

The Barrow “Neuroplex”

The Future of Barrow Neurological Institute



*Accepting Challenges. Rejecting Norms.
Pushing Boundaries.*



In 2017 Barrow leadership transitioned from Dr. Robert Spetzler (right) to new President and CEO Dr. Michael Lawton (left).

VISION: To be recognized as the world's leading neuroscience institute.

MISSION: To save human lives through innovative treatment, groundbreaking, curative research, and by educating the next generation of the world's leading neuro-clinicians and researchers.

Accepting Challenges. Rejecting Norms. Pushing Boundaries.

Barrow Neurological Institute has set the standard to accept patients who have been told there is no hope, reject the status quo of how things are supposed to be, and push the boundaries of established protocols to create new and revolutionary treatments – and save the lives of those suffering from Alzheimer's, Parkinson's, brain and spine tumors, stroke, aneurysms and other brain and spine disorders. Barrow doctors are making the impossible possible.

The Challenge

From the very beginning, Barrow Neurological Institute has been a pioneer in the medical community. When Barrow opened its doors in 1962 with 50 patient beds, it was revolutionary – one of just three neurological institutes in the United States at that time.

Now, as a leading international destination for neurological care, the institute needs a dedicated building to enhance patient treatment, accelerate medical discovery and save more lives. Barrow clinics, research labs, rehabilitation gyms, operating rooms, and offices are currently scattered across an eight block radius. The campus can be difficult to navigate, causing patients and their families confusion, added stress and precious time.

Because the world's leading specialists want to work at Barrow, we perform more than 5,500 neurosurgeries annually – the highest volume in the country. But with an aging population and an increase in cases treated each year, our surgeons are in need of additional space to provide lifesaving care for patients diagnosed with aneurysms, arteriovenous malformations (AVMs), brain, spine and pituitary tumors, spine curvatures and more.

At Barrow patient care is intertwined with research. Last year Barrow scientists conducted more than 300 clinical trials and nearly 1,000 studies. The world's top neuroscience researchers naturally migrate to Barrow recognizing the innovative track record that the institute has pioneered over 60 years. They come here to study brain and spine disorders with the hopes of discovering new treatments – and ultimately cures – for conditions like Alzheimer's, Parkinson's, ALS, brain tumors and cerebrovascular disorders. But these leading scientists are currently stymied because lab space is at a premium, risking innovative outcomes that could affect patients' lives. In addition, recruiting efforts are compromised if we do not have state-of-the-art facilities.

There is also no dedicated space for Barrow staff to convene – for ideas and innovation to flow from researcher to physician, from neurologist to neurosurgeon. The current space limits collaboration, the number of patients our doctors can help and the creation and expansion of programs.

BARROW LAST YEAR



5,539
surgeries performed



187
hospital and rehab beds



306
clinical trials



984
research studies



40
patients traveled from
40 countries last year



741
patients inquired through the
Barrow Second Opinion Program

49,950
total patients
treated

The Opportunity

In order to improve patient care and foster conversation among the best and brightest physicians and scientists that Barrow has recruited from around the world, we need to fund the construction of a five-story building that will serve as the heart of Barrow. Just as the Google campus is known to promote innovation, cooperation and forward thinking, Barrow's "Google Campus of Neuroscience" – the Neuroplex – is an integrated and centralized space that brings together clinical research, neurology and neurosurgery for enhanced patient care, increased research space and improved collaboration.

Barrow's leading specialists accept the toughest cases to treat the untreatable. Now it is time to bring together our innovators to advance patient care, drive discovery, and revolutionize medicine in a centralized hub.



Neuroplex

Accepting Challenges to ADVANCE PATIENT CARE



- Provide a unified space for Barrow, improving patient convenience with easier access to laboratories and imaging facilities.
- Enhance the patient and staff experience by providing both unified clinical care and clinical research trials in one well-designed, easy to navigate facility.
- Increase the space for neurosurgical offices and treatment rooms, allowing Barrow's world-class neurosurgeons to help more patients in need.

Rejecting Norms to DRIVE DISCOVERY



- Deliver personalized medicine for patients through a clinical trials center.
- Drive medical discovery by expanding basic science laboratories for increased research into brain and spine disorders.
- Offer additional space and a "store front" for the Barrow Innovation Center, allowing doctors to expand personalized medicine, transform medical procedures, develop new surgical tools and bring cutting-edge projects to fruition quickly.
- Provide a location for new centers of excellence, including the Barrow Aneurysm and AVM Research Center and the Barrow Artificial Intelligence Center.

Pushing Boundaries to REVOLUTIONIZE MEDICINE



- Foster dynamic synergies among neurologists, neurosurgeons and clinical researchers by housing them in a larger, integrated building.
- Transform the way modern neurosurgery is practiced by utilizing state-of-the-art virtual reality and augmented reality technology to combine MRI, CT and angiographic images to model a patient's brain and pathology. In a virtual reality studio, the surgical team will prepare for an operation and anticipate strategy and complications, and then during the surgery itself the team will use a computer-guided system.



Accepting Challenges for Patients Like Ella

Barrow doctors routinely accept the toughest cases that others deem untreatable – something that Bobby Khorshidi was grateful for when his 7-year-old daughter Ella required a lifesaving brain surgery.

When Ella suddenly started complaining of a severe headache and vomiting, Bobby rushed her to the emergency room where she was diagnosed with an arteriovenous malformation, commonly referred to as an AVM. The tangle of abnormal blood vessels had caused a hemorrhage in Ella's brain.

As Ella recovered from two emergency brain surgeries, Bobby and his wife Rebecca researched neurosurgeons to remove her AVM. Living in Los Angeles, they never expected to leave the area for medical care. But on the recommendation of their local surgeon, the Khorshidis came to Barrow to meet Dr. Michael Lawton – a world-renowned leader in treating AVMs, aneurysms and stroke.

Dr. Lawton was able to remove Ella's AVM, and she was discharged from the hospital five days later. She has almost fully recovered, and is back in school and enjoying play dates with her friends.

"Within minutes of meeting Dr. Lawton, I knew we were in the right place," Bobby says. "I will forever be grateful to Dr. Lawton and Barrow for saving my daughter's life."

A Neuroplex would allow Barrow to treat more patients in increasingly innovative ways – and save more lives like Ella's – due to the research and collaborative space a new building would provide.

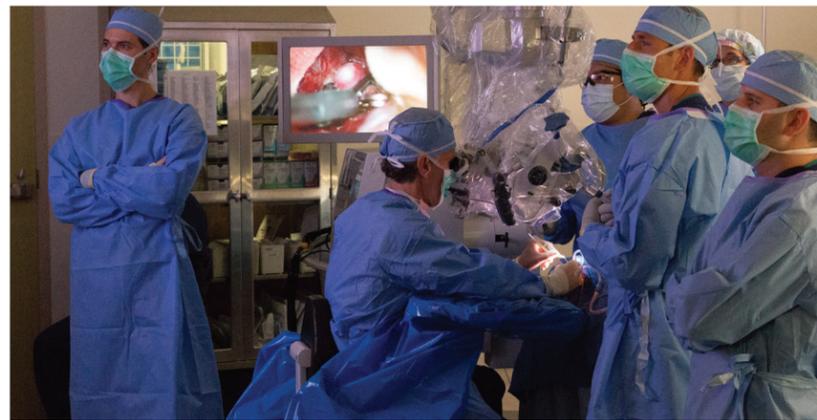
Accept the Challenge

Barrow was built through the collaboration of physicians and donors. Philanthropic gifts have helped bridge the funding gaps between basic and extraordinary medical care, with 100 percent of every donation to Barrow supporting the donor's designation. Without the seed funding that philanthropy provides, many promising research ideas, new procedures, surgical devices and medical treatments would never come to fruition.

But much more remains to be achieved. Every patient who cannot yet be cured is a reminder of all that still needs to be done.

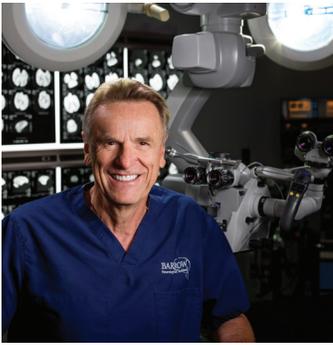
A new building will allow our scientists, clinicians and physicians to unleash their innovation to break through medicine's current limitations and save more lives. But we need your help.

Just as Barrow doctors accept the challenge of caring for patients with the most debilitating brain and spine conditions, we ask you to accept the challenge of helping Barrow continue to reject norms and push boundaries within the neurosciences. Please make a difference today and enable our world's leading specialists to save lives by making a meaningful gift to help build the Barrow Neuroplex.



If you are interested in accepting this challenge, please contact Katie Cobb, President of the Barrow Neurological Foundation, at (602) 406-1032 to discuss ways that you can help build the Barrow Neuroplex – the future of Barrow Neurological Institute – and, most importantly, save lives.





“The new building will address the space constraints that limit Barrow’s growth and drive major clinical and scientific advancements in key areas of the institute. I’m proud to support this next phase of Barrow and look forward to seeing the innovation, discoveries and growth that transpire.”

- Dr. Robert Spetzler, Emeritus President and CEO, Barrow Neurological Institute
Emeritus Chair, Department of Neurological Surgery



“This state of the art facility is critical to helping Barrow become the world’s leading neuroscience center, because it will change the environment in which our team works, create a portal for destination patients, and expand our space for research. The physicians of Barrow Brain and Spine are committed financially to supporting this ‘Neuroplex’ and advancing our mission of saving the lives of patients diagnosed with the most debilitating neurological conditions. We appreciate the community’s support of this effort.”

- Dr. Michael Lawton, President and CEO, Barrow Neurological Institute
on behalf of Barrow Brain and Spine Neurosurgeons



“This new Barrow Neuroplex facility will provide the collaborative, research driven, patient centric alchemy that can truly drive innovation. And we have proven time and again that at Barrow, innovation translates directly to changing – and saving – patients’ lives.”

- Dr. Javier Cárdenas, Director of the Concussion and Brain Injury Center,
Barrow Neurological Institute



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