

THE WAITING ROOM



Return of 'The Greatest'

BY WALLACE MATTHEWS

It started as a craning of 14,000 necks, then grew into a spreading murmur that built to a roar. Finally, it erupted into a chant so familiar, and yet so rarely heard these days, that even the two boxers plugging away in the Madison Square Garden ring had to take notice.

"A-li!...A-li!...A-li!..."

Muhammad Ali, as instrumental as anyone for making this arena the center of the sports universe, had returned to the scene of some of his greatest triumphs.

But there was nothing triumphal about this return. The 64-year-old former world heavyweight champion, slowed by Parkinson's and the toll of 61 professional fights, had to be driven to ringside in a golf cart so he wouldn't need to be seen shuffling in on a walker. It was apparent that his condition had worsened in the year since I last spoke to him for a *Neurology Now* cover story [March/April 2006].

Ali had fought his epic first battle with Joe Frazier in this

arena 35 years earlier, suffering his first-ever defeat on the most glittering night in sports history. But now, Ali was fighting only his own body—once a marvel, now an enemy.

As the chant continued and the roar intensified, Ali momentarily seized control of his tremulous right hand, the one that once stung like a bee, and offered it up in a feeble wave. But there was no mugging for the camera, no biting-lip mock sneer, no bellows of "I am the greatest of all time!" That Muhammad Ali had not been seen in the Garden, or anywhere else, for nearly 20 years.

Returning this November for his daughter Laila's bout on the undercard of a heavyweight title fight, Ali entered the arena 10 minutes before she would. As he sat in his seat, flanked by wife Lonnie and Dustin Hoffman, Ali's body was wracked by uncontrollable dyskinesias. His arms and hands trembled and waved in unrelated dances, his mouth alternately puckered and stretched, and his eyes blinked involuntarily. His once-chiseled body now seemed shriveled and shrunken.

One by one, a procession of old friends made their way



ECHOES OF GLORY
Muhammad Ali evokes another Garden ovation, 35 years after thrilling fans in his epic first battle against Frazier.

to his ringside location. All were shocked and saddened by what they saw. Budd Schulberg—the author of *On the Waterfront* and *The Harder They Fall*, a boxing tragedy that paled next to the reality of the fate that has befallen Ali—came away crestfallen. Himself still energetic and productive at age 92, Schulberg was certain that Ali, a friend for four decades, no longer recognized him.

After a time, the well-wishers were shooed away and Ali settled back in his seat to watch Laila stop her opponent in four rounds. Throughout the brief bout, Ali's eyes, which had seemed perilously near sleep a few moments earlier, became wide and alert, the way they had years before when facing danger in the ring.

But as soon as Laila had finished her work, the world's most famous athlete was helped back to his golf cart and driven out of "The World's Most Famous Arena," the cheers and the chant of the crowd still ringing in his ears.

Muhammad Ali had brought a fight crowd to its feet one more time.

ALI: JUSTIN LANE/EPA/CORBIS (ABOVE); TONY TRIOLO/SPORTS ILLUSTRATED (INSET); AMY LEE: TIM MOSENFELDER/GETTY IMAGES

Rebel with a Cause

Amy Lee, the soaring voice of her generation, has emerged as a leading voice for epilepsy.

As lead singer of the rock band Evanescence, the 25-year-old Lee has won over millions of young fans with her angst-ridden Goth style and haunting lyrics. And now she's using her popularity to educate them about the disorder that affects her kid brother and nearly three million other Americans: epilepsy.

Lee is the face of the "Out of the Shadows" campaign, launched this year by the Epilepsy Foundation to raise awareness worldwide. The surge of interest sparked by her involvement hit a high note this fall when Evanescence's new album debuted at No. 1. In targeting a young audience, Lee hopes to eliminate the stigma associated with epilepsy by changing the way the next generation thinks about the disorder.

"This condition has the unfortunate tendency to bring out the strangest misconceptions—like the person is possessed, he or she is mentally challenged, the condition is contagious, et cetera," she says. "In my experience, people who don't know how to handle the situation do more harm than good. In schools and the workplace, it should be as well-known as how to help someone who's choking, how to react to a fire, or any other common emergency."

Lee learned firsthand about the effects of epilepsy from her 11-year-old brother. She even wrote a song for charity about watching cartoons with Robbie and brought him along to the TV studio when she performed "My Cartoon Network" live on—where else?—the Cartoon Network.

Since Evanescence's new CD topped the charts, her "Out of the Shadows" campaign's website (outoftheshadows.com) has been inundated with visitors linked to it by the band's official site. Now that's something to sing about.



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DR. McBRAINY & ASSOCIATES
Tucci, Feuerstein, and Varma conferring in “3 lbs”

Grey Matter’s Anatomy

BY ORLY AVITZUR, M.D.

When doctors watch medical shows on TV, we tend to roll our eyes. As a neurologist, I’m particularly critical when I see episodes about headaches always turning out to be brain tumors, stroke patients with mouths drooping on the wrong side, and coma patients waking up and jumping out of bed. So when I heard about a new CBS primetime series named for the weight of the human brain, “3 lbs,” I must admit I had my doubts. But the show seems to have gotten it right...so far.

Its three main characters reflect personalities that you, as visitors to our offices, might recognize. Dr. Doug Hanson (played by **Stanley Tucci**) personifies the impersonal but talented neurosurgeon who wastes no time on pleasantries, while Dr. Jonathan Seger (**Mark Feuerstein**) is his touchy-feely protégé who likes to get to know his patients before operating on their brains. My favorite member of the medical team is, of course, Dr. Adrienne Holland (**Indira Varma**), the confident and reassuring neurologist. “We like to try to solve all your problems *without* actually exposing your brain,” she boasts in the pilot episode.

“Indira would have made a terrific doctor,” James M. Schumacher, M.D., the

show’s chief medical consultant, tells me. “She has an unquenchable need to learn and a certain natural curiosity that make her perfect for this role.”

Dr. Schumacher has been teaching her how a neurologist interacts with patients and showing her how to perform a real neurological exam. The Harvard-trained neurosurgeon travels from his Florida practice to the New York City set twice a month to advise on the more technically intensive scenes. “He shows us how to handle every instrument during surgery,” Feuerstein says. To prepare for his role, Feuerstein observed an old friend from high school remove a brain tumor. “It was just an amazing experience for me,” he says. “It just blew my mind.”

In one scene, Hanson operates on a “tricky little astrocytoma” in an area of the brain affecting language and memory. The anesthesiologist jokes, “If you’re ever resecting tissue in my temporal lobe, do me a favor and burn out junior high.” That combination of entertaining humor and neuroanatomy-done-right has me hooked. And Dr. Schumacher hopes it will appeal to you, too. “I want viewers to know that we are going to do our best to be ethical and that we are not going to deceive them,” he says.

It’s good to see a medical drama with a real doctor in the house.

A News Anchor Ready for Primetime

On camera for the first time since he was severely wounded last January while covering the war in Iraq, former ABC anchor **Bob Woodruff** will tell the nation about his grueling and ongoing recovery from traumatic brain injury (TBI).

In a primetime special planned to air next spring, Woodruff will interview eyewitnesses and members of the medical team who saved his life. He will also focus on the military’s medical recovery teams and the stories of soldiers injured in Iraq.

Woodruff continues to undergo outpatient therapy for the TBI he suffered in a roadside bomb blast, ABC said this fall in announcing his TV special. He plans to be at work more regularly after the special, according to the network, although his future role is unclear.

In addition to the special, the 45-year-old father of four is telling his story in a book co-authored by his wife, Lee. In the memoir, the couple will discuss how their family was affected by his TBI. “No one knows exactly just how they might or might not behave in a crisis until it drops out of the sky and knocks you down like a bandit, stealing your future,” Lee Woodruff writes. “Sudden tragic events teach us more about ourselves than most of us ever cared to know.”





The Hundred Years' War

In November 1906, **Dr. Alois Alzheimer** delivered some startling findings to his German colleagues: the autopsy explaining his patient Auguste D.'s dementia and death at 56. After he finished presenting his paper titled "Regarding a Curious Disease of the Cortex" and showing slides of the twisted clumps and threads of protein that are the disease's hallmarks, he waited for the customary questions. There was only silence. "Clearly," the conference chairman said finally, "there is no desire for discussion."

Today, exactly 100 years after Dr. Alzheimer revealed his discovery, the disease named after him has become a global scourge and obsession. Not a day passes without Alzheimer's disease grabbing headlines. Consider some news from this fall alone:

- ▶ Studies showed the benefits of eating vegetables, the Mediterranean diet, and omega-3 fatty acids in lowering the risk for Alzheimer's.
- ▶ A large study found that antipsychotic medications provide little benefit in treating behavioral symptoms of Alzheimer's.
- ▶ A drug that might actually slow the progression of the disease rather than just delay its symptoms has entered the final phase of clinical trials needed for approval by the Food and Drug Administration.

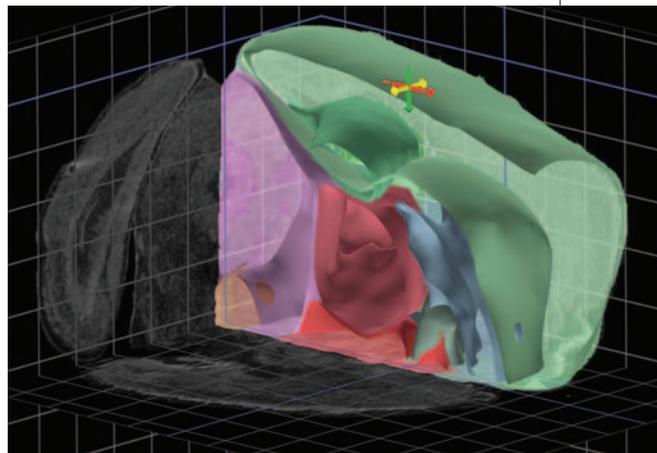
All of that is encouraging news. For, unless researchers find ways to slow or halt the disease, the number of Americans with Alzheimer's—currently 4.5 million—will have more than tripled by 2050 to 16 million.

Rest assured, Dr. Alzheimer, people are asking lots of questions now.

Of Mouse and Human Brains

When you've co-founded the world's biggest software company, what do you do for an encore? How about using computer science to help develop treatments for neurological conditions?

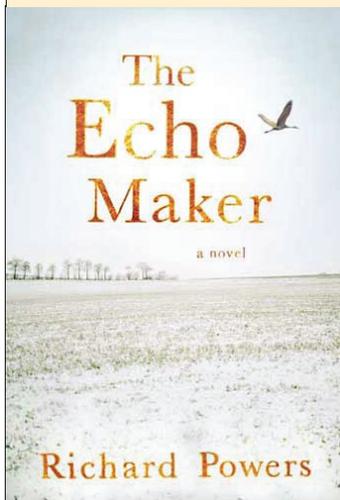
That's what Microsoft co-founder **Paul Allen** had in mind when he recruited leading neuroscientists to create the \$41-million **Allen Brain Atlas**—a 3-D virtual map detailing the 20,000 genes in the mouse brain. Because scientists can't get living samples of human brain cells, they turn to mice, whose brains are very similar to ours.



Since its completion this September, the **Brain Atlas** has become a valuable resource for researchers studying everything from Alzheimer's to autism. And it promises to help unlock the mystery of how the brain works in health as well as sickness.

A Novel Look into the Brain

Since its inception in 1950, the National Book Award for fiction has gone to the likes of William Faulkner, Saul Bellow, John Cheever, Philip Roth, John Updike, and William Styron. This fall, Richard Powers joined those literary giants by winning the prestigious award for *The Echo Maker*—an enigmatic novel about a man who develops a rare neurological disorder after a near-fatal automobile accident.



Published in October, the novel follows a 27-year-old protagonist whose recovery from traumatic brain injury is only the beginning of his journey to self-reckoning. When he mistakes his own sister for an imposter upon his emergence from a coma, she contacts a cognitive neurologist famous for his case histories describing the bizarre worlds of brain disorder. The neurologist recognizes a rare case of Capgras syndrome—a disorder in which sufferers act as if they're in a parallel universe where people they know are doubles or imposters. And what ensues is a gripping mystery that explores the extreme vulnerability of the human brain and the fragility of our sense of self.