



Request for Proposals

South Dakota Governor's Research Center Program

SUMMARY OF PROGRAM

The SD Governor's Research Center Program invites proposals to identify Governor's Research Center projects that will begin in June 2021. The objective of the program is to establish recognized leaders in a focused research area and commercialize promising research results in collaboration with private sector partners.

This request for proposals describes a two-phase process. The first phase is a required Letter of Intent to submit a Governor's Research Center proposal. The Letters of Intent will be used to identify reviewers for an external peer-review process that will select the research focus area(s) that will form the basis of the next round of Governor's Research Centers. The second phase of the process is submission and review of the submitted proposals.

Contacts:

SD Board of Regents

Mel Ustad, Director of SD EPSCoR, SD Board of Regents, 4801 N. Career Ave., Suite 103, Sioux Falls, SD 57107; 605-274-9535 (voice), 605-670-1678 (cell) mel.ustad@sdbor.edu (e-mail).

Eligibility Information:

Eligibility as a lead institution for a Governor's Research Center is open to South Dakota Regental universities collaborating with researchers and industry partners interested in establishing a research center or continuing development of applications of a platform technology within South Dakota. An institution may serve as lead institution on more than one proposal submitted in response to this solicitation.

PI Eligibility Limit:

An investigator may participate in only one proposal as the lead scientist/principal investigator. An investigator may participate in more than one proposal as a senior investigator/co-PI.

Award Information:

Governor's Research Center proposals may request up to \$300,000 in year one, \$900,000 in year two through year five. While the foregoing amounts represent the maximum amounts which may be sought in each of the funding years, proposals should strive to request only that which they actually need to achieve the stated objectives and can realistically expend in any given project year. The number of awards in FY 2021 & FY 2022 is contingent on the scope and quality of the proposals and funding appropriated by the South Dakota Legislature. It is anticipated that

approximately \$900,000 will be available to award in year one; \$2.7M in year two; and \$3M in years three through five. Continued funding in years two through five will be based on an annual performance review by the Research and Commercialization Council and is contingent on continued appropriation of funds by the South Dakota Legislature.

Proposal Preparation and Submission Instructions:

A. Proposal Preparation Instructions

RFP Q&A: Zoom meeting February 12, 2021, 2:00-3:00 Central time

[Join Zoom Meeting](#)

Phone one-tap: US: [+16699009128](tel:+16699009128), [93858364006#](tel:+193858364006) or [+12532158782](tel:+12532158782), [93858364006#](tel:+193858364006)

Meeting URL: <https://sdbor.zoom.us/j/93858364006>

Meeting ID: 938 5836 4006

- Letter of Intent: Submission of a Letter of Intent (LOI) is required. The LOI must be submitted by the lead institution's Sponsored Program Office or its equivalent. Please see the full text of this solicitation for instructions on preparing the LOI.
- Projects submitting a Letter of Intent may submit a full proposal by the deadline noted below. No other proposals will be accepted. Please see the full text of this solicitation for instructions on preparing the proposal.

B. Budgetary Information

The budget period for a Governor's Research Center proposal is five years. Proposals may request up to \$300,000 in year one, \$900,000 in year two through year five.

C. Due Dates

- Letter of Intent (required - due by 5 PM CST):
 - o February 26, 2021
- Proposals (required - due by 5 PM CST):
 - o April 9, 2021
- External Review and Down Select
 - o April/May, 2021
- Panel Presentations and Awards
 - o May 17-21, 2021 or June 1-4, 2021

D. Proposal Review Information

The proposals will be reviewed by a technical review panel with expertise in the field and the operation of major research centers. The technical review panel will make recommendations to the Research and Commercialization Council. The Research and Commercialization Council will make funding decisions based on the technical review panel recommendations and the research center's synergy with the state's research and economic development plans.

E. Award Administration Information

- Award Conditions: Additional award conditions may be included and stated in the award letter.

- Reporting Requirements: Project directors, principal investigators/science leads (if different individuals) and other senior investigators will be required to submit and present an annual progress report to RCC. Based on the report and presentation of progress to date, RCC will make a decision on continued funding.

I. INTRODUCTION

The Governor's Research Center program is intended to accelerate the growth of research competitiveness, move innovations to market and support expansion of South Dakota's knowledge economy. Governor's Research Centers have had a history of success expanding South Dakota's R&D, spinning out businesses, establishing public private collaborations and securing external funding.

Each Governor's Research Center is expected to become a recognized leader in its field by building the physical, human and educational infrastructure needed to be competitive for external funding and be sustained beyond the duration of an award. A successful Center's outcomes are translational; they expand the economy both directly through creating new employment opportunities at the Center, partnering with businesses and spin off companies, and contribute to STEM workforce development.

To accomplish this, a Center's primary objectives include:

- achieve national standing as a leader in focused research and education areas;
- increase competitiveness for major federal research funding leveraging state and private investments and support future research activities;
- develop focused areas of research that generate demonstrable and significant commercial activity contributing economic growth in South Dakota; and
- establish centers in partnership with private sector entities that will drive economic growth.

II. PROGRAM DESCRIPTION

Building the infrastructure to foster translational research growth requires an alignment of university and private sector objectives. Research priorities should align with institutional priorities and leadership should be actively involved in the proposal development process. Additionally, these priorities should align with regional and national industry research, development and workforce needs. Existing entrepreneurial activities in the state, and collaborations between universities, private industry, and regional economic develop entities should be integrated into the project.

Proposals submitted in response to this request should focus on applied or translational research and development programs that meet specific and significant industry needs and opportunities in the states targeted research sectors.

This program will allow South Dakota to make strategic investments in building nationally competitive translational research programs in specific areas of science and engineering that are consistent with state goals. Strategic investments may take several forms including:

- start-up costs for hiring new faculty in targeted areas;
- equipping and staffing core research facilities;
- postdoctoral, graduate, and undergraduate research programs;
- strengthening university-industry partnerships; or
- any other strategy to enable South Dakota to dramatically increase its competitiveness in a focused area.

What an award does not fund is research project support in the traditional sense. A key premise behind the initiatives undertaken with an award is that the outcomes must result in progress that will be sustainable beyond the life of the award; it is an expectation that a successful proposal will transition from infrastructure support through

this program to a self-sustaining status based on competitive federal research funding, private sector and institutional investment in the center's activities and revenue from commercialization of research results.

III. ELIGIBILITY INFORMATION

Eligibility as a lead institution for a Governor's Research Center is open to South Dakota universities collaborating with researchers and industry partners interested in establishing a research center or continuing development of applications of a platform technology within South Dakota. Research teams should consist of basic science researchers, applied scientist or engineers, and industry partners. Prior and existing participants in the Governor Research Center Program are eligible to apply for funding under this proposal; however, such proposals must clearly articulate the progression of, or difference in, the activities contained in their proposal as compared to those covered by prior center funding. If a proposal is led by an investigator supported by a previous round of Governor Research Center awards the proposal must include information on the outputs of the center and explain how the proposed center builds upon or advances their previously supported. Multiple proposals may be submitted from an institution as long as the proposed research aligns with the institution's research agenda and the institution indicates its long-term commitment to pursuing the proposed research area by committing tenure faculty lines or institutional commitment to support essential technical support staff. Award recipients will not be precluded from submitting a proposal in response to the NSF RII-Track I RFP, which is anticipated to be released in 2022.

Letters of Intent and proposals must represent a collaborative effort among South Dakota Regental institutions and private sector partner(s). Collaborations involving industry partner(s) are required. A Governor's Research Center may be proposed in any R&D areas aligned with the state's targeted industry sectors identified in the [2020 Vision: The South Dakota Science and Innovation Strategy](#).

A single individual must be identified as the project director and accept management responsibility for the project. Additionally, a principal investigator must be identified as the principal investigator/lead scientist on the project, which may or may not be the same individual as the project director. An investigator may participate in only one proposal as the principal investigator/lead scientist. An investigator may participate in more than one proposal as a funded senior investigator/co-PI. If the PI and/or Project Director identified in the proposal are not currently employed by the institution, the proposal must include a letter of commitment from the individual(s) indicating their willingness to serve in such a capacity, as well as a commitment on the part of the institution to hire the individual(s) if the proposal is funded.

IV. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

An institution may serve as lead institution on more than one proposal submitted in response to this solicitation as long as the proposed research aligns with the institution's research agenda and the institution indicates its long-term commitment to pursuing the proposed research area.

A. Proposal Preparation Instructions

The Letter of Intent is a required prerequisite to submitting a proposal in response to this solicitation. The Letter of Intent should be prepared as a single spaced document with 1" margins. It may be up to two-pages, and must include:

- Project Title
- Project Director's and Principal Investigator's name (if different individuals), contact information, and institutional affiliation
- Private Sector Partner(s)
- Academic Partner(s)
- Project Summary

The Letter of Intent must be submitted by the lead institution's Sponsored Program Office or its equivalent to the e-mail addresses identified in Part D of this section.

Proposal Preparation Instructions:

The Project Description should clearly define the center mission, activities and goals. Provide background on the significance of the opportunity and the Center partners capabilities including prior research results. The proposed activities should be detailed including defined milestones and timeline for achieving milestones. The project description should also identify anticipated challenges or barriers for the Center and plans for how they may be overcome.

1. Description of how the proposed activities are aligned with and support the SD State Science & Technology Plan ([2020 Vision: The South Dakota Science and Innovation Strategy](#)). This should include the anticipated economic impact of the project and how that impact will be achieved. (2 pages).
2. Description of R&D and commercialization activities. This includes the roles of the various partner institutions, private sector partners and economic development organizations in achieving the goals. (16 pages).
3. Description of a detailed plan for long-term sustainability of the proposed research that clearly presents the strategy and implementation plan (with milestones) for sustaining the research center. Present a detailed strategy to build ongoing research relationships and generate subsequent, sustained non-state funding from federal, private sector, and other sources. Describe commercialization or economic development plans and projected impacts associated with proposed R&D. (3 pages).
4. Description of the management plan that clearly outlines the proposed organizational structure, mechanisms for focusing and maintaining development activities. Project technical and/or industry advisory committees are required and the members must be identified in the proposal. (2 pages).

A biographical sketch, limited to two pages and presented in NSF format, is required and should be included for the project director, principal investigator/science lead (if different individuals) and each faculty investigator and collaborator playing a critical role in the proposed activities. A list of current and pending research support presented in NSF format is required for each person who provides a biographical sketch. These items are outside the 23-page limit.

Letters of Commitment from private sector partners indicating their commitment of funding, equipment, time, etc. must be included as appendices. These letters are outside the 23-page limit. Letters of support that do not make specific commitments should not be included.

It is critical that these proposals be aligned with institutional priorities. Letters of institutional commitment should be attached at the end of the proposal. Only letters making specific commitments should be attached (e.g., committing new faculty FTE to the research focus area, industry cost-share, space assignments, access to facilities, etc.). If new faculty FTE are included in the proposal, a commitment indicating the institution's willingness to hire the position(s) in a timely manner, in addition to supporting the position(s) after the award period, must be included. These letters must be signed by a university official that has the authority to make the commitments (vice-president for research, provost, etc.). If a proposal is selected to present to RCC, a university official having the authority to make the commitments contained in the proposal will be requested to participate in the presentation. Letters of support that do not make specific commitments should not be included.

No other appendices or attachments are permitted.

B. Budget Preparation Instructions

Proposals not adhering to these guidelines will be returned without review.

Cost Sharing:

While no cost-sharing or match funding is required, significant institutional commitment is required. This may take various forms including but not limited to the allocation of new tenure-track faculty lines, facility and space allocations, support staff, etc. These commitments should be fully described in the proposal budget justification.

Indirect costs may not be charged.

Budget Preparation Instructions:

The budget and budget justification should be appended to the end of the required proposal elements discussed in part A. of this section.

Governor's Research Center proposals should be focused on translational, applied research and education programs that meet specific industry knowledge and workforce development needs in the states targeted research sectors.

- Awards may request funding for a project length of two to five years.
- The actual number of awards is contingent on the quality of the proposals, number of submissions, their scope and available funding.

General Requirements

- The proposal budget should be prepared using standard NSF budget forms. Sub-awards should be included for each participating institution.
- While no cost-sharing or matching funding is required significant institutional commitment is required. This may take various forms including but not limited to the allocation of tenure-track faculty lines, facility and space allocations, support staff, etc. These commitments should be fully described in the proposal budget justification.
- A detailed budget description should accompany the budget forms. The budget forms and the budget justification are both outside the 23-page proposal limit.
- Letters from each participating institution specifically stating the institutional commitment are required. These letters are outside the 23-page proposal limit.
- Letters from each private sector partner specifically stating their commitment(s) to the project are required. These letters are outside the 23-page proposal limit.

C. Due Dates

Letters of Intent and proposals should be submitted electronically by the following deadlines:

- Letter of Intent (required - due by 5 PM CST):
 - February 26, 2021
- Proposals (required - due by 5 PM CST):
 - April 9, 2021
- External Review and Down Select
 - April/May, 2021
- Panel Presentations and Awards
 - May 17-21, 2021 or June 1-4, 2021

D. Where to Submit

Letters of Intent and Proposals should each be submitted electronically as a single file in PDF format as an e-mail attachment to Mel.Ustad@sdbor.edu and Marcy.Olsen@sdbor.edu .

Hard copies will not be accepted and will be returned without review.

V. PROPOSAL REVIEW INFORMATION

A. Proposal Review Process

Proposals submitted in response to this solicitation will be reviewed and evaluated by an external panel convened by RCC. Project directors and principal investigators/science leads (if different individuals) will receive a written summary of the review panel's assessment of their proposal.

Proposals will be reviewed using standard NSF criteria described in the GPG (intellectual merit and broader impacts). Additional evaluation criteria that the reviewers will be asked to consider in their assessment of the proposals include:

Institutional, State and Private Sector Fidelity (25%)

- Are the proposed activities consistent with the State Science & Technology Plan?
- Are the proposed activities consistent with institutional research and programmatic priorities?
- What is the potential of the proposed activities to address areas of industry interest and/or contribute to state economic development activities?
- What is the technical merit of the proposal and likelihood of success in competing for external funding?

Significance and Impact (40%)

- Are the proposed research activities consistent with federal funding priorities?
- Are the proposed activities transformational?
- What is the potential of the scientific activities to significantly impact R&D in the state?
- What is the potential for economic impact of the activities in South Dakota?
- What are the broader impacts of the proposed activities
- The strength of the multi-institutional interactions that will develop between institutions of higher education and the private sector and potential for their future growth.
- Is the budget proposed in a manner that is consistent with achieving these impacts?

Outcomes and Sustainability (35%)

- Does the proposed team have the capabilities to achieve the stated goals and objectives?
- What is the potential for proposed activities to achieve a self-sustaining funding status?
- The quality of the project management plan.
- Quality and strength of the proposed public/private partnerships.
- What is the project's economic impact: e.g., development of research and development partnerships with industry, creation of private sector jobs and the workforce to fill them, etc?
- Strength of the institutional commitment to the proposed project, which may include, but is not limited to, the level of commitment on the part of the institution to funding the salary of the PI and/or Project Director.
- Does the proposal effectively leverage partner's capabilities?