Boise State University Request for Proposals

NSF Accelerating Research Translation (ART): TRANSFORM SEED PROJECT

TRACK 1: Market Oriented Research Projects

Boise State, as part of its Translational Research Ambassadors Network for Strengthening Institutional Capacity and Fostering an Open and Responsive Mindset (TRANSFORM) award, is pleased to announce the establishment of a TRANSFORM Seed Grants Program. In partnership with the National Science Foundation (NSF) through the Accelerating Research Translation (ART) program, the goal of the TRANSFORM Seed Grants Program is to "increase the scale and pace of advancing discoveries made while conducting academic research into tangible solutions that benefit the public." The TRANSFORM Research Seed Grants Program will allocate *\$2M in funding over the next four years* to catalyze translational research at Boise State. The investments will be made in two tracks:

Track 1: The **market-oriented** track will support research projects that are oriented toward commercialization and traditional technology transfer work that identify innovations in the laboratory and move them toward the marketplace (e.g., problem identification, innovation, intellectual property protection, industry collaboration, and translation through licensing or startups).

Track 2: The **community-engaged** track will support Boise State researchers to engage with external organizations (e.g., governments, community organizations, NGOs) to co-produce projects that advance new knowledge and also have societal impact.

Each year, over the next four years, we will fund two TRANSFORM SEED projects. It is our goal to fund one project from each track, pending the availability of funding and the alignment of the proposed projects to the goals of each track. Each project will be awarded up to \$200,000 (direct cost). Projects will begin on August 1, 2024 and may continue for up to 24 months. Project PIs will be asked to provide interim deliverables December 31, 2024 and December 31, 2025. Project end date is July 31, 2026 and the final report is due September 31, 2026. Applications are due by May 15, 2024. Additional details about this request for applications are provided below.

Background: What is TRANSFORM?

The vision for our TRANSFORM program is to create and maintain a thriving, sustainable, and innovative translational research ecosystem. As part of the broader TRANSFORM award, we will carry out the following *six objectives*: (1) develop administrative, data, communication, and collaboration infrastructure; (2) prepare and deliver professional and mentoring development opportunities for faculty, staff, postdocs, and graduate students; (3) establish an entrepreneurial ecosystem with the local business community; (4) strengthen collaborative relationships with community partners; (5) build out the office of technology transfer; and (6) help to modernize university-level promotion and tenure, and workload policies.

The TRANSFORM SEED PIs' are integral in supporting the TRANSFORM leadership team toward this vision and meeting our six objectives. As such, PIs of SEED awards will meet with the TRANSFORM leadership team on a monthly basis during their SEED project period. We also expect the SEED PI and co-PIs to participate in an <u>I-CORPS training workshop</u> in the first six months (previous participation in an I-CORPS workshop satisfies this requirement if the SEED project covers the same technology, product, service or process).

Proposal Guidelines:

We invite applicants to submit a proposal that builds on preliminary and ongoing work that will be leveraged to accelerate research and engagement within external partners over a two-year timeline. Projects should show a clear plan to work closely with external partners (e.g., businesses, start-ups, governments, community organizations, nonprofits, etc.ect.) across the 24-month project cycle.

Proposal Format. Proposals should be in 11-point font single-spaced with 1-inch margins and organized as follows:

- 1) Executive Summary (limit: 300 words). Summary of the project in plain language which is understandable for someone outside of the field. Summarize the objectives, significance, and expected translational research outcomes that will be generated by the project.
- 2) Project Team (limit: 1 page). List names and affiliations of the project director/principal investigator (PI), co-investigators, staff, students, consultants, and other key personnel including the required external community/industry partners. Summarize the roles and responsibilities of each team member throughout the project.

3) Project Narrative (limit: 6 pages).

- **Background and Rationale.** Describe the background that motivates the project, including how the proposed work: 1) aligns with the goal of this track; 2) advances preliminary and ongoing work that will result in a prototype or marketable product within a two-year timeline; and 3) will create economic and societal impact.
- **Project Aims and Objectives.** Describe the project objective(s) and what problem you are trying to solve. List specific goals and outcomes of the project and identify the societal impacts that will result from achieving these goals/outcomes.

• **Project Design.** Discuss the design, procedures, activities, protocols, programs, etc. of the proposed work. Identify members of the team who will lead specific aspects of the project. The design will also:

- show the existence of, or potential to develop, a strong industry or community partnership;
- include a plan to assess the project that measures outcomes on science and economy;

- include a DEIA plan with respect to faculty, staff, student, and postdoc involvement, student recruitment and the community/industry organization partnered with; and
- If postdocs and graduate students are included, collaborate with the Center for Research and Creative Activity (CRCA) to engage in centralized training and provide industry engagement opportunities for postdocs, graduate and undergraduate students.

•Intellectual Merit and Broader Impacts. Please address the Intellectual Merit of the proposed research and the broader impacts of this project in separate paragraphs. Include a statement describing the nature of your external collaborations and how the research dovetails with your partner to ensure societal and economic impact.

- Market and Commercialization Plan. What is the current market for this product/technology/service? What are the competitive advantages of this technology? How will the market adopt this solution in lieu of current solutions? How will the product/technology/service be brought to the market (not necessarily during the SEED project period)?
- **Timeline and Major Milestones.** Provide a timeline of the project execution. The timeline should include major project activities and milestones. This timeline should cover both years (24 months) of the project.

• Future Directions. Describe what it would mean if this project were successful, and what next steps might build upon, scale up, or translate the lessons of this project to new or broadened contexts. Identify one or more funding opportunities (state, federal, industry/private, or other) where an application will be submitted no later than 6 months following the end of the SEED award to further this project towards commercialization. Describe the potential for generating intellectual property.

4) References Cited (limit: 2 pages).

5) Budget and Budget Narrative (limit: 1 page each). Provide detailed information for your budgetary needs and how the budget will be used. Funding may be used for summer salary, or AY course buyout, salary/fringe for hiring students or staff, travel, and other research expenses. Please use the Office of Sponsored Programs <u>internal budget template</u>. Project periods will begin August 1, 2024 and end July 31, 2026.

6) Community/Industry Partner Letters of Commitment (no limit).

7) All project participants must submit a biosketch (NSF format preferably, though we will accept others, as needed).

If Institutional Review Board approval is required, this approval can be initiated following the award allocation in June 2024. No funds will be released until IRB approval is secured.

Review Procedure and Criteria:

Applications will be externally reviewed and the highly-ranked applications will be reviewed by the TRANSFORM leadership team. Final decisions will be made by the Division of Research and Economic Development and the Office of the President. Faculty members and staff who are part of TRANSFORM senior personnel team will not apply for this opportunity.

Overall Impact. Reviewers will provide an overall impact score to reflect their assessment of the likelihood for the project to have a significant societal impact.

Specific Criteria. Reviewers will consider the criteria below and give a separate score for each. An application does not need to be strong in all categories to be considered fundable. For example, work that has promise to improve outcomes for some but not all Idahoans could be considered impactful.

Evaluation Criteria for Track 1

1. Does the project address an identified gap or need in the market? Is the current status of the innovation appropriate for SEED funding? Are the goals/objectives of the project clear?

2. Does the project have the potential to develop expertise, products and/or services that are viable and can result in commercialization via an existing business or through a startup company?

3. Likelihood that the project will result in establishment of commercialization partnerships or methods to be used in developing partnerships. Reviewers will consider the applicant's tech transfer and commercialization strategies.

4. Clear plan to build on SEED project and scale the innovation towards commercialization, plan for additional funding mechanisms, and potential for economic development and future return on investment. Is it likely that the proposed project will enhance the prospects for future external funding?

5. Does the project team have the necessary physical resources, facilities, and/or collaborators necessary to implement the project? The proposed budget appears reasonable to support the proposed scope of work.

Project Requirements:

• The Project PI must be a Boise State University faculty member or research staff with the eligibility to serve as principal investigator on sponsored projects. PIs can only submit 1 proposal per year but they can serve as co-PI on multiple applications.

• Project aims must be accomplishable within a 24-month period (by July 31, 2026).

• Proposals must identify at least one community partner (e.g., government, non-profit organization, business, etc.) to be involved throughout the duration of the project (e.g., government, non-profit organization, business, etc.). The proposal should describe the roles and responsibilities of each community partner, and a letter of collaboration from the community partner is required.

• This project is expected to be supported for up to two years. The progress of each project will be monitored, and decisions will need to be made on whether the project should receive additional funding beyond an initial period based on progress made. Teams are required to meet the following deliverables:

eams are required to meet the following deliverables:

- Interim reporting by December 31, 2024, December 31, 2025, and at other times as requested by the TRANSFORM team.
- A final report September 31, 2026.
- Presentations as requested by the university during and at the end of the project period.

Submission Information:

Proposals must run through Pre-Award to have their budgets reviewed and approved. Send documents to preaward@boisestate.edu. This must be done at least 5 days in advance of proposal submission.

Proposals are due by 5:00 PM on May 15, 2024. Funding decisions will be announced by June 10th 2024.

Please submit your proposal via email to John McFarlane at <u>johnmcfarlane@boisestate.edu</u>. Include all documents compiled in one PDF, in the order listed above.

Inquiries:

Applicants are encouraged to discuss project concepts and/or direct any proposal-related questions to Brian Wampler (<u>bwampler@boisestate.edu</u>), Brett Adkins TTO (<u>techtransfer@boisestate.edu</u>) and Jana LaRosa (<u>janalarosa@boisestate.edu</u>).