

Moving on up

Cape Fear Valley's Neuroscience Department is going places thanks to one man's vision

:: by Donnie Byers

When Cape Fear Valley Health announced plans last year to build a state-of-the-art education center, all eyes fell on the health system's burgeoning physician residency program. It made sense since the physicians-in-training would take up most of the building.

However, the new facility also sets aside room for Cape Fear Valley's equally growing Neurosciences division. That's welcome news for a program that's long sought a new place to call home.

For years, Cape Fear Valley's Neurosurgery and Neurology departments have quietly shared space on the health system's main Owen Drive campus. But the spaces were always too small or outdated for such cutting-edge programs.

As a result, the health system lost its share of promising neurologists and neurosurgeons over the years. That should come to an end in 2021, when Cape Fear Valley opens its new Center for Graduate Medical Education and Research.

The \$30 million facility will be built next to the Cape Fear Valley Cancer Treatment and CyberKnife Center and include five floors of ultramodern teaching and working space. Half the top floor will be designated as the new Cape Fear Valley Neuroscience Institute.

Lindsay McNeill, RTR (left)
and Charles Haworth, M.D.



▲ Architect's rendering of the future Center for Graduate Medical Education and Research and home to Cape Fear Valley's Neuroscience Institute.

The new location will give Cape Fear Valley's neurologists and neurosurgeons a penthouse view of the campus for a change. Charles Haworth, M.D., Cape Fear Valley's Medical Director of Neurosurgery, lobbied for the office upgrade even before agreeing to join Cape Fear Valley in 2013.

The veteran neurosurgeon envisioned an all-new spine treatment and wellness center that could do more cutting-edge surgery. The goal, he said, was for Cape Fear Valley to become a destination facility like larger, university-affiliated hospitals.

"We used to send out a lot of neurosurgery cases to other hospitals when I first came here," Dr. Haworth said. "We don't send them out anymore. We do them right here."

It's due, in large part, to the types of intricate brain and spinal procedures he performs. Several involve special computer-aided surgical equipment he helped develop.

Dr. Haworth is so adept at using the equipment that he trains other physicians how to use it. Needless to say, Cape Fear Valley agreed to buy the equipment if he came.

The agreement ultimately benefits the patient, since the equipment allows for much smaller and precise incisions during brain surgery. Dr. Haworth also uses computer-aided equipment during lumbar fusions and spinal alignments on trauma patients.

Such technology wasn't imaginable 25 years ago when Dr. Haworth started his career. He talks about technology enthusiastically, saying the extra precision comes in handy when performing delicate procedures.

"It leads to faster recovery times and better outcomes," he said. "This is our standard now."

Dr. Haworth's excitement doesn't lessen when discussing his department's pending move. He jokes about telling planners to hide powerlines underground to keep things pretty.

Deep down, however, he understands what the new office building means.

"I see it as a two-fold thing," he said. "It's a compliment from the CEO, saying our department deserved better. It will also help attract more people to come work with us."

The lure of a new facility certainly helped with his new colleague, Melissa Stamates, M.D. She joined Cape Fear Valley Neurosurgery last summer after completing residency training and her fellowship in Chicago.

The young neurosurgeon cited the Cancer Center's impressive growth as the main reason she joined. She says the growth represents a real need for more surgeons in the area, especially in the field of neuro-oncology.

Her budding practice sees patients of all ages, including infants. Their conditions range from simple bumps on the head to severe skull fractures and brain tumors. She also performs general spine care, but her passion is brain tumor surgery.

Dr. Stamates and Dr. Haworth both do on-call emergency procedures at Cape Fear Valley Medical Center, which can lead to long days in the operating room. But Dr. Stamates loves her work.

She originally wanted to be a general practitioner, but a neurosurgery rotation in medical school changed her mind. She loved the specialty so much, she eagerly woke every day at 4 a.m. to round with instructors.

"You're making life-changing decisions," Dr. Stamates said, "and thinking about all these scenarios and trying to decide what's best for the patient, so we have a lot of responsibility. I love it."



Matthew Banks, D.O.

The youthful exuberance is matched by her new colleague down the hall, Matthew Banks, D.O. The 34-year-old neurologist joined Cape Fear Valley Neurology last year after completing residency and fellowship training at Cleveland Clinic in Ohio.

Dr. Banks doesn't shy away from the fact that he's just starting his career, or that he looks awfully young for his age. He just goes about his business while carrying himself like someone much older.

Most of his patients require simple nerve blocks or injections to manage pain. He can also perform osteopathic manipulation on them, since he's a Doctor of Osteopathic Medicine.

Osteopathic manipulation is based on the idea that muscle or nerve tightness and restriction can cause other problems. Osteopathic physicians are trained to use their hands to gently move joints and tissues to correct the patient's range of motion.

"It's going to be a really nice building, with nice equipment and a nice team. We're putting together the total package in one place."

The concept is similar to chiropractic medicine, but osteopathic medicine can treat a broader range of conditions and problems.

Dr. Banks' specialty is Electromyography (EMG), which assesses the health of muscles and the nerve cells (motor neurons) that control them. EMG tests use tiny electrodes to translate the motor neuron signals into viewable data for analysis. He also performs neuromuscular ultrasounds.

Combined, EMG testing and neuromuscular ultrasounds can better diagnose nerve problems and abnormalities, such as carpal tunnel syndrome.

"You see how the nerves are functioning with EMG, but you can't physically see the nerve," Dr. Banks said. "With ultrasound, you can. So, when you put the two techniques together, you get a complete picture of how these neurological diseases are working."

Dr. Banks will have plenty of time – and even more space – to apply his new craft once his department moves into its new location. For that, he can thank his new colleague down the hall, who had the vision and resolve to ask for the office upgrade years ago.

"It's going to be a really nice building," Dr. Haworth said, "with nice equipment and a nice team. Everything about the place is going to be nice. We're putting together the total package in one place."