The University of Alabama at Birmingham Department of Neurology is proud to offer a fully accredited fellowship in Neurocritical Care. The program offers a 2 year track designed for physicians who have successfully completed residency training in neurology, anesthesiology, emergency medicine, or internal medicine. Alternative 12-month tracks are available for graduates of neurosurgical residencies, and for physicians who have previously completed an ACGME-accredited critical care fellowship. Our program meets all requirements established by the United Council for Neurological Subspecialties; graduates are eligible for board certification in Neurocritical Care through UCNS. The program is directed by Dr. Angela Hays Shapshak, who has been a practicing neurointensivist for more than 8 years and has extensive experience in graduate medical education at both residency and fellowship level.

The NICU at The University of Alabama at Birmingham (UAB) is a dedicated unit consisting of 36 beds. The clinical service is predicated on a co-primary model, in which patients are managed collaboratively by the NICU team and the admitting service, which might be general neurology, vascular neurology, or neurosurgery. Critical care services are provided by 2 multidisciplinary teams consisting of attending physicians, advanced practice providers, fellows, various residents, clinical pharmacists, registered dieticians, and respiratory therapists as well as specialized neuroscience nurses. The NICU faculty is comprised of intensivists from a variety of backgrounds, including anesthesiology, neurology, and emergency medicine. All have specialized training in the intricacies of neurosurgical and neurologic diseases and employ the latest technologies to treat them. They work collaboratively with the Departments of Neurosurgery and Neurology to deliver the highest possible quality of care. Twenty-four hour resident coverage is provided by residents from anesthesiology, neurosurgery and neurology, along with advanced practice providers. Attending neurointensivist input is available at all times, either in person or by phone. Fellows who rotate in the NICU will learn from some of the best minds in the field.

As an institution, UAB offers many advantages to prospective neurocritical care fellows. UAB is a large, urban tertiary care center located in an underserved state. Our catchment area includes virtually the entire state of Alabama, as well as parts of southern Tennessee and the Florida panhandle. As a result, there is a rich and diverse patient population with a considerable burden of neurological and neurosurgical pathology. UAB operates a NAEC-certified Level 4 Epilepsy Center. Continuous EEG monitoring is available 24 hours a day, with certified clinical neurophysiologists available 7 days a week for study interpretation. In addition, UAB is the only Joint Commission certified Comprehensive Stroke Center in the state of Alabama. The Stroke Center, headed by Dr. Toby Gropen, is one of the busiest in the region. Cerebrovascular ultrasound is available 7 days per week, and CT and MRI services are available 24 hours a day.

One of the greatest strengths of our program is its multidisciplinary, collaborative approach to patient care. Our trainees will interact on a regular basis with faculty from the Departments of Anesthesiology, Neurology, Neurosurgery, and Emergency Medicine. This enables us to tailor our curriculum to each fellow's educational background, in order to ensure that each graduate is capable of the independent practice of neurocritical care at the time of graduation. Fellows in the Neurocritical Care program will have the opportunity to rotate through the Cardiac Surgery ICU, the Surgical ICU, the Medical ICU, and the Operating Room in addition to the NICU. These experiences will offer ample exposure to procedural skills such as airway management, critical care ultrasound, and vascular access procedures. Rotations on the Stroke Service, the Epilepsy Service, Neuroradiology, and Endovascular Neurosurgery are also available.

Neurocritical care fellows will benefit from working closely with fellows and faculty from our ACGME-accredited Vascular Neurology fellowship, run by Dr. Michael Lyerly, as well as the Critical Care Anesthesiology fellowship, run by Dr. David Miller. More information on these programs is available through the following links:

Vascular Neurology: https://www.uab.edu/medicine/neurology/education/fellowships/vascular
Anesthesiology Critical Care: https://www.uab.edu/medicine/anesthesiology/education/clinic-fellowships/crit-care-med
Program Structure

The UCNS recognizes 3 alternative pathways to accreditation, depending upon the incoming fellows’ prior training. Graduates of ACGME or RCPSC-approved residencies in neurology, anesthesiology, emergency medicine, and internal medicine are eligible for the 24-month track, which is outlined below.

Year 1 (24-month program)

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<td>NICU A</td>
<td>Anesthesia</td>
<td>NICU B</td>
<td>MICU</td>
<td>Elective</td>
<td>NICU A</td>
<td>SICU</td>
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<td>CICU</td>
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<td>Neurology</td>
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Year 2 (24 month program)

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<td>SICU</td>
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<td>NICU A</td>
<td>Epilepsy</td>
<td>MICU</td>
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<td>SICU</td>
<td>NICU A</td>
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The 12-month track for neurosurgeons is comprised of 10 months of critical care time, at least 5 months of which will be spent in critical care rotations outside of the neurosciences. The program is designed for trainees with considerable experience caring for critically-ill neurosurgical patients, with the intention of providing a firm background in critical care medicine to supplement the fellow’s existing skillset. Rotations may take place in the OR (Anesthesia), SICU, CICU, and/or MICU. With the remaining 2 months, fellows may opt to devote some time to research, or choose from a variety of electives. Options include cerebrovascular ultrasound, electroencephalography, vascular neurology and endovascular neurosurgery.

Finally, a 12-month track for fellowship-trained intensivists is available. Graduates of ACGME-accredited fellowships in Anesthesiology Critical Care, Surgical Critical Care, or Critical Care Medicine may be eligible for this program. The curriculum is designed to provide a board-certified or board-eligible intensivist with additional expertise in neurocritical care. Fellows on this pathway will spend 8 months in the NICU. During the remaining 4 months, fellows are encouraged to rotate in related neuroscience disciplines, such as neuroradiology, electroencephalography, vascular neurology, and cerebrovascular ultrasound.

Didactics

In addition to bedside teaching rounds, fellows benefit from a variety of educational opportunities. The Critical Care Medicine Lecture series provides a comprehensive overview of critical care principles, and is attended by fellows in the anesthesiology-CCM and pulmonary-CCM programs as well. In addition, the NICU faculty have developed a number of neurocritical care modules to supplement the general critical care curriculum. Finally, a variety of case-based conferences are held regularly, and provide an opportunity for fellows to discuss complex cases along with attendings and residents from a variety of disciplines. A partial listing is offered below.

**Offered Daily**

Neurosurgery Morning Report:
Case-based conference during which details regarding overnight admissions are discussed and films reviewed. Neurosurgery faculty lead discussions regarding diagnostic evaluation and operative management.

Critical Care Medicine Lecture Series:
Core curriculum for critical care fellows from the Pulmonary-CCM and Anesthesiology CCM programs, supplemented by the TRISAT lecture series.

**Offered Weekly**

Joint Cerebrovascular Conference:
Case-based discussion in which interesting and/or challenging patients with cerebrovascular diseases are presented by residents and fellows for discussion among vascular neurology, neurosurgery, and neuroradiology faculty. Relevant literature is discussed as well as any ongoing clinical trials for which the patient might be a candidate.
TRISAT Critical Care Lecture Series:
A weekly webinar on critical care topics including bioethics and evidence-based medicine

Neurology Grand Rounds
Anesthesiology Grand Rounds

Neurocritical Care Fellow Curriculum:
See attached list of didactic presentations prepared by neurocritical care faculty for the neurocritical care fellow, intended to augment the Critical Care Medicine Series.

Offered Monthly

Neurosurgery Morbidity and Mortality Conference
Joint Cerebrovascular Morbidity and Mortality Conference
Neurology Morbidity and Mortality Conference
Neurology Journal Club

To Apply:

The UAB Neurocritical Care program offers positions via the San Francisco Matching Program. Applicants may apply using the CAS, which is available at the San Francisco Match website (https://www.sfmatch.org/).

For More Information, please contact:

Angela Hays Shapshak, MD
Associate Professor of Neurology and Anesthesiology
Program Director, Neurocritical Care Fellowship
RWUH M226
619 19th St. S
Birmingham, Al 35249-3280
Phone: 205-934-2401
E-mail: ahays@uab.edu