

Strategia

Clemson Elevate

Research Symposium – May 2022

CLEMSON 

Pre-Clemson Elevate Spring 2021 Cluster Development

CLUSTER	LEAD COLLEGE	FLAVORS
Circular Food, Feed and Energy Production	CAFLS	Energy Balances, Controlled environments, microbiology
Climate Resilience in Coupled Human-Natural Ecosystems	CAFLS	Genetics and gene conservation, Ecosystem Modeling, Invasive species
Safe, Nutritious, Secure Food	CAFLS	Plant metabolomics, nutraceuticals, food access, protein production, food safety
Astrobiology	AAH	Exoplanet characteristics, Origin of life, Philosophy/ethics
Global and Community Leadership	AAH	Data analytics, Women's leadership in global context
Interdisciplinary Design Innovation: Health & Wellness	AAH	Industrial design, Digital fabrication, Human factors in the built environment
Race Migration and Diaspora	AAH	Driver of Global Cultural Diversity, and Outcome of Conflict

*Criteria

- Current Strengths
- Opportunity
- Strong ROI
- Existing facilities
- PhD education
- Interdisciplinary

CLUSTER	LEAD COLLEGE	FLAVORS
Innovation in Data-driven Research	BSHS	Data systems and Devices (wearables sensors, etc.) Information security
Expanding Team Science	BSHS	A formal approach to advance success of interdisciplinary research
Innovations in Addiction Research	BSHS	Substance abuse Disorder (medicine, epidemiology, psychology, rural and public health)
Intersection of Technology and Successful Aging	BSHS	Extending independence through devices and therapies
Innovation in Environmental Health	BSHS	Diverse topics, occupational health, water quality, epidemiology
Future of Learning and Work	COE	AI-enabled learning, STEM-STEAM, Workforce development; Could be remote learning

CLUSTER	LEAD COLLEGE	FLAVORS
Artificial Intelligence	CECAS	AI, machine learning, autonomy, virtual and augmented reality, Cybersecurity
Advanced Materials	CECAS	Sensors and controls, Climate and coastal resilience, Smart materials
Health Innovation	CECAS	Medical devices, synthetic biology, Sensors and AI
Digital Humanities Research	Libraries	Oral historian, digital approaches applied to multiple humanities disciplines
Human Genetics Research	Science	Computational, statistical geneticist, bioinformatics
Medical Biophysics	Science	Medical biophysics experimentalist and computational
Neuroscience	Science	Neurobiology and Neuropsychology
Quantum Information Sciences	Science	Quantum information systems theorists and experimentalists

ClemsonElevate

Nationally preeminent in education, research, and service to our state



High Seminary of Learning

Deliver the #1 Student Experience

Every Student Thrives

- Excel in Experiential Learning
- Amplify Academic Success
- Promote the Clemson Experience
- Instill Leadership, Creativity, Innovative and Entrepreneurship Thinking



Life Changing Discoveries

Double Research by 2035 while positioning for AAU

Science that Serves

- Capitalize on existing and emerging research strengths to address societal needs
- Build AAU-aligned faculty profile
- Create world class research infrastructure
- Leverage innovation campuses & partnerships



Legacy of Service & Impact

Transform Lives Through Statewide Outreach

Communities Flourish

- Enhance educational and economic opportunities for South Carolinians
- Promote agricultural and natural resources excellence, and lead animal health issues for our state
- Improve the health outcomes of South Carolinians

Initiatives for North Star #2: **Double Research by 2035**



Build AAU-aligned
faculty profile
capitalizing on existing
& emerging research
strengths



Create world class
research Infrastructure



Leverage innovation
campuses &
partnerships

