FEBRUARY 2022

SC EPSCoR/IDeA

South Carolina's Established Program to Stimulate Competitive Research and Institutional Development Awards

$20 million

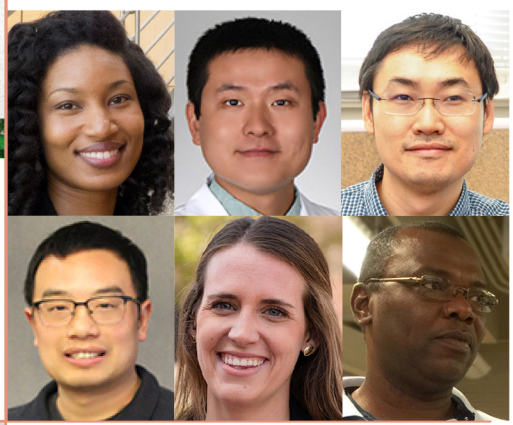
NSF EPSCoR RII TRACK-1 AWARD

Materials Assembly and Design Excellence in South Carolina (MADE in SC) for materials science research, education and development

>35 South Carolina-based, American-owned **SMALL BUSINESS** can receive seed funding tor SBIR/STTR by 2022

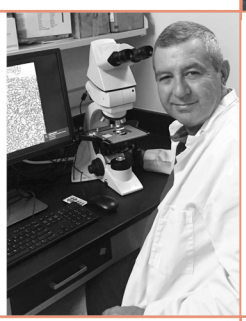
Over 200 New

faculty hires at institutions statewide since1995 with **16 MORE** hired through MADE in SC in 2021



$4.2 million for **STATE OF THE ART EQUIPMENT** to be purchased through MADE in SC by 2022 – accessible by all SC faculty members

>$2.1 million in **SEED FUNDING** awarded to faculty across SC to catalyze new research



320 undergrad and grad students to receive funded training in materials science and **35 HIGH SCHOOL STEM TEACHERS** to receive research training by 2022

SC EPSCOR/IDEA FUNDING

		$ Amount (Millions)
District 1	College of Charleston	$ 9.7
	Medical University of SC	132.6
	UofSC Beaufort	2.4
District 2	UofSC Aiken	1.1
District 3	Clemson University	97.6
	Presbyterian College	0.8
District 4	Converse College	0.6
	Furman University	8.6
District 5	Clinton College	0.1
	Winthrop University	7.1
District 6	Benedict College	0.2
	Claflin University	6.5
	South Carolina State University	3.2
	University of South Carolina	176.7
	Voorhees College	0.1
District 7	Coastal Carolina University	0.8
	Francis Marion University	2.4

TOTAL: 450.5

Other South Carolina instituions recevied subawards from those listed in the table.
Total amount shows EPSCoR and IDeA funding and co-funding since 2006.

KEY OUTCOMES

144 PEER REVIEWED articles published across multiple disciplines

30 Scientific Advocacy awards totaling **> $280,000** supporting diversity initiatives at the HS, undergraduate and graduate level statewide.

Claflin University Biomedical/ Biomaterials Research Summer Internship Program (BR-SIP)

What is SC EPSCoR and IDeA?

Established **P**rogram to **S**timulate **Co**mpetitive **R**esearch and **I**nstitutional **De**velopment **A**wards (EPSCoR/IDeA) programs are meritbased,competitive, authorized programs operating within five federal agencies (NSF, NIH, DOE, USDA, and NASA) across 25 states and three US territories, including South Carolina. These programs invest in research that will lead to new technologies, as well as train the future science and engineering workforce during a time of increasing global competitiveness and economic challenges.

In SC **NIH funded IDeA Programs** are represented by:

10 NIH Centers of Biomedical Research Excellence (COBRE): Strengthen biomedical research infrastructure (~$100 million combined over five years). The **COBRE Stroke Recovery Research** Center at the Medical University of South Carolina is a collaboration of medicine, rehabilitation,and engineering experts working to understand the impact of stroke on brain function.These studies will lead to better post-stroke therapy and improve quality of life for survivors.

SC IDeA Network of Biomedical Research Excellence (SC INBRE): Program office oversees NIH $18.2 million, five-year renewable grant focusing on biomedical research at statewide network of 13 member and 4 outreach institutions.

Impact on South Carolina

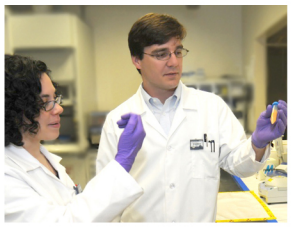
NSF

Dr. Ramy Harik from the University of South Carolina became Principal Investigator on an **NSF EPSCOR RII Track-2, $3.8 MILLION** 4-year, collaborative grant with West Virginia, focusing on developing cyber-infrastructure to support advanced manufacturing and enable data exchange across the manufacturing ecosystem to increase operational efficiency.

11 NSF **Faculty Early Career Development Program (CAREER)**

awards were made to faculty from Clemson and UofSC totaling **$4.2 MILLION**

DOE



Dr. Brian Powell (Clemson) is the PI of the project "Radionuclide Waste Disposal: Development of Multi-scale Experimental and Modeling Capabilities" which is funded as a **DOE EPSCOR IMPLEMENTATION AWARD.** This is a **$7.25 million, five-year award** for research into finding the safest ways of storing nuclear waste.

THE U.S. DEPARTMENT OF ENERGY AWARDED $60 MILLION

for 24 research and development projects aimed at reducing carbon dioxide (CO_2) emissions from passenger cars and light-and- heavy duty trucks.

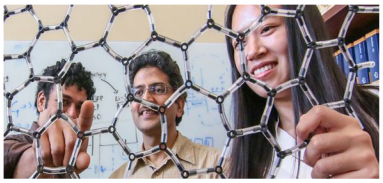
Clemson University received **$5.7 MILLION** for their project titled, "Manufacturing Demonstration of a Large-scale, Multimaterial Vehicle Sub-system."

SBIR/STTR

South Carolina-based, American-owned, for-profit small businesses are eligible to receive $6,000 seed grants through SC EPSCoR Phase-0 Program funding.

Resulting from research at Clemson University and in tandem with TriAltus Bioscience, a **PHASE-1 STTR GRANT FROM NIH** was awarded in the amount of **$256,576** for their project called "Universal affinity membrane chromatography for rapid one-step purification of proteins," that aims to make use of TriAltus' patented protein purification technology.

NASA



Dr. Apparao Rao (Clemson) received a $375,000 grant for his project, "Nanomaterials-based hybrid energy storage devices and systems for space applications"

USDA

Dr. Richard Boyles (Clemson) received a $300,000 grant for his project, "Cultivar Develpment: Combining Genomics-Enabled Breeding with Coordinated Regional Testing to Accelerate Wheat Genotype to Market."