

INVESTING IN THE FUTURE

CLINICAL RESEARCH SCHOLARS IN NEUROSURGERY



A LEGACY OF LEADERSHIP



J. Garber Galbraith, MD
1954-1978



Griffith R. Harsh III, MD
1978-1986



M. Stephen Mahaley, MD
1986-1988



Richard B. Morawetz, MD
1988-2006

The Department of Neurosurgery at the University of Alabama at Birmingham has a storied tradition of excellence in patient care since its inception in 1945. It became a center of resident training and clinical science and research in 1951, when the Residency Training Program was initially accredited. Over the next 40 years, led by internationally recognized surgeon-scientists, the Department provided expert neurosurgical care to thousands of needy patients in the state and region, trained dozens of physicians as neurosurgeons, and became a nationally recognized contributor in clinical and laboratory neurosurgical research. Our Residency Training Program has expanded from one trainee per year in 1991 to two trainees per year in 2007 to three trainees per year in 2009, for a total of 15 in 2013.



James M. Markert, MD, MPH
2006-present

As a result of these leadership decisions, the recruitment of new faculty and the promotion of clinical and laboratory scientific inquiry, UAB Neurosurgery is a top tier program in clinical productivity, contributions to neurosurgical science, and the preparation of residents and fellows for highly skilled, evidence-based practice.

In all quantifiable areas/arenas in academic neurosurgery, UAB Neurosurgery is expanding — increasing its expertise and capabilities; treating more patients with complex neurosurgical disease; leading the field in new approaches to patient care and technology, scientific study and understanding, and research and the generation of new knowledge; and training the best candidates in the most thorough and contemporary methods.

- We have the physician leadership.
- We have the clinical and research skills and expertise.
- We have the commitment.
- We have a proven track record in productivity, patient care, instruction, and education.

A COMMITMENT TO EDUCATION

“It is a true honor and significant responsibility to train tomorrow’s best neurosurgeons.”

–Mark N. Hadley, MD, FACS, Residency Program Director

What makes UAB’s Neurosurgery Residency Program distinctive is our **research-intensive paradigm**. From the first year through the last day of training, UAB Neurosurgery residents are schooled in evidence-based practice and clinical outcomes research. Mentored by faculty and supported by the Office of Clinical Research under the direction of **Beverly Walters, MD, MSc, FRCSC, FACS**, our residents are trained in scientific inquiry and are expected to conduct research and publish their findings in peer-reviewed journals. Resident-directed projects and publications have increased from 11 in 2009 to 75 in 2012.

This is not merely an academic exercise. It is an educational philosophy that produces highly skilled and intellectually curious neurosurgeons who are prepared to practice in any setting: academia, industry, and community practice.

To sustain this endeavor, we have established the **Neurosurgery Resident Education Fund**, and seek current-use gifts to support all of our **15 residents as Clinical Research Scholars at \$25,000 each**. These funds underwrite clinical research projects, travel to scientific conferences, and other related activities that contribute to resident training.

Gifts at every level make a difference.

Gifts of \$25,000 and up offer a naming opportunity at the donor’s discretion, i.e. the John and Mary Jones Clinical Research Scholar in Neurosurgery.

Ultimately, we seek to endow the program at \$7.5 million, which will produce investment income that will sustain the Clinical Research Scholars program in perpetuity.



THE POWER OF DISCOVERY

INVESTING IN CLINICAL RESEARCH TO IMPROVE OUTCOMES

We are dedicated to not only training expert clinicians, but **developing surgeon-scientists** who will add to the body of evidence about best practices. Research is the foundation on which the best patient care is built, so providing opportunities for our trainees to participate in research is a critical component of our program.

Under the leadership of Dr. Beverly Walters, the Office of Clinical Research plays an essential role

in our effort by providing the **infrastructure for designing, developing, and conducting cutting-edge research**. The staff of seven — one research administrator, one clinical trials administrator, three research nurses, and an office associate, plus Dr. Walters — assist residents and faculty in developing their ideas, negotiating contracts, creating budgets, and navigating the regulatory process. The OCR also provides support for writing, editing, and submitting grant proposals and journal articles, data collection, and analysis.

In addition, the OCR provides significant support to our efforts in **brain tumor research**, including our **\$13 million, NIH-funded Brain SPORE (Specialized Program of Research Excellence)**, of which **Dr. Yancey Gillespie** and **Dr. James M. Markert** are co-directors. The office also supports our participation in the **Alabama Comparative Oncology Network**, led by **Dr. Renee Chambers** from our faculty.

Other examples of the benefits of the OCR include acceptance of our second neurosurgery resident in two years to the highly competitive **National Institute of Neurological Disorders and Stroke's Clinical Trials Methods Course**. The Office of Clinical Research helped UAB's applicants prepare their study design and methodology, offering support on statistical analysis and other components of scientifically sound and feasible research projects. Again, with the support from the OCR, another resident is currently serving as an **NIH-funded post-doctoral fellow**, evaluating delivery of agents injected directly into the spinal cord to help treat diseases such as spinal cord tumors and ALS.



THE MEASURE OF SUCCESS

UAB TRAINEES MAKING A DIFFERENCE

The April 2011 tornado system that devastated central Alabama resulted in a large number of pediatric patients requiring neurosurgical intervention. **Fifteen pediatric surgeries were performed by nine UAB neurosurgeons in the ensuing 36 hours.** In the aftermath, those surgeons — including two residents and a fellow — worked with the Office of Clinical Research to catalog the injuries and review the neurosurgical response, seeking to determine what worked and what could work better in a similar, future crisis. They identified several critical response components:

- 1) prompt decision-making by a physician leader,
- 2) formalized patient scrutiny for the appearance of delayed symptoms, and
- 3) the need for a back-up team.

With help from the OCR, the findings were published by the *Journal of Neurosurgery* as the cover article in December 2011, and can now be used by other hospitals, departments, and medical teams to plan for the worst.

“UAB was always my first choice for residency training. Not only is it world-renowned for research, but it also serves a diverse population, and therefore provides a great opportunity to learn pathophysiology and procedures. I was looking for a training program that would provide me with the medical knowledge and operative experience I need to become a safe and effective neurosurgeon, and UAB has certainly lived up to my expectations. Our research-intensive focus has shown me just how much we still don't know about neurosurgery. It's exciting to see how wide open our field is for new ideas, procedures, and technology.”

Amber Gordon, MD
Fifth-Year Neurosurgery Resident
Vanderbilt University, B.S. in Biomedical Engineering
UAB School of Medicine



THE COMMUNITY INVESTMENT

WOMEN'S LEADERSHIP COUNCIL LEADS THE WAY

Founded in 2010, the **UAB Neurosurgery Women's Leadership Council** serves as a catalyst for support of the Department of Neurosurgery through fundraising and advocacy efforts. WLC members include grateful patients and family members of patients whose lives have been touched by UAB Neurosurgery.

Led by **Jacquelyn S. Shaia, JD, PhD**, the 42-member council seeks to secure philanthropic gifts to fund the Clinical Research Scholars Program, with a current-use goal of \$375,000 each year and an endowment goal of \$7.5 million.

The WLC is funding the first named Clinical Research Scholar through a portion of annual dues.



I think the research-intensive focus of the UAB Neurosurgery Residency Program helps to remind us that we should always question how and why we do things, to be vigilant about making sure what we do is helpful and effective, and focus on finding better ways to provide care to our patients. I'm very excited about the theme of the work I'm doing during my research year: economic analysis. Our current economic and political situation is evolving to require that providers of health care show that the treatments we provide are not only effective, but cost-effective. My work will help us determine if our treatments are cost-effective or, if not, what the target costs are to make them cost-effective.

Benjamin Ditty, MD

Fourth-Year Neurosurgery Resident
Johns Hopkins University, B.S. in Economics
University of Southern California Keck School of Medicine
Inaugural Women's Leadership Council Clinical Research Scholar



THE PROMISE OF TOMORROW

INVESTING IN THE NEXT GENERATION OF NEUROSURGERY LEADERS

A gift to the **UAB Neurosurgery Resident Education Fund** is an opportunity for former trainees, current and former faculty, and grateful patients to invest in the future of neurosurgery.

Gifts of \$25,000 and up offer a naming opportunity at the donor's discretion, i.e. the **John and Mary Jones Clinical Research Scholar in Neurosurgery**. Gifts at every level make a difference, and are fully tax-deductible to the extent allowed by law.



For information on how you can support UAB Neurosurgery and ensure that the next generation of neurosurgeons are prepared for the challenges of tomorrow, please contact:

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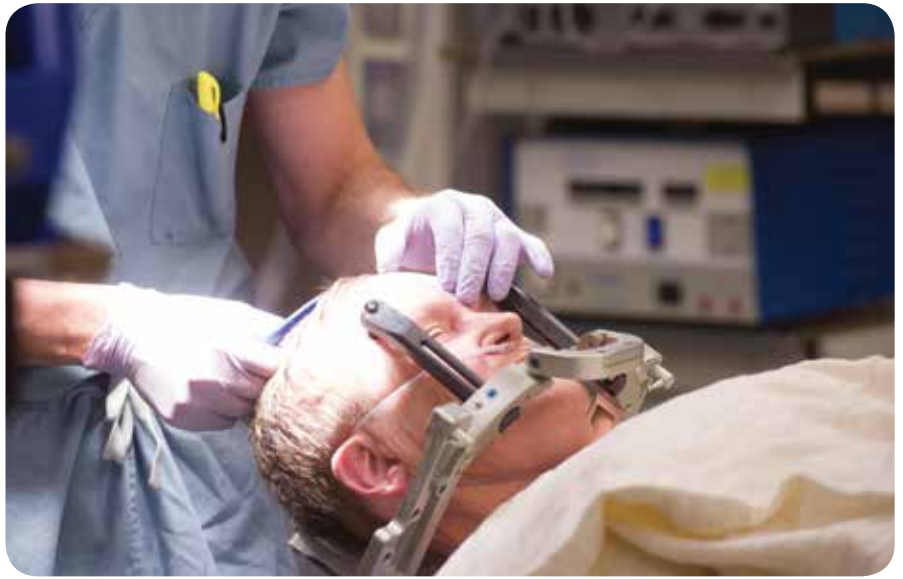
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THE UNIVERSITY OF ALABAMA AT BIRMINGHAM
DEPARTMENT OF NEUROSURGERY



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