

Barrow

50 years, \$50 million

Women's Board of Barrow
Neurological Foundation
celebrates golden anniversary

Barrow names Associate Director, Chair of Neurology

Leading ALS physician-scientist
accepts key position at Barrow



The Ben & Catherine Ivy Foundation grants funds to Barrow Brain Tumor Research Center

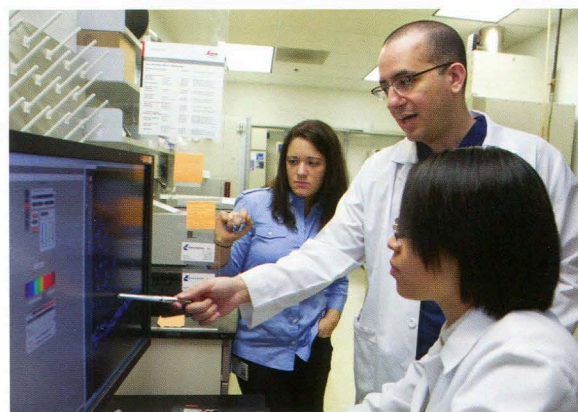
The Ben & Catherine Ivy Foundation has awarded a grant of \$885,294 to Barrow for brain cancer research. The Ivy Foundation is the largest privately funded brain cancer research foundation in North America. Catherine Ivy is the founder and president of the Ivy Foundation, which has a research funding focus on glioblastoma multiforme (GBM), the most common and deadliest of malignant primary brain tumors in adults.

The grant will support the Barrow Brain Tumor Research Center's research into the role of stem cells in brain cancer:

- In glioblastoma, cancer stem cells are thought to be the driving force of tumor progression and recurrence.
- The research team has identified a reservoir of cancer stem cells in humans that is undetectable by conventional MRI.
- This study is the world's first brain tumor clinical trial targeting cancer stem cells with focused radiotherapy beams.
- With this strategy, the team hopes to eliminate a source of glioblastoma recurrence, as well as cut off an outlet for its spread to other brain regions.
- The hope is to turn glioblastoma from a multi-focal disease to a self-contained process that can be controlled with localized therapy.

"With support from the Ben & Catherine Ivy Foundation, we can now finally take the steps necessary to develop and test this strategy in newly-diagnosed glioblastoma patients," said Nader Sanai, MD, director of the Barrow Brain Tumor Research Center. "Our hope is that it will not only be a relatively safe strategy, but one that starkly impacts the ability of glioblastoma to recur or move beyond its site of origin in newly-diagnosed patients."

"We are encouraged and remain strongly committed to moving the progress forward for patients diagnosed with brain cancer," said Ivy. "Barrow Neurological Institute is an important strategic partner in our objective to double the life expectancy of people diagnosed with GBM within the next seven years."



Yael Kusne, Nader Sanai, MD, and Ning Su, MD, in a lab at the Barrow Brain Tumor Research Center.

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Catherine Ivy

Barrow surgeons first to perform new procedure for spinal cord injuries

Barrow neurosurgeons implanted the world's first scaffolding device into the spinal cord of a patient.

The surgery involves inserting a bioresorbable scaffolding implant to bridge the gap of an injured section in an attempt to help the spinal cord heal. This first case is part of a pilot study to measure the clinical safety of the implanted device, which was developed by InVivo Therapeutics Holdings Corp. If successful, the new technique could become a standard protocol in the treatment of acute spinal cord injury.

"This is a major milestone for spinal cord injury treatment, and we are elated to be the first hospital in the world to perform this innovative surgery," said Nicholas Theodore, MD, chief of spinal

surgery at Barrow and principal investigator of the study. "This could be the first step in identifying a new treatment to improve the overall recovery of individuals with acute spinal cord injury."

The patient, Jordan Fallis, 25, will be closely monitored during recovery for changes or improvements to his spinal cord and mobility.

Fallis was injured in a dirt biking accident. He was airlifted to Barrow for emergency surgery performed by Dr. Theodore. After a week in ICU, Fallis was transferred to the hospital's Bruce and Deborah Downey Neuro-Rehabilitation Center.

"I'm excited to be the first patient in this research study that may one day become the standard of spinal cord

injury treatment," said Fallis.

To measure the safety of the device, the FDA has approved five individuals to undergo the procedure. Fallis will be monitored for three months before InVivo reopens enrollment. Other participants in the study are the University



Nicholas Theodore, MD

of North Carolina, the University of Arizona and the Washington University Medical Center.