



Savannah River National Laboratory

We put science to work.™

November 15, 2021

Transition to Battelle Savannah River Alliance (BSRA)



Vahid Majidi
Laboratory Director



U.S. DEPARTMENT OF
ENERGY

SRNL is managed and operated by Battelle Savannah River Alliance, LLC for the U. S. Department of Energy.



Transition to Battelle Savannah River Alliance Completed June 20

Regional Impact

- Employees Residence: ~30% in GA, ~70% in SC
- ~\$300M spent regionally
- First M&O with a HBCU partner
- Partnership with Ft. Gordon, SC National Guard, Citadel, Augusta University.



Aiken County Leased Facilities



BRSA: University Partner Collaboration

Future- Advanced Manufacturing Collaborative at USC-Aiken



Management Expectations – Culture of Simultaneous Excellence



Our Vision is Focused on Three Mission Outcomes Enabled by a Workforce Development Initiative

Environmental
& Legacy
Management

Environmental & Legacy Management
Provide risk-informed approaches that achieve sustainable regulatory end-states.

National
Security

National Security
Enable NNSA success by supporting a robust weapons stockpile while reducing threats through advances in proliferation detection technologies.

Science &
Energy Security

Science, Engineering, & Energy
Develop environmentally responsible and secure energy strategies through advanced engineering of materials & chemistry.



Workforce Development
*Deliver the intellectual resources needed
to execute the vision for the nation.*

Implement a workforce development initiative in collaboration with our five partner universities

• **Six-tiered workforce development initiative:**

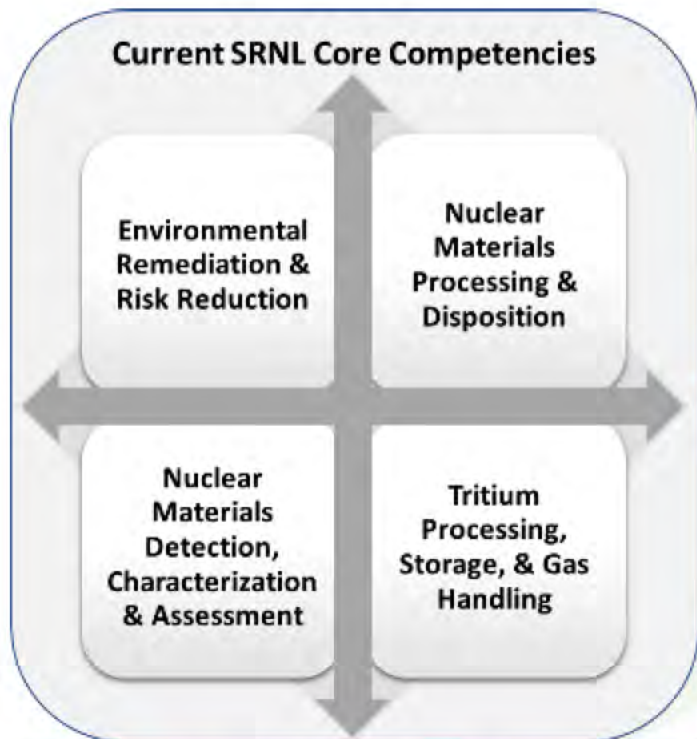
- Visiting scholar program
- Continuing professional development
- Post-doctoral scholar program
- Graduate Student Fellowships
- Undergraduate Student Assistantships
- Technical Training School



UNIVERSITY OF
SOUTH CAROLINA

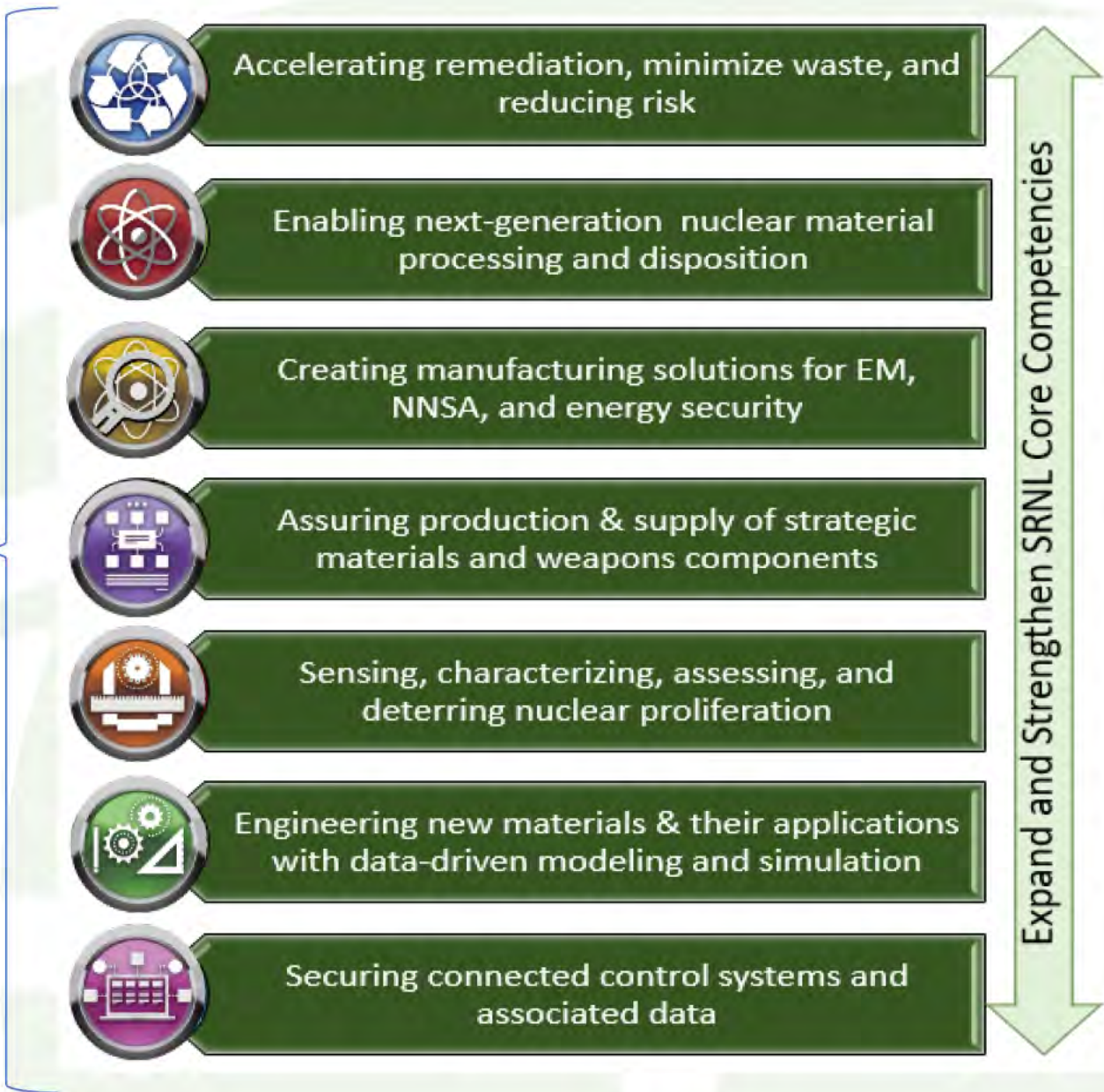


- **Expand our joint appointments in partnership with the BSRA universities to support expansion of our core competencies**



SRNL Management & Operations: University Partners

South Carolina State University is the First HBCU Management Partner of any National Laboratory



Core competencies cut across all Mission Outcomes and our Workforce Development Initiative



The Joint Appointment framework has several levels of engagement

- **An Overarching Agreement for strategic engagement – institutional agreement**

Philosophy & Intent: In most cases, the university Joint Appointee remains an employee of the university; no co-employment

- ✓ Definitions, Roles & Responsibilities

- ✓ Process

- ✓ Principles, including benefit to host university and SRNL

- ✓ Each individual JA at the institution will provide additional info for an Appendix that links the effort to SRNL strategy and defines scope, level of engagement, site access needs, IP management, etc for that individual

- **Subcontracting agreement for the JA, if funds are to be exchanged – typically linked to individual engagement**

- ✓ Links to specific SRNL programs, with defined deliverables and timelines

- ✓ Requires effective management by SRNL program managers and other SRNL responsible entities

- ✓ Needs to be consistent with the appendices in the Overarching Agreement above

Partnering across the state to create impactful opportunities: 2021

Advanced Research Projects Agency – Energy (ARPA-E) ONWARDS Funding Opportunity



ONWARDS = Optimizing Nuclear Waste and Advanced Reactor Disposal Systems

SRNL partnered with SC universities and nuclear industries to generate 8 proposals in response to the FOA.

Topics included TRISO fuel waste management, clean-up of molten salts for MSR, and advanced waste forms.

*Opportunity to provide solutions to
waste management challenges for the nuclear industry in SC and across the nation.*

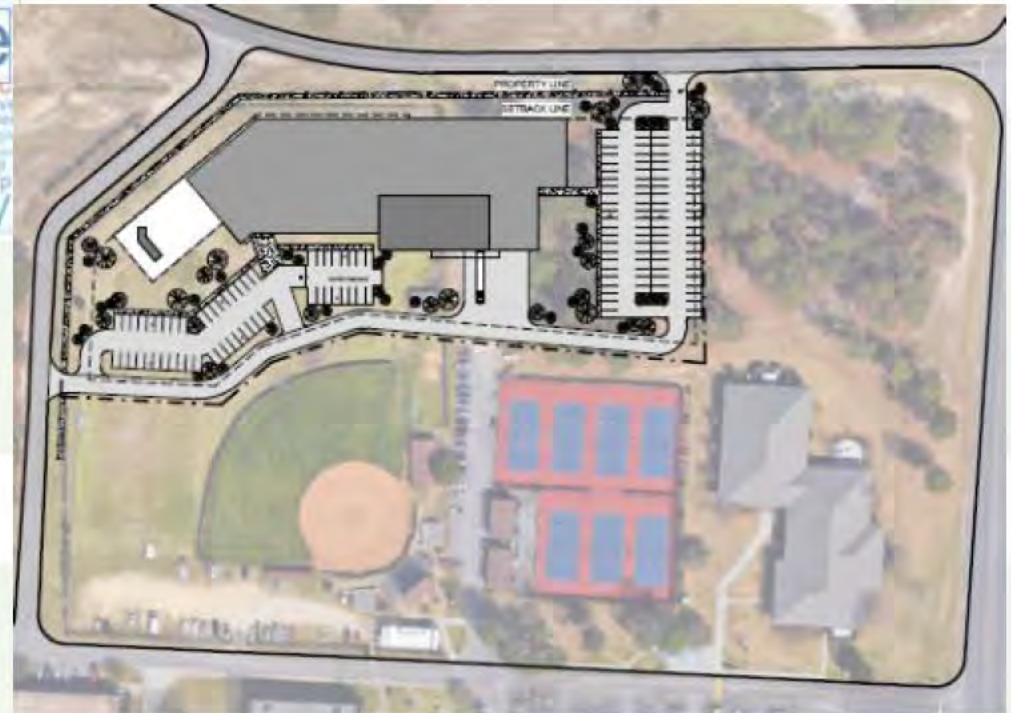
Near-Term Objectives: Advanced Manufacturing Collaborative

Secure Supply Chain:
National Lab Stakeholders
University Stakeholders
Government Stakeholders

Algorithm Partnership:
IP protection
Industrial Collaboration
University Collaboration

Public Data Availability:
Open Architecture
Curated
STEM Education
University Partnership

Manufacturing R&D for:
Advance Materials
Biological Products
Clean Energy Systems
Environmental Processes
National Security



SRNL's Five Year Strategic Objectives:

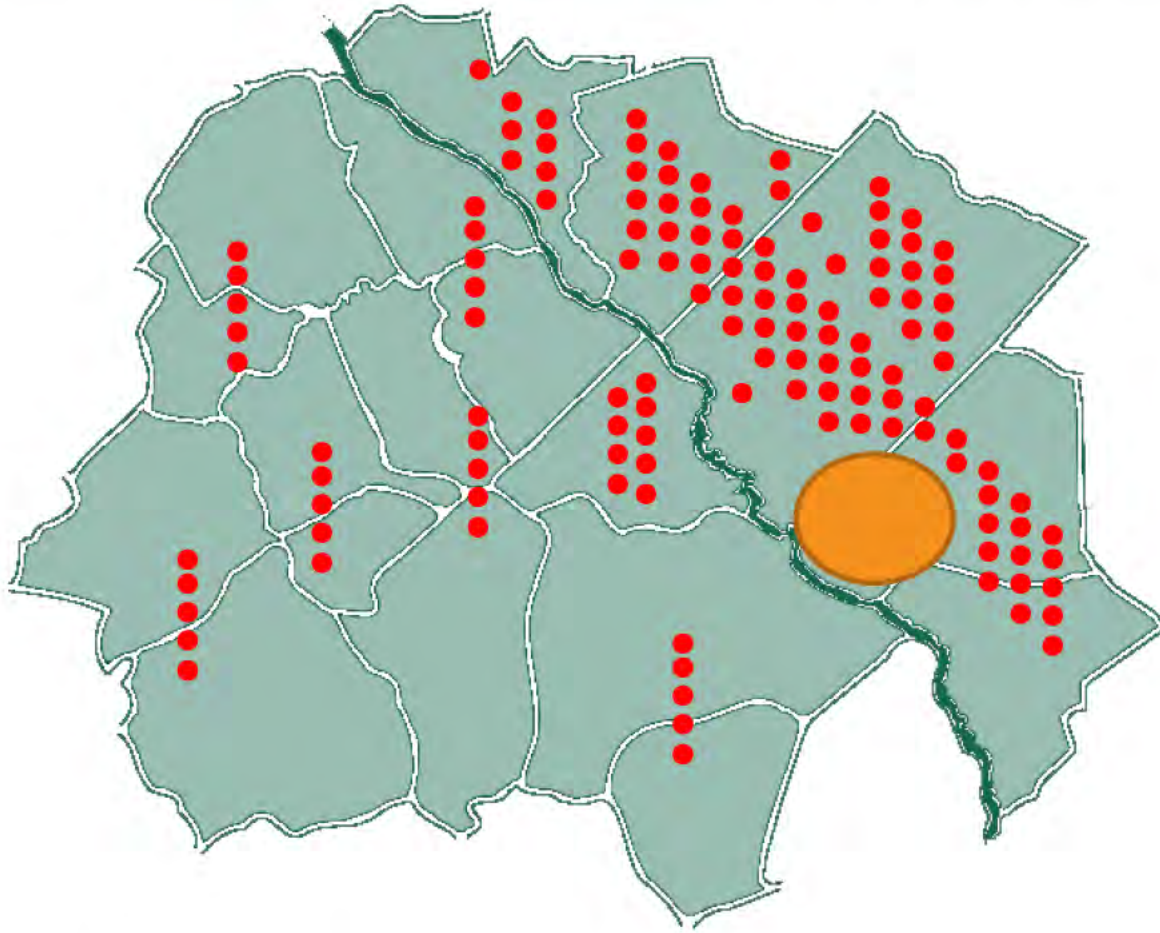
- 1) Work with Universities to Leverage SRNL's seven core competencies.
- 2) Reduce cost for DOE remediation activities.
- 3) Reduce cost for DOE monitoring strategies.
- 4) Facilitate NNSA's plutonium efforts.
- 5) Develop next generation of tritium processing technologies.
- 6) Establish efficient nuclear processing strategies.
- 7) Design and improve tritium systems for fusion research.
- 8) Enhanced scientific knowledge.
- 9) Mitigate the impact of climate change on EM, LM, NNSA and Programs.
- 10) Strong community service engagements in SC, GA, and a key partner in CSRA.



SRNL's Ten Year Vision: Better Future!

- 1) Societally impactful discovery science and advance engineering initiatives.
- 2) Leading champion for our environment and planet.
- 3) Cornerstone for our national security.
- 4) Advocate for advanced STEM education of our future workforce.
- 5) Community engagement to support our youngest citizens and enable a better future for all.

Recent Regional Hires (18 counties in GA and SC)



- Over 400 new staff in past 2 years
 - Average age down to 45
 - Several strategic hires
- Revitalized Post Doc program
 - ~ 30 Post Docs
 - Established Eisenhower post doc program
 - Process for conversion to staff
- Established Laboratory Fellow program
- Mentoring, personnel development, and recognition
- Recruitment of strategic positions

Central Savannah River Area (CSRA)

SRNL as an economic engine: > 100 households per year have moved to CSRA since 2018



- 300 SRNL positions eligible for retirement in 3 years
- Need additional 450 positions over the next three years to meet functional and mission needs at SRNL

Thank you!

