



**CLEMSON UNIVERSITY–SAVANNAH RIVER NATIONAL LABORATORY
EQUIPMENT/LAB INFRASTRUCTURE INITIATIVE
[CU-SRNL ELI]
2024–2025 CALL FOR PROPOSALS**

SUMMARY

The **Clemson University–Savannah River National Laboratory Equipment/Lab Infrastructure (CU-SRNL ELI) Initiative** provides financial support to Clemson University researchers for the purchase, replacement, or upgrade of major research equipment that increases and strengthens research collaboration between Clemson University and Savannah River National Laboratory (SRNL). The equipment is intended to be used in collaboration with SRNL and must be aligned with SRNL's core competencies (see Appendix A). For this initiative, major research equipment is defined as a unit having a useful life of at least five years and an acquisition cost of more than \$50,000. Deliverables must include the purchase and installation of equipment.

Funding amount: \$1,500,000 total funding available; number of awards and award size will depend on the number of proposals received and the amount of funds requested

Proposal deadline: Wednesday, October 2, 2024 at 4:30 PM

Funding period: Six months, beginning on November 13, 2024

ELIGIBILITY

Tenured or tenure-track faculty and research faculty are eligible to serve as PIs on proposals. Postdocs, staff, and emeritus, adjunct, or visiting faculty are not eligible to serve as PIs on proposals but may be included in research teams. U.S. citizenship is desirable for PIs.

Past recipients of R-Initiative funding who did not comply with the terms of funding are ineligible.

An individual may apply as PI or Co-PI on one CU-SRNL ELI proposal each year. A proposal must have a single PI. Other team members can be listed as Co-PI, Co-I, Collaborator, etc. SRNL personnel are encouraged to be included as senior personnel. The same proposal is not allowed to be submitted for consideration to the CU-MRI funding opportunity.

Each college may submit two proposals as the lead for funding consideration by the Office of the Senior Vice President for Research, Scholarship, and Creative Endeavors and by SRNL. Preliminary proposal down-selection at the college level will be conducted by the respective associate dean for research (ADR) offices. Please reach out to your ADR to inquire about the college-level down-selection process.

Selected college applications to this competition are not eligible for submission to the CU MRI R-Initiative.

BUDGETARY INFORMATION

The grant period is six months, beginning on November 13, 2024. **The purchase and ordering of the equipment must be completed within the grant period.**

Allowable Costs

- Equipment acquisition
- Shipping and handling
- Taxes
- Required software to operate the equipment and setup costs for the equipment, including initial company technical support

Unallowable Costs

- Facilities (F&A) costs
- Salary
- Materials and supplies
- Expenses for technical staff to operate and/or maintain the equipment
- Travel requests
- Facility upgrades required to house or operate the equipment

The PI and project team must assume the operational and maintenance cost of the equipment going forward.

Cost Share

Cost sharing is not required but highly encouraged and will be considered in the selection process. These funds may come from faculty members, centers, institutes, departments, schools, colleges, or a combination of these sources. Cost-share funds must be allowable under federal and state guidelines. Unallowable cost-share funds are costs on other federal projects, supplies on hand, etc. Cost-share fund sources not allowable are Fund 18, Fund 20, Fund 22, and Fund 25. The cost-share funds must be available during the project period.

PROPOSAL SUBMISSION

InfoEd Routing

The Clemson University Office of Sponsored Programs uses InfoEd to route and monitor research funding requests. All proposal documents, including electronic signatures, must complete InfoEd routing. PIs must coordinate with their OSP Support Centers as they normally would for an external submission. PIs are strongly encouraged to submit their proposals for routing and electronic signatures no later than two business days before the deadline to ensure electronic signatures are received on time. Only those proposals that have completed the InfoEd routing process and are marked as “R-Initiative Applied” by the deadline will be reviewed.

InfoReady Submission

PIs must submit their application to the Clemson InfoReady Research Portal (<https://clemson.infoready4.com/>) by **4:30 PM on October 2, 2024.**

Proposals that do not comply with guidelines will be returned without review.

PROPOSAL PREPARATION

Cover Sheet Information

Enter the following information into the InfoReady text fields:

- Project title beginning with **CU-SRNL ELI: [Proposal Title]**
- Name, affiliations, and citizenship status of the PI, Co-PI(s), and senior personnel
- Center affiliations, if applicable
- Name and email address of CU departmental fiscal officer
- Total Division of Research (DoR) budget request amount
- Total cost share
- Total overall budget amount (DoR + cost share)
- Prior R-Initiative funding. If the PI has prior R-I funding awards, provide the year of funding and the initiative (e.g., 2020 CU Fellows) and the associated proposal processing number (PPN; found in InfoEd)
- Anticipated deliverables

Proposal

Submit the proposal in InfoReady as a single PDF using 12-point Times New Roman font, one-inch margins, single line spacing, and 8½ x 11-inch paper size. The PDF should include the following components:

A. Project Description [5 pages, inclusive of figures and charts]

- Identify the proposed piece of equipment. Integrated equipment, while allowable, must have a strong justification and detailed description.
- Describe the research, training, and proposal activities that will be possible upon acquisition of the equipment and those activities' relation to SRNL core competencies.
- Explain how the proposed equipment will strengthen Clemson–SRNL collaboration and benefit both institutions.
- Detail which users will have access to the equipment and plans for sharing it between Clemson (centers, departments, schools, and colleges) and SNRL, as appropriate.
- Explain where the equipment will be housed, how it will be maintained and operated over its lifetime, and how the maintenance costs will be covered.
- Elaborate on whether similar equipment is currently available at Clemson and/or SRNL. If so, justify the need for the new equipment.

B. Budget and Budget Justification [No limit]

- Provide the internal budget prepared by your college's Office of Sponsored Programs pre-award office. This budget will include cost share, if applicable. If cost share is included, provide a clear breakdown of the cost-share funds and sources. Specify each cost-share source/chart string.
- Provide a budget justification using the R-Initiative Budget Justification Template.
- Provide vendor quote(s) for the proposed equipment, including shipping and installation/familiarization costs.

C. Biosketch [Page limit determined by format]

Submit a biosketch for each PI, Co-PI, and senior personnel, including any SRNL technical staff members on the collaborative team. Allowable formats include the R-Initiative Biosketch Template, or either SciENCv NSF or NIH.

D. Letter(s) of Support [No page limit]

Provide letter(s) of support from:

- the director(s) of the center/facility that will house the equipment
- the SRNL Deputy Director for Science & Technology

E. Documentation of Cost Share [No page limit]

Provide commitment emails or letters for the cost-share funds, if applicable.

REVIEW PROCESS AND CRITERIA

Funding decisions will be announced within six weeks of proposal submission. A committee comprised of relevant Clemson and SRNL reviewers will evaluate the proposals. Additional information, such as CVs, may be requested from the project team during the review process.

Evaluation Criteria

- Sharing of equipment between Clemson and SRNL
- Likely impact of funding on scholarship, productivity, and collaboration between Clemson and SRNL.
- Probability of increased extramural funding resulting from the purchase of the equipment
- Presence and condition of similar equipment in the university
- Space, operation, and maintenance plan for the equipment
- Significant discount secured from a vendor
- Amount of cost share provided by other units and individuals

Priority consideration will be given to requests that involve new collaborations between Clemson and SRNL, demonstrate a current lack of necessary equipment, and/or include cost-share commitments.

AWARD INFORMATION

Funding Initiation and Close-Out

Funds will be available to PIs as individual project accounts and will be maintained and managed by the Division of Research. The PI will work with his/her department/school/college to transfer the cost-share funds (if applicable) to individual project accounts at the beginning of the project. Funds will be available once cost-share funds (if applicable) are transferred.

Any residual funds at the end of the project will be returned to the Division of Research and, if applicable, those providing any matching funds. In the event the PI leaves Clemson during the life of the project, unspent funds will be returned to the Division of Research, and the project will be closed.

Research Compliance Requirements

All applications selected for an award must receive the required approvals from the Office of Research Compliance before the award can be activated.

SRNL is required to execute any activities in compliance with their managing and operating (M&O) contract between BSRA, LLC and the US Department of Energy.

Expenditure of Funds

The equipment order should be placed and in route to Clemson by the end of the by the end of the award period.

Expenditure of award funds must follow state procurement guidelines. State money cannot be used for personal gain (i.e., books, recordings [CDs, DVDs, etc.]) from which the author receives ANY portion of funds directly.

Project Income Policy

All income received from sales is considered Clemson University revenue unless the assignment of rights to the faculty member is granted by the Vice President for Research, Scholarship and Creative Endeavors and by the Clemson University Research Foundation (CURF). All equipment purchased through CU-SRNL ELI becomes the property of Clemson University.

No-Cost Extensions

No-cost extensions will only be considered in extraordinary circumstances.

DELIVERABLES AND FINAL REPORT

The primary outcome of the CU-SRNL ELI R-Initiative is the purchase of a major piece of equipment valued at over \$50,000. The purchase must be completed, equipment received and installed or in route and scheduled for installation, and all expenditures used for the purposes identified in the proposal by the end of the six-month grant period.

A final report must be submitted via the Clemson InfoReady Research Portal (<https://clemson.infoready4.com/>) within one year of the funding end date. The final report will be assigned to PIs via InfoReady two months before the end of the award period. Teams who fail to submit their final reports will be ineligible for future R-Initiative funding. Additional reporting may be necessary depending on state reporting requirements.

Awarded teams must also provide SRNL with a one-page project summary and a single slide overview of the project to be used in general communications about the project.

Should projects supported by R-Initiative funding result in publication(s), PIs must acknowledge in the publication(s) that the project was funded in part by Clemson University's R-Initiatives.

QUESTIONS

General questions about this opportunity should be directed to rifunds@clemson.edu. Questions about SRNL partnerships and support letters should be directed to Dr. Liz Hoffman (Elizabeth.Hoffman@srnl.doe.gov).

APPENDIX A

SRNL's Core Competencies in support of the Office of Environmental Management, National Nuclear Security Administration, and our other sponsors.

A distinguishing feature of multi-program national laboratories is a broad science, technology, and engineering (ST&E) base that catalyzes innovation and technology breakthroughs in support of mission initiatives. This base is built from the integration of exceptional people with deep disciplinary expertise in science and engineering disciplines, state-of-the-art equipment and instrumentation, partnerships, and modern research facilities. These core competencies are enduring and structured to support the evolution of our mission initiatives both now and in the future.

SRNL has six core competencies, as described below. In addition, a crosswalk that links each of our core competencies to core capabilities as defined by the Department of Energy's Office of Science is provided in the following table.

E1. Accelerating remediation, minimizing waste, and reducing risk: This is an enduring core competency for SRNL. It is being expanded and strengthened by bolstering the science foundation underpinning risk-informed remediation and long-term surveillance, including an emphasis on data analytics, modeling and simulation. It is also enabling optimization of long-term monitoring and surveillance in the context of changing land and resource use and climate variability.

E2. Enabling next-generation nuclear materials processing & disposition: This core competency is also an evolution of an enduring competency on nuclear materials processing and disposition. Its expansion is driven by highly skilled chemists and chemical engineers who are applying modern process intensification and other expertise to move towards smaller scale processing of a diverse family of nuclear materials. It also advances efforts to address the dispositioning of excess weapons-usable materials.

E3. Creating manufacturing solutions for EM, NNSA, and energy security: This is a new core competency for SRNL under BSRA and is required to realize our vision for expanded manufacturing programs across all three mission initiatives, with a goal of de-risking advanced manufacturing innovations to accelerate adoption.

E4. Assuring production & supply of strategic materials & components: This core competency primarily supports our national security mission initiative and builds upon the well-established competencies in tritium processing, storage, and gas transfer systems. This core competency is being expanded beyond tritium to include R&D support for the production of plutonium pits at the Savannah River Site.

E5. Sensing, characterizing, assessing, & deterring proliferation: This core competency expands and strengthens SRNL's existing competency in nuclear materials detection, characterization and assessment in support of both the EM/LM and National Security Mission Initiatives. The expanded opportunity for this core competency lies in the extension of sensing, characterizing, assessing, and deterring nuclear proliferation into the Global Security aspects of our NNSA mission.

E6. Securing connected control systems & associated data: Under BSRA, SRNL has created this core competency to encompass cyber-physical solutions for securing the nation's electrical energy grid, while also supporting opportunities to strengthen the security of interconnected

manufacturing and other control systems and their data. It draws upon our integrated institutional computing capability and our connected infrastructure.

		FY20 Science-defined Core Capabilities Relevant to BSRA's Vision for SRNL																			
		Adv Computer Sci, Visualization & Data	Applied Material Science & Engineering	Applied Mathematics	Biological, Bioprocess Engineering	Biological System Sci	Chemical, Molecular Sci	Chemical Engineering	Computational Science	Cyber, Information Sci	Decision Sci, Analytics	Earth Syst Sci & Eng	Envir Subsurface Sci	Mech Design & Eng	Nuclear & Radiochem	Nuclear Engineering	Nuclear Physics	Plasma & Fusion Energy	Power Syst & Electrical Engineering	Systems Eng & Integration	
SRNL Expanded and Strengthened Core Competencies under BSRA	Accelerating remediation, minimizing waste, & reducing risk	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓					✓	
	Enabling next-generation nuclear materials processing & disposition	✓	✓	✓			✓	✓	✓	✓	✓			✓	✓	✓				✓	
	Creating manufacturing solutions for EM, NNSA, and energy security missions	✓	✓	✓	✓		✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	
	Securing connected control systems and associated data	✓						✓	✓	✓	✓									✓	✓
	Assuring production & supply of critical materials & components	✓	✓	✓			✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓		✓
	Sensing, characterizing, assessing, and deterring nuclear proliferation	✓	✓	✓			✓	✓	✓	✓	✓			✓	✓	✓	✓	✓		✓	✓