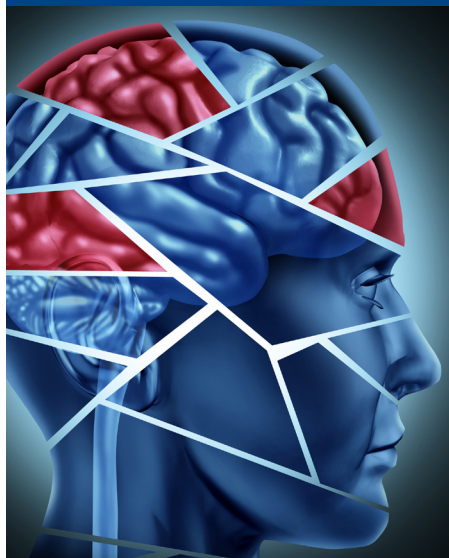


Neurocritical Care Program



For More Information

[BarrowNeuro.org/
NeurocriticalCare](https://BarrowNeuro.org/NeurocriticalCare)

#MindingWhatMattersMost



About Our Neurocritical Care Program

The Neurocritical Care Program at Barrow Neurological Institute provides state-of-the-art, comprehensive neurocritical care to patients with acute, serious, and life-threatening brain and spine injuries across a wide spectrum of functional changes associated with these conditions. Our multidisciplinary team comprises a highly skilled and specialized group of neuroscience professionals, including neurointensivists, neurosurgeons, multidisciplinary intensivists, neuroscience nurses, advanced practice providers, respiratory therapists, and critical-care pharmacists. We also collaborate with other disciplines within St. Joseph's Hospital as needed to ensure that each patient receives personalized attention that they need.

We care for neurosurgical and neurological patients throughout the entire continuum of care. Many of our patients begin their care with us in the emergency department. Others have had complex and challenging elective neurosurgical procedures or life-threatening conditions that require intensive care. This may include patients who are transferred from other hospitals.

The Barrow Difference

Multidisciplinary Excellence

Our neurocritical care experts collaborate extensively with other members of our neuroscience team. Barrow neurocritical care physicians work with neurosurgeons and other multidisciplinary physicians and intensivists to deliver excellent and comprehensive care for patients who have had neurosurgical procedures or acute/severe brain injuries. They also play a role in stabilizing emergent patients who need either neurosurgical or neurological care.

Our neurocritical care physicians could not do their job without an outstanding cast of neuroscience nurses, pharmacists, advanced practice providers, and respiratory therapists. Barrow is one of the largest employers of subspecialized and advanced practice neuroscience nurses in the world, and they are integral to the care team for our neurocritical patients.

Neuro-specific Expertise

Critical care physicians are an integral part of patient care in a hospital setting. The complexities of certain patients with critical neurological and neurosurgical conditions often benefit from a unique specialization.

Our core faculty are fellowship trained and board certified in neurocritical care with expertise in the intricacies of caring for neurological and neurosurgical patients in a critical care setting.

Education and Research

Our faculty have received awards from the NIH and other foundations to pursue research in neurocritical care. The director of our Neurocritical Care Division, Dr. Ruchira Jha, conducts translational research to develop individualized targets against cerebral edema and other forms of secondary injury to improve outcomes after acute brain injury insults including traumatic brain injury and subarachnoid hemorrhage.

We also anticipate launching a fellowship program in neurocritical care in the coming academic years.

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What We Treat

- Hemorrhagic Stroke
- Ischemic Stroke
- Seizures
- Traumatic Brain Injury
- Subarachnoid Hemorrhage
- Cerebral Edema
- Anoxic Brain Injury
- Coma

Meet the Team



Ruchira Jha, MD, MSc

*Associate Professor
Acute Brain Injury*

Ruchira Jha, MD, MSc, is a neurologist and an associate professor in the departments of Neurology and Translational Neuroscience at Barrow Neurological Institute. She is a clinical neurointensivist and the division chief of neurocritical care. She is board certified in neurology by the American Board of Psychiatry and Neurology and in neurocritical care by the United Council for Neurologic Subspecialties.

Dr. Jha's expertise includes clinical and translational research in neurotrauma and neurocritical care. She is a member of the American Academy of Neurology, the American Neurological Association, the National Neurotrauma Society, the Neurocritical Care Society, the Society of Critical Care Medicine, and the Society for Neuroscience.

Dr. Jha earned her medical degree from Harvard Medical School in Boston, Massachusetts. She also earned a Master of Science degree in clinical and translational research from the University of Pittsburgh in Pennsylvania. Dr. Jha completed her neurology residency, chief residency, and a fellowship in neurocritical care at Massachusetts General Hospital and Brigham & Women's Hospital through the Harvard Medical School Partners Program.

Dr. Jha has received prestigious awards from the National Institutes of Health (NIH) and other foundations to pursue her research. She uses a translational approach to evaluate and develop individualized targets against cerebral edema to improve outcomes after traumatic brain injury (TBI).



Fiona Lynch, MD

*Neurologist
Neurocritical Care*

Fiona Lynch, MD, is a neurologist and an assistant professor in the Department of Neurology at Barrow Neurological Institute. She is board certified in neurology by the American Board of Psychiatry and Neurology.

Dr. Lynch's expertise is in neurocritical care. Her clinical interests include the treatment of subarachnoid hemorrhage, seizures in critically ill patients, and neuroendocrine disorders. She is a member of the American Academy of Neurology, the Neurocritical Care Society, and the Society of Critical Care Medicine.

Dr. Lynch earned her medical degree from Rush Medical College in Chicago. She completed her neurology residency and a fellowship in neurocritical care at Rush University Medical Center.



Nassim Matin, MD, MPH

*Neurologist
Neurocritical Care*

Nassim Matin, MD, is a neurologist in the Neurocritical Care Program and an assistant professor in the Department of Neurology at Barrow Neurological Institute. She is board certified in neurology by the American Board of Psychiatry and Neurology.

Dr. Matin's expertise includes the care of individuals with life-threatening neurological conditions. She is a member of the Alpha Omega Alpha Honor Society, the American Academy of Neurology, the Neurocritical Care Society.

Dr. Matin earned her medical degree, along with a master's degree in public health, from Tehran University of Medical Sciences in Iran. She completed her neurology residency at SUNY Downstate Health Sciences University in Brooklyn and a neurocritical care fellowship at the University of Washington in Seattle.

Dr. Matin's research interests include brain injury after cardiac arrest, and systemic complications of neurological disorders such as severe acute brain injury and subarachnoid hemorrhage.



Patrick Crooks, MD

*Neurologist
Neurocritical Care*

Patrick Crooks, MD, is a neurologist in the Neurocritical Care Program and an assistant professor in the Department of Neurology at Barrow Neurological Institute. He is board certified in neurology by the American Board of Psychiatry and Neurology.

Dr. Crooks' expertise includes the care of individuals with life-threatening neurological conditions. He is a member of the American Academy of Neurology and the Neurocritical Care Society.

Dr. Crooks earned his medical degree from the University of Michigan in Ann Arbor. He completed his neurology residency and a neurocritical care fellowship at the University of Washington in Seattle.

Dr. Crooks' research interests include resident physician education and early detection of neurological decline using quantitative EEG.



Aditya Kumar, MD

*Neurologist
Neurocritical Care*

Aditya Kumar, MD, is a neurologist in the Neurocritical Care Program and an assistant professor in the Department of Neurology at Barrow Neurological Institute. He is board certified in neurology by the American Board of Psychiatry and Neurology.

Dr. Kumar's expertise includes the care of individuals with life-threatening neurological conditions. He is a member of the American Academy of Neurology, the American Heart Association, and the Neurocritical Care Society.

Dr. Kumar earned his medical degree from Panjab University in Chandigarh, India. He completed his neurology residency at the University of Texas McGovern Medical School and a neurocritical care fellowship at Columbia University Vagelos College of Physicians and Surgeons/Weill Cornell Medicine.

Dr. Kumar's current research interests lie in adaptive immune response to acute brain injury, iron-dependent cell death, subarachnoid hemorrhage, and traumatic brain injury.