Transition to Battelle Savannah River Alliance (BSRA)

Vahid Majidi
Laboratory Director
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.

Transition to Battelle Savannah River Alliance Completed June 20
Management Expectations – Culture of Simultaneous Excellence

Excellence in Science & Technology
Meet our Nation’s and our customers’ needs through outstanding research and innovation

Excellence in Laboratory Operations
Effectively execute our mission in a safe, secure, and efficient manner

Excellence in Community Service
Lead by example of service to our communities: our Laboratory, our Profession, and our Region
Our Vision is Focused on Three Mission Outcomes Enabled by a Workforce Development Initiative

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

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

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

- Expand our joint appointments in partnership with the BSRA universities to support expansion of our core competencies
Current SRNL Core Competencies

- Environmental Remediation & Risk Reduction
- Nuclear Materials Processing & Disposition
- Tritium Processing, Storage, & Gas Handling
- Nuclear Materials Detection, Characterization & Assessment

SRNL Management & Operations: University Partners

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

Accelerating remediation, minimize waste, and reducing risk

Enabling next-generation nuclear material processing and disposition

Creating manufacturing solutions for EM, NNSA, and energy security

Assuring production & supply of strategic materials and weapons components

Sensing, characterizing, assessing, and deterring nuclear proliferation

Engineering new materials & their applications with data-driven modeling and simulation

Securing connected control systems and associated data

Expand and Strengthen SRNL Core Competencies

We put science to work.”
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
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 MSRs, 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)

Central Savannah River Area (CSRA)

- 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
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!