News that matters

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## Living his dream: Doctor fights tropical diseases in Africa, Americas

By Robert Joiner, Beacon staff



Dr. Frank O. Richards

Pr. Frank O.
Richards Jr.
has practiced
medicine in places
where flying bullets
and kidnappings are
as common as the
tropical diseases he
wants to eradicate.
His medical and

public health expertise took him to Guatemala in the late 1980s, when a guerrilla war was in full swing. He found himself doing similar work in Sudan while fighting between the north and south was splitting the country apart. He also happened to be in Nigeria last August when an Islamist group, called Boko Haram, bombed the United Nations headquarters where Richards had attended a meeting the day before.

"By the way we arranged our schedules and by the grace of God, we weren't in the U.N. building," he says, adding that running into civil strife can be "part of the job."

The job is a kind of war itself, one in which he is using the weapons of medicine and education in what should be a winnable fight against disease in Africa and the Americas. His upbringing didn't exactly prepare him for this work, having grown up in a comfortable University City home. He might have aspired to become a surgeon, like his father, or at least practice some other line of medicine in safer surroundings.

That might have been an option before he went to Cornell Medical School and got hooked on tropical medicine. The decision led him first to 20 years of service at the Centers for Disease Control and Prevention and finally to the Carter Center, both in Atlanta. He directs the center's programs to conquer malaria,

river blindness and two other debilitating diseases. One is schistosomiasis, commonly known as snail fever, a waterborne parasitic infection that harms internal organs. The other is lymphatic filariasis, which is transmitted by mosquitoes and can cause grotesque swelling in the legs.

## **Eradicating river blindness**

"I am living my dream right now," Richards says of his work, recalling the period about 25 years ago when he was naive enough to believe it was possible to make major strides toward conquering river blindness, particularly in Guatemala. He was elated last November when the Carter Center announced that Guatemala, and Mexico as well, had broken the transmission cycle of river blindness.

Their success was due in no small way to a medicine called Mectizan, donated by Merck, and

backing from the Carter Center itself, the Lions Clubs International Foundation and the Bill and Melinda Gates Foundation. Breaking the transmission cycle, the Carter Center says, meant Guatemala and Mexico could finally halt their Mectizan treatment programs.

The idea of conquering river blindness "sort of stuck with me," Richards says, and getting the job done "was like a personal career goal." More than medicine was required. They had to figure out ways to engage residents based on what was learned through surveys, discussions about the disease and its cure, and

an understanding of indigenous beliefs. In those days, it wasn't unusual to find him working on remote coffee plantations where people lived in "thatched huts, with dirt floors and chickens walking around and kids crying."

His voice trails off as if those experiences are removed from his current thinking, now that the hard work is paying off. Even so, he tries to put the team work in perspective, noting that conquering river blindness is "just one little piece" of progress. On the other hand, he says, "I can see all those faces and the hope and feel a small contribution was made toward helping them have a better life."

Another point that needs to be put into perspective, he says, is the fact that 99 percent of victims of river blindness are in African nations, including Cameroon, Ethiopia, Nigeria, Uganda and the Republic of Sudan. An estimated 100



This statue on the grounds of the Carter Center in Atlanta shows a child leading a blind man with a stick. The man is a victim of river blindness, a disease that affects millions of people in Africa and Latin America.

The Carter Center/M. Fr



Dr. Frank Richards speaks with Shehu Lliya, a Nigerian afflicted with elephantiasis, the most extreme form of lymphatic filariasis.

million people are at risk in Africa, compared to roughly 600,000 in Latin nations, including Mexico, Guatemala, Ecuador, Brazil and Venezuela.

Brought to the Americas mainly through the African slave trade, river blindness is caused by baby worms or larvae transmitted by flies. The larvae enter a person's skin and slowly mature into worms.

"The microfilariae (or baby worms) can get into your eye and cause river blindness," Richards says. "That's the blinding piece."

Interestingly enough, the microfilariae will not grow to become new adult worms unless they first pass through a fly, Richards notes. The fly has to bite and infect a human being to transmit the infection.

"The flies breed in rapidly flowing water, and that's where the river blindness piece comes from," he says.

When the fly bites another victim, the larvae are transferred to the fly, and the fly passes it to another person. The medication halts the chain by killing microfilariae.

The next stage in Guatemala will be a post-treatment surveillance lasting three years to determine if new cases are detected.

"Last year, knock on wood, will be the last year for distributing the medicine," Richards says. "It appears that this disease has been completely eliminated once and for all."

## Father was pioneer, too

Richards concedes that his father, Dr. Frank O. Richards, initially wasn't excited about his son's career path. Richards senior helped to break down barriers in medicine, becoming part of a wave of

black physicians who saw local medical schools and hospitals open jobs and staff privileges to them.

"He told me later that he thought I was crazy," Richards says of his father. "But the things I appreciate from my parents now, and being a parent myself, is how they supported me in pursuing my passion. They stood behind me and weren't pessimistic about my chances."

Richards adds, "I guess I'm kind of crazy. I sometime say that when I was young and foolish, I was young and foolish. (But) why am I doing this now? You sort of renew your

vows when you get out and see the faces of people and understand why you got passionate about this in the first place."

The trips to faraway places, he says, make him "understand that there is so much still to do, and I think that I get renewed strength from them rather than second thoughts."

Now 58, Richards says the nurturing attitudes of his parents have rubbed off in the way he deals with his own two children, one just out of college and the other soon to start college. "I try to emulate my parents. As a parent with kids who are interested in drama and sculpture and things like that, I wonder how they are going to make a living. But I think you have to have an opportunity to follow your passion."

Richards credits his mother, Ruth Allen Gordon, as being the "hands-on figure" who pushed him and his sister to excel in school. Motivation was natural for his mother, perhaps, because she came from a family that began producing college graduates starting with the first generation after slavery. His mom and great grandmother graduated from Talladega College, and his grandmother is a graduate of what is now Cheyney University.

Richards' other mentor in St. Louis was Dr. John Gladney, who died recently. He once served as chair of the Department of Otolaryngology at Saint Louis University Medical School. He was the first African American to head a basic science clinical department at the school. "He was like a second father to me," said Richards, calling Gladney not only a mentor but a good tennis partner.

Richards' parents moved to Boston last year. Their other child, Susan Windham-Bannister, is CEO of the Massachusetts Life Sciences Center. It was set up by the state in 2008 with a mission of investing \$1 billion over 10 years to grow the state's life sciences sector.

Young Richards has fond memories of St. Louis, but he recalls one experience that didn't sit well with his father, the surgeon. Before moving to University City, the family lived in St. Louis on Wabada near Kingshighway. Across the street from the home sat the old DePaul Hospital.

"You can imagine growing up and becoming a physician, certified in surgery, and looking across the street at a hospital every morning and knowing that you couldn't walk in the door," young Richards says.

As for his own generation, Richards says, "Times were better, nothing like that." He's just as optimistic about scaling other public health mountains and conquering disease beyond Latin nations. In fact, he regards the success in the Americas as "a guiding light" for similar success elsewhere.

"If we can do this in the Americas, we can dream of doing it in Africa," he says.

He believes that sustainable programs like those created by the Carter Center have helped to generate pride among the indigenous people, and created a desire to do more.

"Our view is that we (are now at) a point where the despair is going away and the enthusiasm is growing. That's part of the Carter Center model of waging peace, fighting disease and building hope."

In time, he predicts indigenous communities and leadership will be able to "do a lot of work themselves with just a little bit of help" from outsiders.

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