Division of RESEARCH

CLEMSON UNIVERSITY–SAVANNAH RIVER NATIONAL LABORATORY RESEARCH SCIENTIST AND POSTDOCTORAL SCHOLAR INITIATIVE [CU-SRNL SCHOLAR] 2024–2025 CALL FOR PROPOSALS

SUMMARY

The **Clemson University–Savannah River National Laboratory Research Scientist and Postdoctoral Scholar (CU-SRNL Scholar) Initiative** assists faculty, academic departments, colleges, centers, and institutes in recruiting, hiring, and training qualified new research scientists or postdoctoral researchers who are not currently affiliated with Clemson University. Researchers may be hired to conduct research projects in collaboration with Savannah River National Laboratory (SRNL), with the goal of increasing partnership between the university and SRNL. These collaborative activities must align with one or more of SRNL's core competencies (see Appendix A).

Funding amount: $75,000/year plus fringe benefits
Proposal deadline: Wednesday, October 16, 2024 at 4:30 PM
Funding period: Two years, beginning on the start date

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 and is required for the new research scientist/postdoc hire.

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 only one CU-SRNL Scholar proposal each year. A proposal must have a single PI. Other team members must be listed as Co-PI, Co-I, Collaborator, etc. An SRNL team member must be included on the project team as a mentor for the new hire.

Each college may submit two proposals as the lead for funding consideration by the Office of the 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 Fellows R-Initiative.

BUDGETARY INFORMATION

Allowable Costs
The only allowable costs are salary and fringe benefits for the new hire.

Cost Share
Cost sharing is not required but highly encouraged and will be considered in the selection process. Cost-share contributions may only go toward the salary and fringe benefits of the proposed researcher being hired. These funds may come from faculty members, centers, institutes, departments, schools, colleges, or a combination of these sources. All other items (visa, travel, startup, etc.) are the department's responsibility and should not be included in the budget. Cost-share funds must be allowed 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 16, 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 Scholar: [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 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 [3 pages]
- Explain the need and vision for the proposed position and how it will strengthen Clemson–SRNL collaboration.
- Explain how the proposed position will support Clemson's strategic priorities and one or more of SRNL's core competencies.
- Provide details on the proposed new hire's activities, including research and proposal submissions, and how these activities will be conducted at Clemson and SRNL.
- Describe where at Clemson/SRNL the proposed work will be carried out.
- List the proposed new hire's mentor(s) and primary supervisors at Clemson and SRNL.
- Identify the home department for the position.
- Provide a proposed timeline that includes the identification and hiring of the researcher.

B. Recruitment Plan [1 page]
Describe the recruitment plan to generate a pool of candidates that are U.S. citizens.

C. Sustainability Plan [1 page]
Describe how the position and the Clemson–SRNL collaboration will be sustained beyond the two-year grant period.

D. Training and Mentoring Plan [1 page]
Describe the training and mentoring that the new hire will receive from Clemson and SRNL.

E. Budget and Budget Justification [2 pages]
- 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.

F. Documentation of Cost Share [No page limit]
Provide commitment emails or letters for the cost-share funds, if appropriate.

G. Letter of Commitment [No page limit]
Provide a letter of commitment from the SRNL Deputy Director for Science & Technology detailing any SRNL involvement in this effort.

H. 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.

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

- Need and vision for the position
- Strengthened Clemson–SRNL collaboration
- Foundational integration of Clemson's strategic priorities and SRNL's core competencies
- Potential impact on Clemson research, scholarship, and extramural funding
- Long-term sustainability plan
- Training and mentoring plan
- Recruitment plan
- Budget and inclusion of cost share

Priority consideration will be given to requests that include cost-share commitments.

AWARD INFORMATION

Funding Initiation and Close-Out

An individual project account will be established by the Division of Research using the PI's department number. The account will be set up 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 the individual project accounts at the beginning of the project. Funds will become active once cost-share funds (if applicable) are transferred.

Any residual funds at the end of the project will be returned to the original source (either those providing cost-share funds or the Division of Research). 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.

Expenditure of Funds

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

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 the managing and operating (M&O) contract between BSRA, LLC and the U.S. Department of Energy.

Project Income Policy

All income received from sales is considered Clemson University revenue unless assignment of rights to the faculty member is granted by the Senior Vice President for Research, Scholarship

and Creative Endeavors and the Clemson University Research Foundation (CURF). Guidelines surrounding royalties can be found in the Clemson University Intellectual Property Policy and should be followed accordingly.

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

DELIVERABLES AND REPORTS

The CU-SRNL Postdoctoral Scholar initiative requires a midterm report and a final report. Both must be submitted via the Clemson InfoReady Research Portal (https://clemson.infoready4.com/). Awarded PIs will receive automated emails from InfoReady with access links to the reporting portal and materials two months prior to the end of each funding year.

Year 1 Midterm Report
A midterm report must be submitted by the end of the first year of funding. Year 2 funding is contingent upon the submission of the midterm report.

Year 2 Final Report
Submission of a final report is required and is due two months after the end of the funding period. A copy of all deliverables will be requested with the final report. Teams who fail to submit their reports will be ineligible for future R-Initiative funding.

Teams who fail to submit final reports will be ineligible for future R-Initiative funding.

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.

Additional reporting may be necessary depending on state reporting requirements.

In the event that the PI leaves Clemson during the reporting period, the reporting requirement will fall on the project team.

Should R-Initiative funding result in publication(s), PIs must acknowledge 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, & 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	✓	✓	✓			✓	✓	✓	✓	✓			✓	✓	✓	✓		✓	✓