is most useful when the answer is uncertain, the methods require judgment, and the result can change a real scientific, engineering, operational or investment decision.

PRISM conducts research rather than advocacy. A strong project begins with a falsifiable or decision-relevant question, makes assumptions explicit, distinguishes evidence from inference, and defines what a negative or inconclusive result would mean. The final output should be examinable by a technically competent reader.

Independence

Applicants choose or help shape the question. They do not purchase the answer. Findings are reported according to the evidence and the signed scope.

Who may apply

- Nonprofit and public-benefit organizations.
- Universities, research organizations and educational institutions.
- Public bodies and mission-aligned organizations where the engagement is legally and operationally appropriate.
- For-profit companies through an Industry Research Partnership or other approved commercial structure.
- Consortia when one organization is identified as the contracting and accountable lead.

Strong applications usually have

- A specific unknown or decision rather than a desired marketing conclusion.
- A plausible computational evidence path using data, literature, mathematics, software, models, simulations or reproducible benchmarks.
- If new physical evidence is essential, a credible qualified party responsible for generating it.
- An internal sponsor able to answer technical questions and coordinate access.
- Clear beneficiaries and a credible reason the answer matters.
- A realistic path to a public or otherwise examinable output.
- Known constraints disclosed early rather than after scoping.

3. Program pathways

Pathway	Primary objective	Economics and publication
Public-Benefit Research	Advance a mission-aligned computational question whose value is meaningfully broader than the participating organization.	PRISM may subsidize or fully support the approved research scope. The project normally requires a meaningful public output.
Industry Research Partnership	Investigate a commercial or industrial problem while preserving research integrity and a useful public contribution where feasible.	Normally co-funded. Confidential details may be protected, but a fully private commercial assignment should generally be scoped outside the founding support program.
Grand Challenge	Attack an unusually hard, high-impact computational problem that merits exceptional research effort.	Individually approved. Funding, scope, publication, IP and timing are negotiated case by case.

Selection is not first-come, first-served

PRISM may prioritize projects based on computational fit, scientific merit, public benefit, tractability, available capacity, portfolio balance, data readiness and the ability to produce a useful result. A strong application can be declined or deferred if the necessary expertise, data, compute, funding or review capacity is unavailable.

4. Research scope, responsibilities and deliverables

A project scope should answer seven questions

1. What exactly is unknown?
2. What decision or scientific understanding changes if the question is answered?
3. What computational methods, data and baselines are required?
4. Does the project require new physical-world evidence, and if so who will generate it?
5. What work will PRISM perform and what will the partner or third party perform?
6. What outputs will be delivered and how will they be accepted?
7. What information may be published, withheld or delayed?

Possible deliverables

- Research protocol or computational analysis plan.
- Literature/prior-art synthesis and source register.
- Data audit and documented preprocessing methodology.
- Mathematical model, algorithm, simulation, optimization or statistical analysis.
- Benchmarking against relevant baselines and sensitivity/uncertainty analysis.
- Research manuscript or technical report with explicit limitations.
- Reproducibility package, code, notebooks or verification artifacts where rights permit.
- Executive findings briefing and implementation recommendations.

Physical experimentation boundary

Product deployment, wet-lab work, specimen handling, human/animal studies, field campaigns, fabrication, physical test campaigns, accredited certification and regulatory filings are outside the standard program. If a project depends on any of them, the signed scope must identify a qualified external party responsible for execution, approvals, funding and data delivery. PRISM does not execute that physical work.

5. Data, confidentiality and security

Preliminary application rule

The first application must be nonconfidential. Describe sensitive material; do not transmit it with the application.

Before sensitive data are transferred

- The organization must have the legal right and internal authority to provide the material for the approved computational use.
- PRISM and the applicant must agree the transfer method, access controls, permitted users, retention period and deletion/return requirements.
- Personal data, controlled technology, safety-critical credentials, human-subject information and other regulated material require specific review before acceptance.
- Applicants should disclose third-party licenses, contractual limits, data-quality issues and known provenance gaps.

Evaluation confidentiality

A shortlisted applicant may request an evaluation NDA before disclosing nonpublic technical details. The NDA does not authorize transmission of every category of sensitive information; data-specific restrictions still need to be addressed in the project schedules.

6. Publication, attribution and research independence

Founding support is intended to create research that can be examined. The signed project documents define the publication route, confidential elements, review period and any justified delay. A partner may identify confidential information, trade secrets, legal restrictions and factual errors, but may not suppress an otherwise permitted result solely because the conclusion is unfavorable.

What may be public

- The research question and participating organizations when permission and the scope allow.
- Methods, results, limitations and conclusions to the degree permitted by the agreed publication schedule.
- Aggregated or transformed data when lawful and scientifically adequate.
- Code, benchmarks or reproductions when rights and security allow.
- A factual case study only with separate permission for names, logos, quotations and promotional use.

What is not automatically public

- Raw partner data.
- Trade secrets or confidential operating details.
- Personal data or protected records.
- Third-party material PRISM has no right to publish.
- Patent-sensitive information during an approved limited filing delay.

7. Economics, support value and partner contributions

A supported project is a defined research engagement, not a cash grant or stored-value account. The signed scope records the actual project economics: any PRISM-supported research capacity, partner fee, approved expenses and in-kind commitments.

Term	Meaning
Research support	PRISM-funded or subsidized effort allocated to the approved project. It has no cash-redemption or transfer right.
Partner fee	A real payment obligation only if stated in the executed agreement or statement of work.
Approved expenses	Third-party or direct project costs that the agreement expressly assigns to a party and caps or preapproves.
Reference value	A substantiated contextual figure, if used at all. It is not automatically revenue, a donation, tax deduction or payable balance.
Unused capacity	Research effort not consumed before completion or termination; it does not automatically convert into cash or a credit balance.

Industry co-funding

Industry projects are normally expected to contribute meaningful resources, which may include a fee, relevant staff time, lawful data access, compute or other agreed support. The contribution is set during scoping; the application should state the applicant’s budget status honestly rather than inventing an amount.

8. Selection and project lifecycle

- 1. Initial fit screen: computational scope, eligibility, conflicts and obvious constraints.
- 2. Merit screen: significance, evidence path, tractability, data readiness and expected public benefit and examinable output.
- 3. Scoping: PRISM and the applicant refine the question, responsibilities, methods, milestones, economics and publication plan.
- 4. Protected diligence: nonpublic details are reviewed only after appropriate confidentiality/security arrangements.
- 5. Approval and contracting: a statement of work and project schedules define the actual commitment.
- 6. Activation: research starts after the specified activation conditions are satisfied.
- 7. Research and review: work proceeds through defined evidence and delivery gates.
- 8. Closeout: PRISM delivers the contracted package, records limitations and handles publication or confidentiality as agreed.

Selection criteria

Criterion	What PRISM looks for
Computational fit	A central question PRISM can meaningfully investigate with computational methods and available evidence.
Research merit	A consequential unknown, credible methodology and nontrivial contribution.
Decision relevance	A clear explanation of what changes if the answer is positive, negative or inconclusive.
Evidence readiness	Lawful access to data, sources, models or partner-generated measurements needed for the scope.
Execution readiness	A responsive sponsor, realistic timing and manageable procurement/security constraints.
Public benefit and dissemination	A useful path to examinable output, knowledge transfer or broader benefit.
Integrity fit	Willingness to accept evidence rather than purchase a predetermined conclusion.

9. What PRISM will not promise

- A predetermined or favorable conclusion.
- Success of a hypothesis, algorithm, model or product.
- Execution of wet-lab, physical, clinical, animal-subject or field experiments under the standard program.
- Certification, accreditation, regulatory approval or legal/compliance sign-off.
- Journal acceptance or independent peer-review status.
- Guaranteed commercial savings or investment returns. Production deployment is not included in a founding research award.
- Exclusive IP or confidentiality rights that are not written into the executed project documents.

Negative and inconclusive results

A well-executed project can conclude that the hypothesis is unsupported, that the available data are insufficient, that a model fails to generalize, or that a proposed approach does not outperform the baseline. These are valid research outcomes when they answer the agreed question honestly and document the evidence.

10. Applying

What to submit

- A nonconfidential description of the organization and proposed question.
- Why the answer matters and what decision it changes.
- What has already been tried and what remains unknown.
- Expected computational methods or evidence path, if known.
- Available datasets, source material, models or systems and their access constraints.
- Any dependency on new physical-world evidence and who would generate it.
- Publication/confidentiality constraints.
- Expected staff participation and, for industry applicants, current budget status.
- Known legal, security, data, IP or conflict issues.

What not to submit initially

- Raw confidential datasets or trade secrets.
- Passwords, credentials or access tokens.
- Personal records or unnecessary identifying information.
- Export-controlled or otherwise controlled technical data.
- Precise locations of vulnerable species or sensitive ecological assets.
- Any information your organization is not authorized to share.

Application status

Submitting an application does not create an award or obligate PRISM to perform research. A project exists only after the required project documents are executed and activation conditions are met.

Contact and submission

For general questions: prism@metriq.org. Use the specific submission channel supplied with your invitation and review its privacy notice before submitting. Keep the initial application nonconfidential. The website's general inquiry tool prepares an email draft; it is not evidence that an application has been delivered.

1. Start with fit

PRISM is computational

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Confirm the proposed work has a computational core

- The primary unknown can be investigated through mathematics, software, existing data, models, simulations, optimization, statistical analysis, machine learning, algorithms, benchmarks or evidence synthesis.
- If the project needs new physical experiments, measurements, field sampling, wet-lab work, specimen handling, human/animal studies, fabrication or physical testing, you can identify the qualified party that will perform that work.
- You are not asking PRISM to certify, accredit or provide regulatory sign-off.
- You are willing to accept positive, negative, mixed or inconclusive findings.

2. Prepare the application

Question and decision

- State one primary research question in a sentence.
- Explain what decision, scientific understanding or action changes if the answer becomes clearer.
- Describe what has already been tried, including failed or inconclusive approaches.
- Describe what positive, negative and inconclusive outcomes would each mean.
- State any timing dependency and whether it is hard or flexible.

Computational evidence

- List datasets, documents, models, code, systems, published sources or expert access relevant to the question.
- Identify owners, approximate size/date range/format and known quality gaps where applicable.
- State the computational methods you think may be relevant, if known; it is acceptable to say “unsure.”
- If new physical-world evidence is required, identify who will generate it, what they will measure and when it could be available.
- Check whether you have legal and organizational authority to share the relevant information for the proposed use.

Organization and delivery

- Name the person who will own the application and the technical/program sponsor who can answer questions.
- Estimate realistic staff availability for scoping and technical review.
- For industry applications, state actual co-funding status: approved, planning range, not yet approved or not applicable.
- List procurement, legal, security, insurance or vendor-onboarding constraints that could materially affect timing.

3. Keep the first submission nonconfidential

The preliminary application is a screening document. It should explain what exists without disclosing information that requires an NDA, data agreement, security review or controlled transfer process.

Do not attach

- Raw proprietary datasets.
- Trade secrets or confidential source code.
- Passwords, credentials or access tokens.
- Personal records or unnecessary personally identifying information.
- Export-controlled or controlled technical information.
- Precise locations of vulnerable species or sensitive ecological assets.
- Material owned by a third party that you are not authorized to disclose.

Describe, do not disclose

For example: "We have approximately 18 months of timestamped machine telemetry under a customer confidentiality restriction." That is enough for initial screening; the data itself can wait.

4. Final submission check

- The question is an unknown, not a desired conclusion.
- The project has a computational research core.
- Any physical experimentation dependency has an identified qualified external party, separate from PRISM, with its own authorization and funding.
- Benefits, constraints and current evidence are described candidly.
- No confidential or restricted material is included.
- Your organization has authorized the person submitting the application.
- You understand that application does not create an award or commitment.

1. Questions and answers

What exactly is Metriq PRISM Laboratory?

Metriq PRISM Laboratory is a computational research laboratory. We investigate scientific, engineering, mathematical and technical questions primarily through software and computation: mathematical analysis, modeling, simulation, optimization, statistical analysis, machine learning, algorithm design, software-systems research, literature and prior-art synthesis, and reproducible computational studies.

Is PRISM a wet lab or physical test lab?

No. PRISM is computational. Under the standard Founding Research Program, it does not conduct wet-lab bench work, culture organisms, handle specimens, run human- or animal-subject experiments, collect field samples, fabricate experimental hardware or perform destructive/physical test campaigns.

Can PRISM research biology, ecology, manufacturing or other physical-world subjects anyway?

Yes. The research domain can be physical-world while the research method remains computational. PRISM can analyze public or partner-generated data, build models and simulations, optimize decisions, evaluate algorithms and synthesize evidence without executing the physical experiment itself.

Can PRISM design a physical experiment?

PRISM may define analytical measurement requirements, formulate hypotheses and propose computational evaluation methods. A qualified external party remains responsible for physical study design, approvals, execution, supervision and funding. PRISM does not execute or supervise that experiment; its role stays computational.

What if our project needs new measurements?

Identify who can generate them, what would be measured and when the data could be available. PRISM can then scope its work around the resulting evidence. If no credible source of the necessary evidence exists, the project may be deferred or declined.

2. Questions and answers

What is a “computational experiment”?

A controlled run of software, a simulation, model, benchmark or numerical study in which assumptions, inputs and outputs can be recorded and reproduced. It does not mean PRISM physically performed the corresponding real-world experiment.

Is this a cash grant?

No. The program provides or subsidizes defined research services. A stated support amount is not cash, stored value, a transferable credit, a tax receipt or an entitlement to unused funds.

Who can be considered?

Depending on the pathway, PRISM may consider nonprofits, universities, public-interest organizations, public bodies, for-profit companies and other organizations capable of supporting a serious computational research project. Eligibility does not guarantee selection.

Can a for-profit company participate?

Yes. Commercial applicants are generally considered through an Industry Research Partnership or another approved structure, usually with meaningful partner co-funding and clearly defined publication/confidentiality terms.

Do we need a fully formed research plan?

No. You should have a consequential question, enough context to explain why it matters, and a plausible evidence path. PRISM may refine the research question and computational methods during scoping.

3. Questions and answers

Can we ask PRISM to prove that our technology works?

You may ask PRISM to investigate whether it works under defined conditions. You may not purchase a predetermined favorable conclusion. The research can confirm, qualify or contradict the original hypothesis.

What if the result is negative or inconclusive?

That can still be a successful engagement if PRISM performed the agreed work and delivered the specified evidence and analysis. A well-supported negative result can prevent wasted investment or identify what evidence is actually missing.

Can the project remain completely confidential?

Founding support normally requires a meaningful public-interest or examinable output. A fully private commercial assignment may be possible, but it should generally be scoped separately rather than automatically funded through the founding program.

Can PRISM sign an NDA?

For shortlisted projects, PRISM can consider an evaluation NDA before reviewing nonpublic technical details. An NDA does not by itself authorize transfer of regulated, personal, controlled or otherwise restricted data.

Should we send our dataset with the application?

No. The preliminary application must be nonconfidential. Describe the dataset, ownership, size, date range, known limitations and restrictions. Transfer methods are addressed later if the project advances.

4. Questions and answers

Who owns the data?

Ownership does not change merely because an application is submitted. Any project access, use, retention and deletion rights are defined in the executed project documents.

Who owns new algorithms, code or inventions?

The project documents specify background IP, newly created materials, reusable methods, licenses and any exclusive rights. No IP transfer should be assumed from selection or support alone.

Will PRISM publish our confidential information?

Not if it is properly identified and protected under the agreed project terms. Publication is planned before work begins so legitimate confidentiality can coexist with an examinable research output.

Can we stop an unfavorable paper from being published?

A partner may flag confidential information, legal restrictions and factual errors under the agreed review process. A result is not suppressible solely because it is unfavorable if publication of that result is otherwise permitted by the signed terms.

Can we use the PRISM name or logo after selection?

Only as permitted by the signed communications terms. Participation is not certification or endorsement of a product, technology or claim. Promotional logo use, quotations and case studies require separate permission.

5. Questions and answers

What does an award value mean?

It describes the approved research support or scope under the relevant project documents. It is not automatically the project's accounting value, a donation, taxable benefit, revenue or an amount payable to the participant.

Do we have to pay anything?

It depends on the project pathway and approved scope. Public-benefit projects may be fully or partly supported. Industry projects are normally co-funded. Only amounts stated in executed project documents are payable.

What happens after we submit?

PRISM screens computational fit and the application, may request a scoping conversation, and may conduct protected diligence. If PRISM wants to proceed, it prepares a bounded project proposal and agreement. Work starts only after activation conditions are met.

How quickly will we hear back?

Review timing depends on capacity, complexity and whether additional information is needed. Any deadline stated in an invitation or submission channel controls; do not assume an application is accepted because a response is pending.

Is selection an endorsement of our organization or product?

No. Selection means PRISM chose to investigate a question under the agreed scope. It does not certify the applicant, product, claim, regulatory status or scientific validity of an untested hypothesis.

6. Questions and answers

Can we submit more than one idea?

Yes, but separate materially different questions. PRISM may ask you to prioritize one project so scope, feasibility and research value can be evaluated clearly.

What makes an application strong?

A clear unknown, a real decision at stake, a credible computational evidence path, honest description of prior attempts, lawful data access, a responsive project sponsor, manageable restrictions, and willingness to accept evidence even when it does not support the original hypothesis.