

Dr. James W. May Jr.

Groundbreaking work in reconstructive surgery By Robin Roenke

As a UK senior in 1965, James W. May Jr. '65 AS was asked to be part of a student Centennial Committee charged with devising ideas to commemorate the university's 100th anniversary. As part of that group, May helped with the establishment of a formal ceremony to induct and recognize members of the then-newly founded University of Kentucky Alumni Association Hall of Distinguished Alumni, never imagining that he would one day be inducted into that very same group.

But that's precisely what happened in 2015, when — during the 50th anniversary of the first official recognition ceremony — Dr. May's name was added to the prestigious list of the association's Hall of Distinguished Alumni.

"It came full circle," says May, who grew up in Louisville and graduated with a degree in chemistry from UK before completing medical school at Northwestern University Feinberg School of Medicine and a surgical internship and residency at Harvard University and the Massachusetts General Hospital (MGH). "It was so moving to be inducted on the 50th anniversary of that particular enterprise, which I was lucky enough to be involved in, as a student, from the beginning."

As one of the world's most accomplished plastic surgeons, May was at the forefront of advancing a cutting-edge plastic surgery technique known as microsurgery in the 1970s. He is a professor of surgery at Harvard Medical School and served as chairman of the Division of Plastic Surgery at MGH from 1982 until his retirement in 2008. Author of more than 247 scholarly papers, May is a former chairman of the American Board of Plastic Surgery, as well as a former president of numerous professional med-

ical associations, including the American Association of Plastic Surgeons. In 2006, he was awarded the Lifetime Educational Award by the American Society of Plastic Surgeons for his decades of teaching to nearly 100 plastic surgery trainees and 30 Fellows over the course of his career. He was elected as an honorary member of the Royal College of Surgeons of England in 2008.

These days, May and his wife of 44 years, Linda May, divide their time evenly between a coastal farm in East Blue Hill, Maine, and the warmer climes of Boca Grande, Florida. They also pay frequent visits to their two grown children, Alison, a psychiatrist who lives in Mill Valley, California, and James, an economist and environmental engineer in Park City, Utah.

An occasional trip to Lexington is on their travel list, too. During the weekend of the UK Alumni Association Hall of Distinguished Alumni induction ceremony in 2015, May also attended a meet-and-greet event for chemistry students on the UK campus. Steve Yates, professor of chemistry in the College of Arts & Sciences, said the event was very informal. "Jim May talked at length with our students. They were very receptive to him and clearly enjoyed the opportunity to meet with him. His comments and advice were well received," Yates said.

While May has retired from surgical practice, he continues to work as a consultant to companies that produce plastic surgery products and instruments. Still, he carves out ample downtime in order to thoroughly enjoy the benefits of retirement. He is an active sailor and fisherman, an avid tennis player, and even, on a small scale, a gentleman farmer.

"My wife Linda has always loved cows," May explains. "She is a New

Jersey native, but she went to college in Vermont and fell in love with rural life. All of our married life, she asked for a cow. Most of our lives together, we were living in Boston, so instead of a real cow, I'd give her paintings or jewelry with cows. But that never seemed to satisfy her. Then, last year for her 70th birthday, I obtained two dairy cows — Fiona and Leona — who live now in our field at our Maine home. They were there to surprise her when we arrived after wintering in Florida. She said it was the best gift she'd ever received."

The Mays' coastal Maine property, which they have owned for more than two decades, has had its own share of stories. Their guest home is where the Broadway play "Sabrina Fair" was written. Later, the play was adapted into the movie "Sabrina," starring Audrey Hepburn and Humphrey Bogart.

Still, there's a part of May for which Kentucky will always be home. Both his parents were Kentucky natives. His father grew up in Brandenburg, and his mother's family had owned farms in Lexington on both Tates Creek Pike and Richmond Road, including land that became the Brighton development. "My grandmother was the one who coined the name Brighton," May says. "There was a little post office there, by the farm, and they had the opportunity to name the post office."

May's father had been a UK engineering associate professor before eventually accepting a job as an engineer at a Louisville firm, and his mother had taught English at UK. So May jokes that he grew up in Louisville never realizing there was any choice but to attend UK when it came time to enroll in college.

With his college choice settled easily, the only question on May's mind as a high school student was what to study. The answer to that question ended up being



close at hand. "We had a neighbor in Louisville who was a doctor, who took me under his wing and really encouraged me," says May. "That kind of mentor is so important when you are young."

With his neighbor's support, May set his sights on a career in medicine while still in high school. He spent his summers working first as an orderly and then as a scrub technician at Louisville's Methodist Hospital to get a feel for the profession.

It was as a scrub tech alongside the renowned Louisville-based Kleinert Group hand surgeons that May was first exposed to hand surgery. "I decided that hand surgery was eled to Australia, where I studied microsurgery, on a Harvard Cabot Fellowship," May says.

Microsurgery pioneer

Thanks to this extensive training, May launched his career as a plastic surgeon on the staff at MGH. "When I came back to Boston, I was about the only surgeon who was well-trained in microsurgery in the region. So I was able to help plant that seed in Boston and get microsurgery off the ground for the entire area of New England," he says.

Microsurgery, unlike previous plastic surgery techniques, al-



amazing and really cool, and so when I was in medical school, I compared every rotation with my earlier hand experience," says May.

After completing medical school at Northwestern, May launched into a five-year, general surgery internship and residency at Harvard, based at MGH, followed by a full residency at MGH in plastic surgery.

"When I completed formal training, I became interested in a subsection of plastic surgery called microsurgery. The irony of the whole story was that the microsurgery-hand surgery capital of the United States was Louisville. So we went back to Louisville, where I had grown up, and did a six-month fellowship with the Kleinert Group. The following year, our family trav-

lows surgeons to perform repair of small blood vessels under magnification, using stitches that are smaller than the size of a human hair. This advancement allowed surgeons like May to revolutionize and streamline wound repair and replantation procedures.

As a result, May's career is highlighted by many surgery firsts, including the first successful transfer of small bowel to reconstruct an esophagus in a patient at MGH whose esophagus had been removed due to cancer. May also was behind the world's first penis replantation surgery in the world, and the first elective hand transfer in the world.

The patient who underwent the hand transfer had been injured by a cannon explosion during a commemorative Revolutionary War reenactment event in Concord, Massachusetts. He

lost his left hand, except for his thumb and also lost the thumb on his right hand. Because he suffered severe damage to the nerves under his right arm, he'd also lost feeling and use of his right hand. Over many years of consultation with this patient, May ultimately suggested transferring the patient's right hand to his left side in order to give him a thumb that could oppose fingers and to give him a hand that would have some sensation. "With the hand where it was, he could never get sensation, since the nerves above had been torn apart. So, ultimately, we did a transfer operation to give him one good hand. It was the first operation of this kind in the world," says May. "It set the



stage for all of the hand transplants that are being done now, from one person to another. It proved, anatomically, that it could be done, that the nerves would regenerate and the tendons could be made functional." Over the course of his career, May performed more than 100 clinical replantation operations, in which he and his team reattached amputated portions of hands, faces and other body parts, which had been lost through traumatic amputation.

Another memorable case involved a successful hand replantation operation for a university professor, who had amputated his hand while woodworking.

A replantation operation is an endurance experience for the patient and surgeon.



James May (top row, second from right) was part of the Student Centennial Committee in 1965 appointed by UK President Oswald.

"If you can get that hand to live — if you can repair all the flexor tendons and all the extensor tendons, and all the blood vessels that will make this hand survive, and, most important, all the nerves that will give the hand sensation and give the muscles inside the hand the ability to move — you realize that at the end of the 24-hour operation, when you're dead tired, that you've done something for that patient that will make a huge difference every day

for the rest of their life," May says.

Still, May is careful to credit timing and persistence, as much as talent, for the landmark surgeries in which he was able to participate. "It was mainly timing because 10 years earlier, microsurgery didn't exist, and 10 years later, everyone knew how to do it. I just happened to arrive at the right time," he says. "It did also require persistence, because a lot of the things that happened in the early days of microsurgery were trial and error. There were a lot of errors, so you had to persist to make things work."

Looking back on the accomplishments of his career, May likens his serendipitous launch onto the plastic surgery scene, just as new, cutting-edge surgical advancement was taking shape, to a surfer lucky enough to catch the perfect wave.

"I'm not a surfer, but I've equated it to riding waves," May says. "You sit there on your surfboard, and you paddle and paddle and paddle. Then all of a sudden along comes a wave that is just spectacular. It's exhilarating. It's exciting. And it's brief. But in its splendor, it's memorable."

May says he feels lucky that his career coincided with the "wave" of advancement in plastic surgery ushered in by microsurgery. "Some people enter a medical specialty where there were no major waves during their entire career. I was just incredibly fortunate to arrive at a time when you'd open the Journal of Plastic and Reconstructive Surgery every month and read about a paper that you had submitted that was accepted, or learn about another advancement from someone else in another area of the country that expanded the power of what you could do for other people. It was just exhilarating and exciting. You could see and feel the growth of plastic surgery as a specialty," he says.