

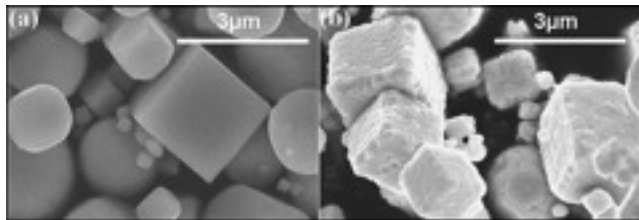
EPSCoR Funding in South Carolina

Workforce Development

- Enabled the hire of 107 new, tenure-track faculty members in science and technology at eight South Carolina colleges and Universities
- Engaged 23 institutions of higher education in science and technology research, including three Historically Black Colleges and Universities
- Supported the participation of 316 undergraduate students in research experiences, since 2005
- Placed eight postdoctoral fellows in historically black colleges to instruct nearly 200 students in contemporary research practices
- Created a Master of Biotechnology degree at Claflin University and Bachelor, Master and Doctorate in Biomedical Engineering degree programs at the University of South Carolina



Kidney vascular tree made of plastic using rapid-prototyping techniques (*Bill Beaver, York Technical College*)



Scanning electron microscope image showing nanocrystals before and after exposure to a hydrothermal process to alter the surface (*Terry Tritt, Clemson University*)

Industry/Commercialization

- Invested in small businesses such as Innegrity, LLC, an advanced fibers manufacturing firm, whose growth will create over 150 new jobs
- Generated \$3.1 million in Phase I and Phase II SBIR and STTR awards for local, high-tech small businesses
- Stimulated the award of 19 patents, contracts and licenses for commercialization to supported companies and faculty

Energy

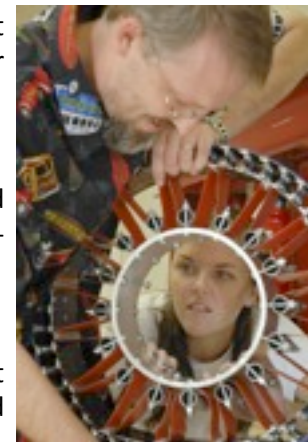
- Designed coatings to be applied to nuclear fuels, reducing the amount of dangerous waste and improving the safety of nuclear energy production
- Developed more efficient thermoelectric materials to convert heat into useful electrical energy to help streamline the collection of solar energy to supplement the demand for fossil fuels

Health

- Developed new biomedical technologies for regeneration of tissue and cells, using a scaffold-free, self-assembly approach to three-dimensional tissue engineering

Space

- Established partnerships with Michelin Corporation and the Jet Propulsion Laboratory, to design and test rover wheels for lunar and Martian exploration
- Improved renewable fuel cells that provide alternative and efficient sources of energy for manned space travel



Dr. Joshua Summers and an undergraduate inspecting the metallic rover wheel prototype (*Clemson University*)

EPSCoR Funding by Agency:

Agency	FY10 Funding Amount
NSF	\$10,951,139
DOE	\$1,341,426
NASA	\$1,125,000
Total	\$13,417,565