Muli bwanji?

The 2019 malaria season will be the second year of our clinical trial — enrollment is slow because malaria control efforts in Malawi are working: more children are being diagnosed and treated earlier in their illness, so we are seeing many fewer patients at “Queens.” We’re all thrilled, of course, but it does add to the challenge of carrying out the clinical trial.

During the malaria season of 2011, we carried out a pilot study of a new-ish imaging technique, transcranial Doppler ultrasound (TCD). It is similar to any other kind of ultrasound — a probe is placed on the skin and records information. In this case, it is information about blood flow velocity, and if the probe is placed properly, we learn about blood flow into and out of the brain.

Back in 2011, the equipment was large, clunky and finicky — but it was clear that the approach was useful. We could see distinctly different wave patterns in different patients.

The technology has improved greatly, now. The equipment can be carried in a backpack, acquiring the wave forms is easily taught to ancillary health personnel, and the “post-processing” of the wave forms has become much more sophisticated. We thought that combining all we are learning about the patients in the clinical trial with the additional information provided by the TCD machine would be very helpful in understanding why the brains become swollen in some children with cerebral malaria.

There were two stumbling blocks: acquiring a machine, and involving a TCD expert. I was telling Bob Garvey of the Warm Hearts Foundation (the co-host of this summer’s Malawi Update at the Garvey Barn) about the machine during the summer of 2017. He realized how much we might learn from adding it in to our routine assessment of patients — and he offered to buy a TCD machine, through the foundation. ZIKOMO!!

At the SAME TIME, summer of 2017, one of our new colleagues on the clinical trial, the aptly named Dr. Allan Doctor, of Washington University in St. Louis (his med school nametag read “A. Doctor”) was professor for a day at Ohio State University. When he mentioned that he was working on a cerebral malaria project in Malawi, he was
Gail and Barbara Riegle continue to be our lead donors — they have now sponsored three cohorts of “Riegle Scholars,” BMP staff members who combine support from the Riegles with their own savings to pursue a wide variety of career development opportunities.

Arnold Loo, D.O., an MSU-COM alum, is also a staunch and steady supporter — his gifts are in memory of his parents, Mr. Che Chin Loo and Ms. Chien Hwa Wong, and in support of global health experiences for current MSU-COM students.

Two former elective students, Christi- na Lindell and Jayaraj Salimath, make regular “payroll deduction” contributions to the Malawi Fund — those monthly infusions are greatly appreciated.

Thanks also to Grant and Terry Carrithers, John and Mary Jo Crosby, Annemarie Drummey and Alex Harris, Mark Risk, Kyle Minch, Mark Travassos, Therese Tomasoski, Karen Hassankhani, Mike and Mary Forness, Katie Cashen, Grace Armour, Bruce and Nina van Dop, the Allan Doctor Family, Rick and Susan Cover, Jamie M. Bartley, Brenda Harshman-Plonski, Gail Persons, and the David and Kristen James family (including Marissa, who collected cash and toys!), Merry Mombourquette (hand-sewn clothes for patients on the Research Ward), and, through the efforts of Colleen Hammond (Dept. of Radiology at MSU), a contribution from Holt Junior High that supported the local purchase of insecticide-treated bed nets. We give one to each patient on the Research Ward when they go home.

During 2018, the Malawi Fund covered repairs to the water tower and water tank at the MSU House (see front page). It supported Lufina Tsirizani, who presented a poster at the International AIDS conference in Amsterdam and Dr. Ngin-ache Nampota who presented her poster at Interest Conference in Rwanda. The Malawi Fund covered the cost of having post-exposure HIV prophylaxis available for the elective students (happily, it wasn’t needed).

We used the Malawi Fund for a “pump-priming” activity, too: Dr. Chet Joyner, a promising young immunologist from Emory University, visited us in May and worked with Dr. Karl Seydel and his D.O./PhD student Sarah McNitt in Karl’s molecular parasitology lab in the College of Medicine. Pump-priming now may generate serendipity in the future.

Our reunion in August and our gathering at “trop med” (see below) were also supported by the Malawi Fund.

On average, expenditures from the Malawi Fund come to about $60,000 each year. In 2019, we’d like to continue to support activities like those listed above, and assuming no unexpected “adverse events” at the MSU House, we’d like to use some of the Malawi Fund income to upgrade one of the rooms in the outbuilding behind the main house. We’ve fondly referred to it as the “introvert’s room” and we’ve used it for overflow visitors. It already has a water hookup, but there are NO amenities. For $3,000, we can install a sink, a toilet, a shower, a solar water heater and spruce up the furnishings.

Your contribution to sustaining all that our NIH grants don’t cover would be gratefully received and hugely appreciated. Please use the envelope provided or donate online at malawi-fund.com.msu.edu. Thank you!

Ankie Borgstein
I am sorry to report that Dr. Ankie Borgstein passed away in her sleep, on her farm outside Blantyre, on August 6, at the age of 93. She welcomed us into her Department of Paediatrics in 1986 and was an unwavering source of encouragement, support, tea and biscuits. I will really miss her!!

Continued from front

immediately introduced to Dr. Nicole O’Brien, an adult and pediatric critical care specialist who had established a research capacity in the Democratic Republic of Congo. As it happened (you can’t make this stuff up ...), Dr. O’Brien had just finished a large study using TCD on cerebral malaria patients in Congo. Dr. Doctor arranged for Dr. O’Brien to present her work to our group and we were wowed (check it out for yourself: O’Brien N, et al., Pediatr. 2018 Sep 14. pii: S0022-3476(18)31074-6.8).

Dr. O’Brien has visited Malawi several times already and — serendipity alert — when I was talking about her work with our NIH program officer at the American Society of Tropical Medicine and Hygiene annual meeting a year ago, he suggested I write a supplement to our grant to support her research with us. The supplemental grant was awarded and as a result, Dr. O’Brien will be able to spend four months in Malawi during each of the next four malaria seasons.

Trop Med meetings
This year’s American Society of Tropical Medicine and Hygiene conference was in New Orleans and it was a wonderful whirlwind of activity. Miriam Laufer, Professor of Pediatrics and Associate Director for Malaria Research at the University of Maryland School of Medicine’s Center for Vaccine Development and Global Health, was awarded the Joseph Augustin LePrince Medal, a prize given every three years for outstanding work in malariology. We had a small contingent from Malawi and hosted a reception after the first full day of the conference, then dove into science.

Miriam Laufer