

Advanced Neurosurgical Training in SENEGAL

Dear Friends,

The journey from my boyhood in Senegal to the neurosurgical operating rooms of New York has been nothing short of magical. As I moved through my medical training, I always dreamed of bringing my expertise back to my native country, but I knew the realization of that dream would likely be many years in the future.

But in my last year of neurosurgical residency at Weill Cornell Medicine and NewYork-Presbyterian Hospital, my department chairman and mentor, Dr. Philip Stieg, came to me with two questions: Did I have any neurosurgical contacts in Senegal to collaborate with? And would I be interested in a project that would bring advanced neurosurgical training to a hospital there?

The answers, of course, were yes and yes. So began a journey that is still in its first stages, but that holds enormous promise for the future. Earlier this year I traveled to Dakar to visit my family, but I also paid a visit to the Clinic of Neurosurgery at the Centre Hospitalier Universitaire de Fann, one of the largest public hospitals in West Africa, to lay the groundwork for a larger visit later in the year.

In September of this year, that trip came to pass. I had the honor of traveling to Dakar to provide training to Senegalese neurosurgeons, accompanied not only by our chairman Dr. Stieg but also by my colleague Dr. Jeffrey Greenfield, who is a pediatric neurosurgeon, and Dr. Ashutosh Kacker, a Weill Cornell Medicine ENT surgeon. Over the course of a week, we performed advanced surgeries and provided classroom instruction, hands-on training in the operating room, and guidance on how to run an organization efficiently in order to provide guality patient care.

It is my honor to share here some of the stories and images our team brought back with us. I am proud to have started this important project, but the need is so great and our effort is still so small. We hope to get desperately needed equipment and supplies to Dakar, and more importantly we need to provide the training that eager neurosurgeons there need to use them effectively. I hope the stories you see here will move you to help by making a donation to support this important work.

Babacar Cisse, MD, PhD

The Challenge of Neural Tube Birth Defects

It seems that wherever there is suffering, the smallest among us fare the worst. Neural tube defects like myelomeningocele (a form of spina bifida) have become extremely rare in developed countries, where pregnant women are routinely counseled on the importance of taking folic acid supplements. In sub-Saharan Africa, however, some 40,000 babies a year are born with these defects. Fortunately, babies with myelomeningoceles have normal brain function and can have good outcomes when diagnosed and treated early. Dr. Greenfield and I operated on this little girl, from The Gambia, to repair the defect. However, only a widespread education campaign about folic acid during pregnancy will reduce the incidence of this birth defect, and only more training will prepare local neurosurgeons to intervene when prevention fails.

Help support our ongoing work. Make a tax-deductible donation today at weillcornellbrainandspine.org



Fall 2018



Top: I was proud to work with Dr. Seydou Boubakar Badiane, the head of neurosurgery at Centre Hospitalier Universitaire de Fann. Bottom: We posed with the operating room team at the hospital before we said our good-byes.



ADVANCED NEUROSURGICAL TRAINING IN SENEGAL 2018

We were in Dakar for just a week, but we accomplished a great deal:

- Performed the first endoscopic resection of a craniopharyngioma ever done in West Africa, on a 14-year-old girl
- Repaired a myelocystocoele, split cord malformation, in a 1-year-old girl.
- Removed a cavernous malformation
- Removed a brain tumor from a 10-year-old boy
- Repaired an encephalocele in 3-month-old girl
- Performed a ventriculo-atrial shunt on a 10-year-old boy
- Removed a giant adult pituitary tumor
- Removed a pediatric third ventricular mass

There is much more to be done. The hospital is in desperate need of basic equipment and supplies, and the neurosurgical team needs training in many procedures including minimally invasive ones. The only operating microscope that they have is very old and lacks basic features to help perform a safe operation. We were limited in the number of patients we could treat because the hospital has only six neuro-ICU—we had nowhere to send patients after surgery. They need more ICU beds, but they also need a step-down unit where patients can

go after endoscopic surgery instead of to an ICU.

We are committed to helping Dakar become a center of excellence. Not only do their brave and talented neurosurgeons care for local people, but patients from all over West Africa go there to seek treatment. I hope to initiate a weeklong multidisciplinary "boot camp," where we can train local neurosurgeons, nurses, and administrators in how to run an effective organization—financially, procedurally, and administratively. That's how we provide the best care in the West, and that's what we want for Senegal.







Clockwise from top left: Dr. Kacker training a local ENT surgeon to work with neurosurgeons; Dr. Stieg and I confer with the local team about a 24-year-old patient with a ruptured aneurysm; Dr. Greenfield operates on a 10-year-old boy with a brain tumor; I performed the first endoscopic resection of a craniopharyngioma in Senegal; A surgical microscope sits idle, unusable for neurosurgery because it is fixed-position, not movable.

A Meeting with the President

It was a great honor for us to be invited to the Presidential Palace to meet with His Excellency Mr. Macky Sall, the President of the Republic of Senegal. President Sall, an engineer by trade, is very well informed on medical issues and has a great vision for the future of health care in his country. Although it was a national holiday in Senegal, His Excellency Mr. Sall invited us, along with Dr. Seydou Boubakar Badiane, the head of neurosurgery at Centre Hospitalier Universitaire de Fann (far right in photo), and Dr. Cheikh T. Diop, the president of the hospital (far left). We look forward to expanding our program in Senegal with the support of His Excellency Mr. Sall and the government.

Top: I had the honor of introducing Dr. Stieg to President Macky Sall. Center: The five of us posed with a well-known symbol of Senegal. Bottom: Our meeting with President Macky Sall at the Presidential Palace.



SUPPORT OUR WORK IN SENEGAL

Please consider a donation to help us continue our life-saving work.

- \$8,000 would buy an ultrasound machine with cranial probe to help perform safer resection of brain tumors.
- \$5,000 would bring a young neurosurgeon from Senegal to the United States for a week to observe surgical procedures, department organization, and effective patient care procedures.
- \$2,800 would buy a Doppler for transcranial ultrasound imaging.
- \$2,500 would buy desktop computer for doctors to store and manage patient data.
- \$1,000 would buy a basic set of neurosurgical tools.
- Any amount donated would go toward desperately needed supplies used in the OR and recovery rooms every day.

Visit weillcornellbrainandspine.org to make a secure online gift, or make your check payable to Weill Cornell Medical College and indicate "Cissé-Senegal" in the memo. Mail to: Roseann Henry, Dept. of Neurological Surgery, 525 East 68th Street, Box 99, New York, NY 10065.