**S.C. Research Center for Recovery from Stroke**

Stroke is one of the most disabling conditions in the U.S., yet few options exist to treat and give hope to those who’ve suffered from one. Taking an innovative approach, the Medical University of South Carolina’s new stroke recovery research center aims to improve the treatment and long-term quality of life for stroke survivors.

1 in 6 people will have a stroke in their lifetime

7 million stroke survivors in the U.S., with a disproportionate number residing in the stroke belt

16,000 South Carolinians have a stroke each year. Although S.C. residents represent only 1 in 66 of the U.S. population, they represent 1 in 50 stroke cases

25% of strokes occur under the age of 65, with the age of onset younger in S.C. than the national average

4 out of 5 families in the U.S. are touched by stroke

73.7 billion in medical and disability costs for stroke in the U.S. in 2010

1 billion in yearly expenses for stroke-related hospitalizations and rehabilitation in S.C.

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**Four Synergistic Scientific Cores**

**QBAR**

The Quantitative Behavioral Assessment and Rehabilitation Core

This core answers the question: “What are patients’ impairments?” It develops critical standards and novel quantitative measurements of behavior and function using the latest in high-tech, state-of-the-art equipment including motion capture, electromyography and accelerometer-based devices.

**BSTIM**

The Brain Stimulation Core

Electricity is the currency of change in this core. Taking advantage of the pioneering work MUSC does in brain stimulation treatments, this core provides the expertise necessary for researchers to develop unique tools and methods to measure brain function and plasticity in the journey of figuring out how to induce brain changes to potentially treat damage caused by a stroke.

**NI**

Neuroimaging Core

This core leverages resources within the Center for Biomedical Imaging to show through sophisticated imaging techniques how treatments and research trials may work to augment the brain’s plasticity. Using neuroimaging to explore patients’ specific deficits will enable researchers to help stroke survivors have a better response to traditional and developing treatments.

**CTTR**

The Clinical & Translational Tools and Resources Core

Harnessing the power of biomedical informatics and biostatistics, this core leverages stroke data and research. The Stroke Clinical Registry Database is the centerpiece of this core and creates a powerful research tool and informational clearinghouse for researchers.

**Aims**

The center accelerates research by:

1. Providing a structure for the mentoring of junior scientists who will hold the keys to future breakthroughs.
2. Developing core resources that will empower researchers to easily tap into multiple disciplines that hold the most promise to accelerate research from the lab to the patient.
3. Promoting the vision of finding solutions for stroke recovery through a comprehensive center that integrates the best work that is happening in the field.

South Carolina Research Center for Recovery from Stroke

843.792.4608

The Medical University of South Carolina has received $10,823,406 from the National Institutes of Health (NIH) to support an Institutional Development Award (IDeA) Center of Biomedical Research Excellence.

The IDeA program builds research capacities in states that historically have had low levels of NIH funding by supporting basic, clinical and translational research; faculty development; and infrastructure improvements.

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