

Professor Brody's *Brain Child*

UB'S NEUROANATOMY MUSEUM IS AN ENDURING RESOURCE



BY NICOLE PERADOTTO

Harold Brody, MD '61, PhD, has a profound appreciation for beauty and brains. That much is apparent from one look at the museum he founded in UB's School of Medicine and Biomedical Sciences.

On the third floor of the Biomedical Education Building, in an irregularly shaped room at the end of the hall, dozens of brain dissections are displayed in tall wood cabinets. Each is housed in custom-made Plexiglas cases, suspended in preservative liquid and bathed in dramatic light befitting a rare gem.

LINING THE WALLS are color photos of the brain along with series of X-Rays, MRIs and CT scans. One corner serves as a neuroanat-

omy hall of fame, highlighting the achievements of Thomas Willis, Alois Alzheimer and other groundbreaking researchers.

Officially, Brody's labor of love is known as the Neuroanatomy Museum. To the thousands of medical students who have toured it since its opening, it's known as "the brain room."

"If they didn't have this museum, they'd have a difficult time learning the anatomy," says Brody, a distinguished teaching professor emeritus of pathology and anatomical sciences.

"They could sit down with a brain specimen, but they couldn't see how the nervous system works together. Everything that we study in nervous system anatomy is demonstrated here."

Since the 1960s, when Brody first envisaged a neuroanatomy museum at UB, he saw it as a testament to the brain's elegant intricacies and a unique teaching tool. Three decades later, when his dream became bricks-and-mortar reality, he took painstaking efforts to organize a 3-D complement to traditional slide-and-textbook learning.



"From the beginning, students think that the brain is so incredibly varied that they'll never learn it. So what you have to do is present a practical picture," Brody says of his approach to the museum's exhibits.

"You have to present something where the student doesn't say, 'Eww—a brain.' You let them see all the different layers so they say, 'Gee—isn't that interesting.'"

To that end, the room is free of eye-stinging aromas. The dissections, with hand-painted pins highlighting the dentate nucleus, the cerebellar peduncles and other anatomical points of interest, look like works of art rather than models of scientific study.

The only inspiration a modern-day Mary Shelley* might find in this room is unintended: On blustery days, you can hear the wind howling through the windows.

More than Book Learning

BRODY'S DEFERENCE to the complexity of the brain is summed up in a quote by pioneering brain surgeon Wilder Penfield, which is posted at the museum's entrance:

"Treat the brain with reverent gentleness and it will reveal its secrets."

*Author of the novel *Frankenstein* (or, The Modern Prometheus), published in 1818.



INDEED, BRODY EMBRACED that philosophy long before he was hired at UB. He found his calling by the time he was 18, as an Army enlistee serving in World War II England. It was there—with no more medical training than the first-aid skills he'd learned in the Boy Scouts—that the teenager from Brooklyn was called on to assist a neurosurgeon operating on wounded G.I.s.

"We did anything that came to the table," recalls Brody, who still has the diary in which he recounted each procedure. "I didn't know an awful lot at the time, but I began to pick it up.

"There were very serious cases, and ones that weren't terribly serious cases. The head of the neurosurgical team, who was a major in the Army, would do most of the intricate surgery, but then for other surgeries he'd ask me, 'Why don't you do that one?'"

With that unorthodox introduction to neuroanatomy, Brody committed himself to by-the-book learning.

Upon returning stateside, he received his undergraduate degree in biology at Western Reserve University (now Case Western) and his PhD in anatomy at the University of Minnesota. From there, he joined the faculty at the University of North Dakota, where he directed the neuroanatomy program for four years.

In 1954, he was hired at UB to do the same. Two years later, Brody assumed double duty at UB—as medical school professor and medical student.

"The dean [Stockton Kimball] thought I'd have more to offer the medical students and the medical community in Buffalo if I had the background of a physician. It

was the right thing to do, but it was unusual. I was attending classes and teaching classes. The students were my classmates, but I was also grading them because they were taking my course."

Graduating in 1961, Brody received a Fulbright scholarship to

study anatomy in Denmark, where he helped establish a successful anatomical donor program. During his sabbatical he also toured the University of Copenhagen's medical museum, a vast collection of exhibits devoted to numerous fields of study, anatomy included.

As he marveled at the collection, Brody considered whether a similar museum—though one devoted exclusively to the brain—would be feasible at UB. When he returned to the medical school, he scouted potential locations, but found nothing suitable. As the years passed, the rigors of teaching and research afforded him scant time to do more than dream about such an endeavor. In 1971, his responsibilities in the medical school increased exponentially when he was appointed chair of the Department of Anatomy and Cell Biology.

Then, after the Biomedical Education Building was built in 1982, Brody considered housing his museum in an empty third-floor room. With financial contributions from alumni and other donors, the neuroanatomy collection began to take shape.

Performing some of the delicate dissections himself, Brody was finally assembling the museum he'd imagined for so many years. Working closely with him were

Thomas Wietchy, laboratory aide in gross anatomy, and Katerina K. Smith, former senior histology technician in the Department of Anatomy. Since it opened in 1994, the museum has become a haven for the study of the nervous system.

"Simply put, it's vital to the education of medical students," says Christopher Cohan, PhD, professor of pathology and anatomical sciences.

"For many years, when I first started teaching here, it was very difficult to get a good appreciation of what these structures looked like because most of what the central nervous system does is buried underneath the surface. But in the museum, these displays make it wonderful to look at the structure of the brain from different angles. That's something you can never really appreciate from pictures in a book."

Cohan, who joined UB's faculty in 1986, six years before Brody stepped down from the chairmanship, points out that his mentor's contributions to the medical school aren't limited to the museum. He's also responsible for creating what Cohan calls a world-class collection of learning materials: sets of 127 slides featuring stained cross sections of brain material that Brody created shortly after arriving at UB.

Some four decades later, they're still used by every medical student during the neuroscience module.

"He's given his whole career to teaching and research, and I have been so fortunate to have him as a model," Cohan says. "He's made an enormous impression on me. He has influenced how I have developed as a teacher; the ways I help medical students understand the brain—and love the brain—are due to his direction."

Over the course of his career, Brody has earned international recognition for his research on aging and cell populations in the nervous system. He served as editor-in-chief of the *Journal of Gerontology*, was president of the Gerontological Society of America and was on the National Institute on Aging's first advisory council.

Through it all, he has remained committed to UB. Although retired, he still maintains a busy schedule on campus. When he's had enough of writing in his Sherman Hall office, he may trade his favorite sweater—a Kelly-green cardigan he bought in Denmark—for a white lab coat and a stroll through classrooms, to survey students' progress. He serves on

numerous medical school committees, including the time-consuming Admissions Committee.

"With his reputation, he probably could have gone anywhere," reflects Roberta Pentney, PhD, professor emeritus of pathology and anatomy. "But I think his international reputation was the frosting on the cake for him. His primary focus was always the faculty he led here and the students he taught. He never seemed to want anything else, and he never chose to turn his attention elsewhere."

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FOR BRODY, revealing the wonders of the brain to others is reward enough. And that's not limited to medical students. Since the ribbon was cut on the neuroanatomy museum, he's maintained an open-door policy for anyone who takes an interest. That includes dental and occupational therapy students, psychology doctoral candidates, guests at parents weekend—even, on one occasion, trainees at a local beauty school.

Near the museum's light table hang the notes of appreciation that Brody has received from visitors. One of them, by a grade schooler named Laura, is written on a folded sheet of paper.

Dear Dr. Brody:

Thank you for letting us go to the brain museum. I thought it was interesting (and a little gross). I never thought I had life like that in my head! It looks so weird! Thanks again!"

"Isn't that great?" Brody says with a grin. From there, he continues escorting his guest through the museum. Ever the educator, he launches into a lively description of a nervous system pathway as he goes. **BP**