

Most of my career here has been under the chairmanship of Frank James, III. When he retired, I was named the first recipient of the endowed professorship under his name. It has been the perfect place for my career and for our family. Great mentors and colleagues for research (I direct four NIH grants with a total funding of a little over \$2 million per year investigating obstetric, postoperative, and chronic pain in the laboratory and the clinic), and a fantastic section of Obstetric Anesthesia. My Rochester-born daughter moved back north for college at Columbia, but being a French major and deciding on her junior year abroad, opted for the South of France and is currently in Toulouse. Our son, born shortly after we arrived in Winston-Salem and also fluent in French (we lived in Paris during a sabbatical), will likely be heading to Montreal

to study at McGill. I've included a couple of pictures of our recent hobby – buying a 1968 Mustang on eBay for around \$1000 and spending many times over that essentially taking it all apart and replacing it with new pieces.

No, I am not related to John Eisenach, on staff at Mayo, although I do have an older brother of that name. I keep in touch on nearly a weekly basis with many friends from Mayo – Terre Horlocker, Denise Wedel, Marc Huntoon, David Warner, Mike Murray, and Brad Narr among them – and hear much of the current gossip from the outstanding Mayo residents who we continue to attract here for an optional obstetric anesthesia rotation. And of course this wonderful newsletter that Peter puts together!

## "And Especially the Children of Africa"<sup>1</sup>

**David Byer, M.D.**



*Jeannie and Dave Byer visit the Macha Mission Hospital with their son, Paul.*

Jeannie and I have been married almost forty years. Our time together has been a rich and rewarding experience. Peter Southorn asked me to share some elements of our lives.

When I married Jeannie, I figured she would teach me something about Africa. The daughter of Presbyterian missionaries, Jeannie grew up in Sudan and Ethiopia. She attended boarding school in Alexandria, Egypt. Little did I realize what an important role Africa would play in our lives. It all started when I received a Smith Kline French Fellowship. This enabled us to spend my last quarter of medical school at Pokwo Hospital/Medical Clinic in the extreme western tip of Ethiopia.

Following my internship, we went to Macha Hospital near Choma, Zambia, for two years. Our first child, Lois, was born there. After anesthesiology residency at Mayo, we returned to Macha for fifteen months. By that time we had three children. We returned to Mayo in April, 1976.



Until 1995, we had limited contact with Africa. We were busy working and living in Rochester, rearing our family. Travel continued as a popular feature of our lives. Our six children enjoyed four summers exploring Europe in Jeannie's motorhome. Our children led us back to Zambia when they began asking: "Mom, Dad, can you take us to Macha, this place you are always talking about?" We returned with our family in 1995 (without the motorhome). The Macha Hospital community received us so warmly Jeannie and I continue to visit at least annually. Abraham Mhango, hospital pharmacist, and Frederick, hospital painter, were especially resourceful in finding tasks for our teenagers during our visits.

Macha Hospital was established in 1957 as a mission hospital. In 1990, its administration was fully turned over to the Brethren in Christ Church of Zambia. Since then, it has had Zambian administrators and a local oversight board. This has led to a sense of community ownership. Macha is a 208-bed inpatient facility with the hospital and nursing school complex laid out over a 120-acre site. The pediatric ward consists of 45 beds although the pediatric inpatient census often reaches 75 to 80 during the peak malaria season November to June.

In 1994, the hospital catchment area had an estimated population of 70,000 with 50% under twelve years of age. The hospital serves as a referral center for a number of smaller facilities in an 80-kilometer radius. This area has endemic *P. falciparum* malaria. Each year the hospital outpatient department sees over 5,000 cases of malaria and the pediatric ward admits approximately 700 children with slide-confirmed malaria. Of these, 50-60 children have cerebral malaria and 160-195 children have severe malaria anemia. Malaria is the foremost discharge diagnosis accounting



*Children congregate at the well-child clinic.*

for 35% of pediatric discharges. Malaria is a leading cause of death in Zambia.

Anesthesia administered at Macha is usually ketamine or spinal. Equipment, including a Boyle anesthetic machine with halothane vaporizer, pulse oximeter, automated blood pressure machine, oxygen concentrator, oxygen cylinder, laryngoscope and endotracheal tubes, is available for general anesthesia, but is infrequently utilized because of lack of personnel.

In 2001, I joined the Board of Directors of Macha Malaria Research Institute (MMRI)<sup>2</sup>. I was glad to participate in efforts to ease the burden of this disease. MMRI is a US-based charitable organization supporting the research of Dr. Phil Thuma, a Johns Hopkins-trained pediatrician and Fulbright fellow. MMRI provides salary supplements to Zambian physicians working at Macha. Additionally, MMRI supports Zambian personnel training to become nurses, administrators, laboratory technicians, and pharmacy technicians. In May, 2001, the Johns Hopkins Bloomberg School of Public Health launched a \$100 million campaign to rid the world of malaria. The Bloomberg School established the Johns Hopkins Malaria Research Institute (JHMRI)<sup>3</sup>. This initiative required a field research center.



For a variety of reasons, Macha Hospital was chosen. Development of the fifteen-acre site for the Malaria Institute at Macha (MIAM) commenced two years ago with clearing of the bush.

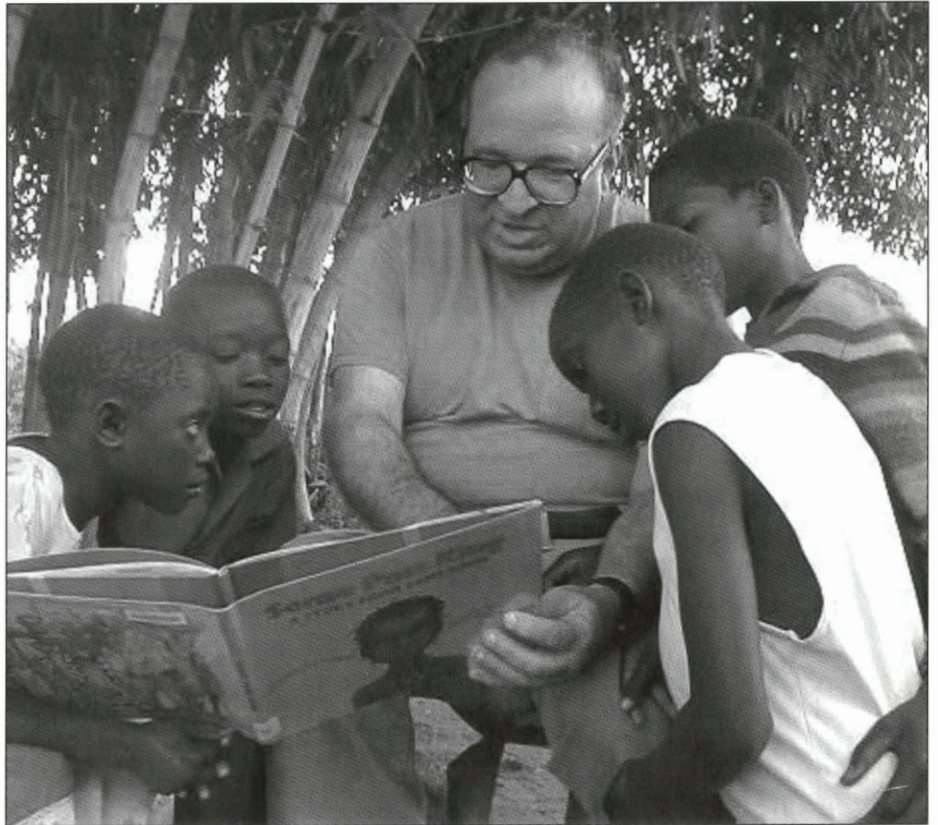
Jeannie and I attended the January, 2005, Official Opening of the Malaria Institute at Macha. We brought

five suitcases containing medical, laboratory, and personal supplies, and gifts (weighing in total 300 pounds). Development has included a full broadband internet facility using a satellite system that allows voice communication. There is an airstrip for light aircraft<sup>4</sup>. MIAM is the first high-tech facility to be placed in a rural area of Zambia. Macha is attracting bright young Zambian physicians such as Dr. Lottie

Hachaambwa and Dr. Kelvin Moonga.

Christopher Simoloka, laboratory manager is busy with PCR genotyping of *P. falciparum* field samples. Sandra Chisimba, a University of Zambia student, came to Macha during her holiday break to assist him. Rebekah Kent, a graduate student from JHMRI, developed a test enabling identification of the mammalian species of origin of a mosquito's blood meal. A pilot study on diagnosis of malaria using a urine dipstick is underway. Other investigations include a NIH-funded study of the immunology of pediatric malaria, an examination of mosquito behavior, and clinical trials of new malaria drugs. Macha Hospital may well be the best place in Zambia to seek treatment for malaria.

Vision Community Center<sup>5</sup> is especially impressive. MIAM staff Mr. Gertjan Van Stam<sup>6</sup> and his wife, Dr. Janneke Van Dijk, initiated this project within the last year. The center includes an internet cafe, community radio station, cafeteria, theater, sports center, gift shop, and a small lending library. Reservations for flights to and from Macha



Dr. Dave Byer reads a children's book to a rapt audience.

are handled at the community center<sup>4</sup>. The internet cafe staff is especially helpful. They soon realized I was going to be a heavy user and suggested I purchase a discount card!

Jeannie and I decided to observe the reaction of Zambian children to illustrated children's books. Their intense interest in *Sense Pass King - A Story from Cameroon* is obvious. Now we are developing a small collection of illustrated children's books to add to the Vision Community Center library. We look forward to gifting these books to the community. Such books, if available at all in Zambia, would be extremely expensive.



Here at home a number of activities keep us busy. When we settled in Rochester we wanted to be able to provide accommodations to people in need. The first project for our "open house-open home" was a guest room. Later we finished the basement for our growing family. We have had as many as 80 visitors in the course of a year. Jeannie tells me that all except four would be welcomed back. We have accommodated students from Poland, Japan, Laos, Thailand, Ghana, Zambia, and Canada. Just now our usual guests are our children who return fairly frequently. Our Thanksgiving and Christmas dinners are attended by some 25 to 30 children, relatives, and friends.

All of these adventures are enabled by the satisfying professional life we enjoy at Mayo. Development of the total joint multi-modal perioperative orthopedic analgesia program

has added a special dimension to our practice. I especially appreciate the patience of Drs. Jim Hebl and Sandy Kopp in teaching this old dog the new tricks of peripheral nerve blockade. I am pleased and proud to be part of this endeavor.

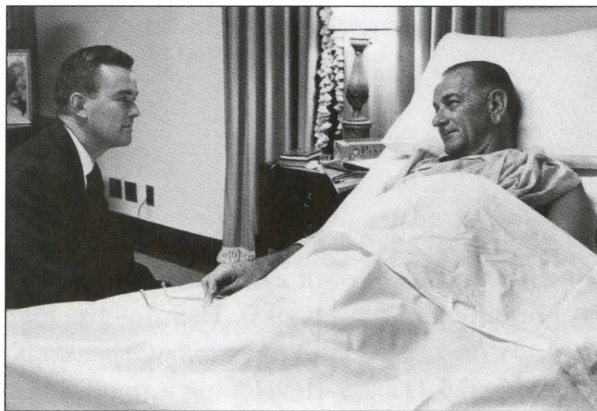
1. From the Vision Statement of MMRI. "As long as malaria causes millions of people in this world to suffer, and especially the children of Africa, the Institute will strive to help them overcome this disease through its efforts at improving prevention and establishing appropriate treatment of the infection."
2. <http://www.mmri.net>
3. <http://www.jhsph.edu/Malaria>
4. <http://abfa.macha.org.zm>
5. <http://vision.macha.org.zm>
6. <http://www.vanstam.net>

## President's Photos

**Peter Southorn, M.D.**

We all respect our patient's privacy. Nevertheless, on occasion our national leaders will publicly recognize and honor their physicians after a successful medical outcome. These photographs show two such historic

instances with President Lyndon Johnson thanking Dr. Paul Didier and President Ronald Reagan thanking Dr. Steven Rettke for their care.



To Dr. Edward P. Didier  
with best wishes —  
*[Signature]*



To Dr. Steve Rettke. With Very Best Wishes & Regards.  
Ronald Reagan