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The Brown Kenya Medical Exchange Program: An Overview

CHARLES SHERMAN, MD, MPH; JANE CARTER, MD
GUEST EDITORS

Karibu. Welcome.

The Brown Kenya Program has now been in existence for more than 15 years. During that time what started as a learning opportunity for a few medical trainees has developed into a comprehensive care, education, and research effort by countless Brown and Kenyan physicians. A large number of medical specialties are represented including emergency medicine, internal medicine, neurology, obstetrics and gynecology, pediatrics, psychiatry, and public health. All projects involve cross-cultural collaborations in which both groups greatly benefit.

The accomplishments have been many. From a clinical perspective, over 100,000 persons living with HIV/AIDS are now under supervised care. Approximately 70,000 symptomatic individuals have been screened for tuberculosis. And those with diabetes are much better managed with the creative use of cell phones and portable glucose monitors. Greater access and provision of care have ensured that HIV, TB, and diabetes are no longer death sentences for those living in Western Kenya.

The bidirectional medical educational exchange remains the keystone of the program. A rapidly increasing number of medical students, residents, fellows, and attending physicians have made the journey with most having life-changing experiences. Research has followed care and education and become a flourishing component. Each year, millions of dollars in grants support basic science and implementation projects in a variety of areas such as HIV, tuberculosis, cervical cancer, hypertension, COPD, and diabetes.

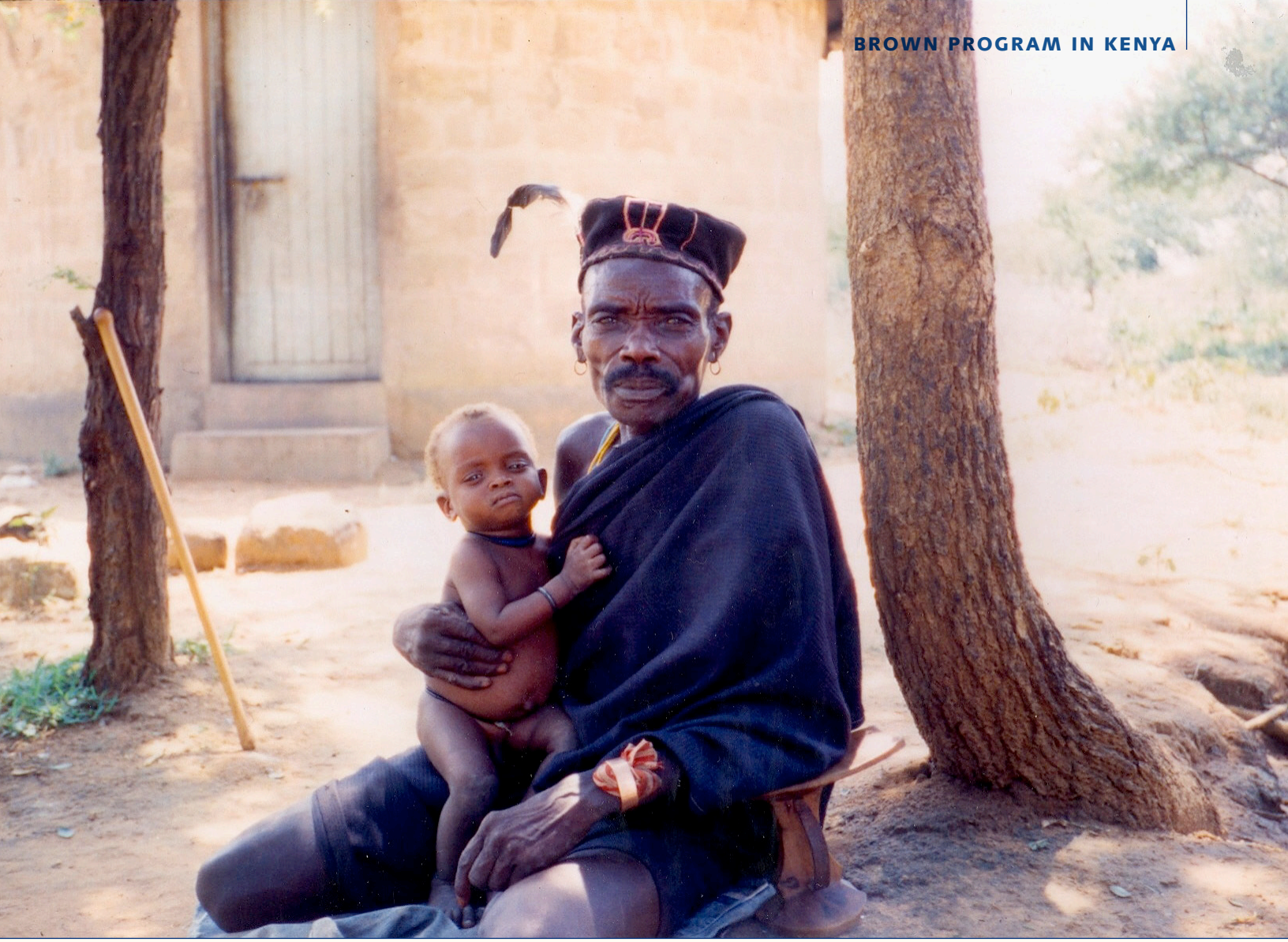
In this issue of the *Rhode Island Medical Journal* and next month's, we have

Dr. Chuck Sherman training a Kenyan physician, Dr. David Lagat, in spirometry.

Dr. Jane Carter with a patient in Eldoret.

PHOTOS COURTESY OF JANE CARTER, MD

Dr. Jane Carter with her TB Team.



A Kenyan man with his grandchild at the TB Manyatta in West Pokot. The concept of the 'TB manyatta' was started by Dr. Tonelli, a Catholic sister, who in 1976 persuaded nomads in Wajir District with TB to construct their dwellings next to her health center to make it possible to receive supervised drug administration.

tried to capture the most important elements of the Brown Kenya Program, a daunting task.

Dr. Jane Carter starts with a detailed history of the program. Then, Janet O'Connell provides specific information for those who want to take part in the medical educational exchange. Dr. Charles Sherman has compiled selected comments from both Brown and Kenyan medical students and residents who have participated over the years. The similarity of experiences across the institutions is remarkable. There are several articles written by Brown faculty members and their children, illustrating the profound nature of living and working in Kenya.

In the October issue, Drs. Jane Kamuren and Dennis O'yiengo will share their unique perspective of being trained at both Brown and Moi University. The development of specialty care can be challenging, especially when done across two universities; Drs. Bud Kahn, James Myers, Geoff Berg, and Nick Califano write about the joys and frustrations of starting such efforts in a low-income country. Finally, Dr. Rami Kantor provides an overview of the extensive collaborative research efforts between the two universities.

The Brown Kenya Program has become an integral part of who we are as physicians and as people. We hope you will consider joining us in this most worthy of life's adventures.

Asante Sana. Thank you. ❖

Authors

Dr. Charles Sherman, Clinical Associate Professor of Medicine, the Alpert Medical School of Brown University, was the first Brown faculty member to travel to Eldoret in 1996. In 2013, Dr. Sherman was appointed as Director of Field Operations, East African Training Initiative, Ethiopian Pulmonary and Critical Care Medicine Training Program at the University of Addis Ababa in Ethiopia and Head of Global Pulmonary and Critical Care Medicine for the Brown University Global Health Initiative.

Dr. Jane Carter, Associate Professor of Medicine at the Alpert Medical School, has been the Director of the Brown Kenya Program since its inception.

Brown Kenya Program: The Growth of a Progressive Partnership

'It takes only one person's efforts to change the world'

JANE CARTER, MD

Dr. Jonathon Cohen, a T32 HIV training fellow at Brown, traveled to Kenya for one year to assist in training staff and staffing the clinic at Mosoriot.

Initiated in 1997, the Brown Kenya Medical Exchange Program was the first program to engage medical trainees and practitioners from all levels at Brown Medical School within a structured partnership with a low-income country partner medical school. Like many life successes, it grew out of some serendipity coupled with determination, dedication and long-term enthusiasm.

Moi University – Indiana University Partnership

In 1988 three faculty members of Indiana University (IU) traveled the world to identify a medical school with which to partner. Dr. Joe Mamlin, at that time the chairman of medicine at IU, dreamed of replicating an exchange program that he had led as a Peace Corps volunteer following his residency. That original program had been the first medical school in Afghanistan partnering with IU, a program that thrived until the advent of the Afghan-Soviet wars. Dr. Mamlin and his former chief resident, Dr. Robert Einterz, and several other IU faculty settled on Moi University School of Medicine (MUSOM) in Eldoret, Kenya. The essentials needed were in place – Moi University (MU) would open its doors in 1990. The curriculum was in English. The MU dean and the chairman were receptive to the exchange program. When the doors of the medical school opened in 1990, Dr. Einterz was the first U.S. faculty member living there for a year.

Asante (American Sub-Saharan Network for Teaching and Education) Consortium

The backbone of the exchange was set. Moi students rotated to IU for six weeks in their clinical years and IU students, residents and faculty rotated to MU. However, Drs. Einterz and Mamlin realized that despite the large faculty at IU, a single faculty in the United States could not sustain a continuous presence on the ground to contribute to care and teaching at MU. Thus, they started looking for partners to join a consortium. *Asante* had a double meaning – 'thanks' in Kiswahili but also an acronym for the American Sub-Saharan Network For Teaching and Education.

First Brown University Involvement

In 1996, Dr. Charles Sherman, pulmonary physician and faculty member at Brown, happened to glance at the *ACP Observer*, a journal he did not usually read. There was an advertisement from the IU group about its exchange, seeking volunteers. Dr. Sherman, having traveled through East Africa before medical school, approached one of the medical chief residents, Dr. Greg Kelly, and the two were off for a month of teaching and care. Both returned with one of the most common statements of all participants to date – "That was the most important experience of my career." Dr.

Dr. Liz Dufort with one of her patients.

Sherman shared his experiences with two other pulmonary colleagues, Dr. Jane Carter and Dr. Jim Myers, both of whom signed up for a month rotation.

Within a year, Drs. Sherman, Carter and Myers had met with the dean of the Brown Medical School to discuss formal Brown Medical School inclusion in the program. Signing a bilateral MOU between MU and Brown paved the way for trainee credits and bilateral tuition waivers.

Early Asante Years

By 1999, The Asante Consortium included not only Brown but four other U.S. medical schools or university-based hospitals collaborating with Moi. Two MU medical students were hosted each year for six weeks of training at a U.S. institution, with all costs covered, and Moi University hosted four U.S. students throughout the year on a monthly rotational basis.

Dr. Jonathon Cohen in a rural clinic in Mosoriot.

In 2000, not long after coming to Brown from Pittsburgh, Dr. Edward Wing, ID physician with a special interest in HIV as well as the chairman of the Department of Medicine, agreed to accompany Dr. Carter to review the program. Moved by the scope of the program – both in care, education and with a potential for research, Dr. Wing returned from that first visit to adopt the Brown Kenya Program formally into the Department of Medicine as a chairman's initiative. With this support, Brown became the second most active Asante partner, increasing the number of medical students training at Brown as well as supporting internal medicine residents form Kenya for six-month rotations.

AMPATH Development

Coincident with the development of the Asante Consortium, another health disaster was spreading across the globe, particularly through Sub-Saharan Africa – the HIV epidemic. In 2000 at MUSOM, HIV patients dominated the wards with a universal mortality. The courage of two Moi University medical students changed the mindset of the entire faculty – both U.S. and Kenyan. The two students had grown up together and both been admitted to medical school – an unusual coincidence considering that less than 250 individuals in the country matriculated into med school. When one did not return to school post-vacation, the second went looking for his friend and found him in a local hospital being treated for military TB. The friend arranged for transport back to Moi Referral Hospital where fellow students watched over him. His friend convinced him to be tested for HIV; the test was positive. On discharge from

VIDEO AMPATH Medical Center Program

the hospital, the patient walked back to the hostel to rejoin school but he was barred at the entrance by the staff. After several nights of sleeping on the grounds of the hospital, his friend declared that, "I am a medical student and I know how HIV is transmitted. My friend will be my roommate. There is nothing to fear." This bravery in the face of overwhelming stigma galvanized the faculty. That student was treated with donated antiretrovirals. The first HIV-care grant was written and funded by the Gates Foundation for a pilot of 50 patients, could they be treated.

In December 2001, Dr. Wing returned to Moi University and sat next to Dr. Joe Mamlin to train him in HIV care. The Academic Model for Prevention and Treatment of HIV (AMPATH) was started. Brown was involved in the opening of the first of the rural health centers – Mosoriot Health Center – as well. Dr. Jonathon Cohen, a T32 HIV training fellow at Brown, traveled to Kenya for one year to assist in training staff and staffing the clinic at Mosoriot. Today there are 35 main clinics and 29 satellite clinics providing care for countless patients throughout Western Kenya.

AMPATH Consortium today

Today AMPATH has changed the acronym for which it stands – it is now the Academic Model for Providing Access to HealthCare. The same infrastructure that was built to provide care for individuals with HIV is now being used to build a primary-care infrastructure to address non-communicable diseases such as diabetes and hypertension. Six North American institutions (including Brown) remain, which underpin the medical exchange program, while over 20 other institutions are involved in the research programs. In 1997 there were no opportunities to train beyond an internship at Moi, now there are now residency programs in all the major fields there as well as the beginnings of subspecialty tracks.

The goal of training physicians – whether they are Kenyan or American – as global leaders remains. The underlying mission of the collaboration remains: Lead with Care. The underlying story of AMPATH remains – it takes only one person's efforts to change the world. ❖

Author

Dr. Jane Carter is the Director of the Brown Kenya Program and an Associate Professor of Medicine at the Alpert School of Medicine at Brown University.

Practical Aspects of the Kenya Medical Exchange Program

JANET O'CONNELL, MPH

The Moi Teaching and Referral Hospital (MTRH) is located in Eldoret, in the western highlands of Kenya in East Africa. Eldoret is the fifth largest city in Kenya with a population of approximately 200,000. The climate is tropical with an elevation of 7,000 feet.

The hospital campus is a 15-minute walk from the gated residential compound, IU House. Residents, attendings and family members reside at IU House during their stay. Medical students are housed in the medical school dormitory with the Kenyan medical students across the street from the hospital. Both living situations are communal.

The medical center is a large multi-building compound with open walkways and lush gardens. The interior of the hospital has large, open, gender-segregated wards along with subspecialty units and outpatient clinics. The children's and mother and baby hospitals are contained within their own buildings on campus.

The central outpatient clinic – AMPATH – is part of the MTRH campus. There is also a network of smaller, rural health centers throughout the entire western Kenya/Rift Valley area.

The medical exchange is bilateral. Four Kenyan medical students come to Brown for six weeks each year. Two Kenyan registrars (housestaff) come to Brown every other year for four- to six-month rotations.

Eldoret, Kenya

Brown participants include attendings, fellows, residents, medical students and researchers. All Brown rotators must be endorsed by three senior faculty members as well as attending a mandatory orientation lecture.

As an AMPATH consortium member, Brown has two dedicated months each year to schedule students and residents. Rotation opportunities often become available outside of the scheduled months for residents. Attendings, fellows and researchers rotate throughout the year. All rotations are scheduled and organized through the Kenya Program office at The Miriam Hospital.

Brown residents and students are placed on ward teams at MTRH and follow the

Moi Teaching and Referral Hospital

daily schedule of their respective teams. This is a very demanding clinical environment with a myriad of serious medical illnesses as well as a significant overlay of infectious diseases. The mortality on the inpatient wards averages 10% per day. The system operates as a 'pay-as-you-go' model, with each procedure and treatment negotiated with the patient and family members. The members of the ward team responsible for providing care also have the responsibility of ensuring that the proposed care plan is affordable.

It is important to evaluate the degree of difficulty of this rotation on a personal level in making the decision to undertake this very real challenge. The workload is quite heavy and clinically challenging. The emotional toll should not be understated. The high mortality rate and relatively young patient population makes for a very significant adjustment. There are medical risks to the rotators involved. Approximately 60% of the inpatient population is HIV-infected. A recent study documented a 4% tuberculin skin test conversion rate among rotators and their family members. The physical risks include a substantial rate of vehicle collisions – great care must be taken when planning travel. The trip to Eldoret from the United States takes the better part of two days. The overall cost of the rotation is approximately $3,500, excluding personal travel.

Travel within the country is encouraged. Kenya is a very beautiful country with an abundance of varied flora and fauna, including mountainous terrain, savannah and rain forest. Most rotators incorporate some travel into their itineraries. ❖

Author

Janet O'Connell, MPH, is the Brown Kenya Program Administrator.

Guest Editors' Acknowledgement

Janet O'Connell, MPH, has a diverse public health background in maternal and child health, infectious disease, and international health education. She is the person most responsible for oversight of all Program activities. She is a friendly, caring, and helpful presence in the office. Everyone associated with the Program, both at Brown and at Moi, greatly appreciate her efforts.

The Medical Exchange: Brown, Moi students/residents share their experiences

CHARLES B. SHERMAN, MD, MPH

INTRODUCTION

The Medical Exchange is one of the most important components of the Kenya Program. Since 1997, there have been more than 30 Brown medical students who have made the journey to Eldoret, and worked at the Moi Teaching and Referral Hospital (MTRH). In addition, there have been 63 Brown residents, representing the disciplines of internal medicine, psychiatry, pediatrics, obstetrics and gynecology, med/peds, neurology, and emergency medicine, who have traveled to Kenya. Eleven Brown Fellows from infectious disease, renal, and hematology-oncology have all completed part of their training there. Since 2006, there have been 24 Moi University 5th-year medical students and seven Moi University internal medicine registrars (residents) who have come to learn at Brown.

On both sides of the Medical Exchange, participants have returned from their travels with new medical knowledge about regional diseases, resource availability, and practice styles. They have all appreciated cultural differences and experienced personal and professional growth. And of course, there have been wild tales of strange foods tasted and dramatic weather experienced.

What follows are representative comments made by a few select participants of the Medical Exchange grouped by level of training and university of origin.

From Brown, the medical students who contributed are **ANDY LAI '05**, **SOPHIE CALIFANO '07**, and **NAIDA COLE '10**; the residents are **PHILLIP ANDREW CHAN '08** and **BARBARA NICKEL '12**.

From Moi, the medical students who contributed are **VIOLET AWORI '08**, and **GICHYOYA JUDY WAWIRA '08**; the registrars are **DAVID LAGAT '08** and **SARAH OWINO '08.**

Kenyan medical students gathered at the home of Dr. Jane Carter during their time in Rhode Island.

REGIONAL DISEASES

Brown University Medical Students

- The first thing you notice when you walk on the floor is the smell. I can't describe it. It isn't necessarily unpleasant (melena smells far worse) and has a hint of antiseptic…The second thing you notice is that all the people are young.
- I was looking over my logbook of patients and just thought how strange it was that I have been feeling spleens the size of watermelons, recognizing measles from across the room, treating cryptococcus and toxoplasmosis and of course so much TB and malaria, not to mention doing LPs with just a needle and a cotton swab.
- For the patients who are truly sick, they typically present at a disease stage much more advanced than what we are used to seeing in the United States.
- It's a very rich bilateral learning experience, however, as [the Kenyans] usually have much more experience with various diseases that we only read about in books, as well as physical diagnosis skills that we sometimes don't learn or practice adequately.

Moi University Medical Students

- In contrast to patients seen in Kenya, we [saw] very few infectious diseases. This gave me a chance to learn more about different conditions not very common in Kenya and appreciate them in greater depth.
- I got to see diseases that I hadn't seen before, like Lyme Disease, and how to manage them.

Kenyan medical students being vaccinated for Hep B in preparation to come to the United States. Brown purchases the vaccines for all the Kenyan medical school class.

Brown University Residents

- The diseases I have seen here the last few days are amazing! We have had toxoplasmosis, cryptoccocus meningitis, lymphomas, lots of pulmonary TB, rheumatic heart disease, etc.
- The most surprising part of Kenya in my opinion thus far is the TB epidemic. I expected HIV but not as much TB. Overall, TB is a major problem here in Kenya. I cannot over emphasize that point.

RESOURCE AVAILABILITY

Brown University Medical Students

- We're used to having technology at our fingertips, but in Kenya you're really challenged to more frequently rely on your history and physical exam skills and constantly consider which test is truly necessary, given the patient's financial limitations.
- Last month I was sticking feeding tubes and trach masks in chronically vented patients with an average age of 85 and end-stage diseases (ie, strokes) who are going to die no matter what we do (costing upwards of $12,000/day, and some have been in the hospital for months) and today I am watching a 25 y/o kid die because…?
- Some patients have their own bed but most share – some choose to sleep head to foot, and others sleep curled up together.
- Interesting medical tips of the day: you don't use generic medications here because they are often fake, containing water, diluted medication, or something worse.

Moi University Medical Students

- I was able to learn so much about the medical system in America as well as being exposed to the advanced biomedical technology, interventional therapy, and a wholesome and holistic approach to management of a patient.
- Cardiology was awesome, with many learning experiences: catheterization, pacemaker placement, CABG.
- We would investigate patients fully and treat them based on what the investigations revealed. It made me understand better the use of certain investigations as well as their indications; it was to me a real-life application of things I had only read about in books.
- It was not uncommon to know that this patient had Klebsiella pneumonia and E Coli cystitis rather than just pneumonia and urinary tract infection.
- The information system at RIH was commendable. It made me appreciate the value of good record keeping of a patient's data.

Brown University Residents

- I went to cardiology clinic today. All had heart failure from either rheumatic heart disease or dilated cardiomyopathy (attributed to viral causes), and ages ranged from 18-38. Most had end-stage heart failure. Most could also be fixed with a valve replacement. None had any means to get it.

Moi University Residents

- The amount of information available in this place is just amazing.
- Patient management was quite different from what I am used to, with a lot of support from the laboratories … for example, we are used to doing a bone marrow aspirate or biopsy. Here they can do cytogenetic studies, they can do PCR, cardio-typing and use that for purposes of prognosis, so it makes patient treatment a lot more interesting and much better.

PRACTICE STYLES

Brown University Medical Students

- We spend much of rounds rushing to find patient charts. By around 10 a.m., there are enough students on our team that it is difficult to actually see the patients without pushing, and the presentations are done so quietly that it is often difficult to know which patient in the bed is being discussed.
- The interns have anywhere from 24-48 patients and nobody to depend on; the students and consultants (attendings) come and go, and the nursed are untrained, overworked.
- It is hard to make 'the wrong decision' on patient management. Everything is by trial and error. No lab tests seem to ever get done. And the ones that do get done aren't reliable. Another resident who has been here for 4 weeks told me he

Mother and child at TB clinic.

has NEVER seen a positive CSF cell count. So all treatment is based on clinical suspicion. It is good in that it really forces you to do a detailed clinical history and exam. The flip side in America is that we always order every test in the book and often times we still don't know what is going on!

- Their family members (or sometimes the family members of the bedmate) who are not allowed in until afternoon, were usually around by the time we started procedures, and would hold [the patient's] hands and speak softly to them, watching carefully through the whole thing.
- An LP at home frightens me because it always looks complicated, between the sterile field, all the attachments and bottles involved. At Moi it is scary because students do them unsupervised, and they involve rubbing a cotton ball with "spirits" (purple liquid that I believe is rubbing alcohol, or something similar) on someone's back, watching the cotton ball turn completely brown with dirt, tossing it aside, putting on sterile gloves, and sticking an IV cannula into someone's back. I hesitated at first but, after seeing the number of cases of cryptococcal and tuberculous meningitis, I realized the benefits far outweighed the risks, and that it was not something I could afford to be timid about.
- For the remainder of the day, there would be five people sitting on one bed, sharing food and talking, singing prayers and wailing for the dead, and holding each other closely.
- It is not uncommon to have a patient die overnight or for that matter at any time of the day, and usually once they are gone they are not mentioned again. This seems cold until you realize how busy the hospital is, and how important it is that the interns be able to move on and get back to work.
- You'll also begin to learn the process of knowing when enough is "enough" in code-type situations, particularly in the context of a resource-poor environment. It can be frustrating knowing that simple interventions at the appropriate time may have prevented these outcomes.

Moi University Medical Students

- In our setting, there are very few providers for a large number of patients, and an intern can be in charge of over 40 patients, while a nurse can be in charge of over 50 patients. This makes it impossible to offer personalized and individualized care to the patient.
- The patients in America know so much about their illnesses and the preferred mode of management or treatment. Most people [in Kenya] have complete trust in their doctor and believe that he or she will provide the best care possible.
- The attending attends the ward rounds every day, unlike in Kenya. And they hold teaching sessions after the rounds, which was really appreciated. It was quite impressive to see the attending directly taking H&P's on almost every patient!
- I noted great efficiency in carrying out orders, lab samples were taken in time, medications were given in good time and arrangements to take patients for investigations and treatment were carried out with utmost efficiency.
- The medical system was great and shows how the hospitals in developing countries can embrace technology to improve patient management and filing of records. The health service delivery was mostly based on which investigations and what drugs a patient required rather than what the patient could afford.

Brown University Residents

- In Kenya, the attending only sees the patients once a week. I met the attending on my first day (2 days ago) but haven't seen him since. I am working with a Kenyan resident who for all intents and purposes functions as the attending and makes all the daily decision. Today she was not there. I was that person.

Moi University Residents

- Residents here are assigned a particular number of patients to take care of. Back at home, you have the whole of ward 2 to yourself and you are basically working with very little supervision.
- I liked the outpatient clinics here. They are quite organized. You don't get large groups of patients, you know, waiting, from morning to evening. People are given a time and they respect the time and they come.
- The difference [in patient care] again reflects the difference in terms of manpower and resources at Brown compared to ours at home.

CULTURAL DIFFERENCES

Brown University Medical Students

- Our first day, we went for a run, and came back to brace ourselves for the cold water, only to turn the taps and find none. One of the other students waiting in line behind us felt so sorry for us that she offered to lend both of us her bucket…one of the many moments where you are humbled by the realization of how privileged an existence we have at home.

Moi University Medical Students

- There is a big cultural difference in food, work ethics, and socialization.
- People are welcoming, courteous and considerate. However, more people should go to church.
- Accent can be a major hindering block to learning. Tell your teams to improve their diction so that communication can be more effective.

Brown University Residents

- I have been a member of three churches (and visited many more in America) and the churches in America tend to focus on its members; there is some community involvement, but rarely does the church make an impact on its community. In Kenya, the church has a palpable pulse in the community. It was refreshing to see people next to nothing have such excitement and energy for church and each other.
- The drive through Eldoret was interesting. I almost died five times. Here are some fun- filled facts about driving in Kenya:
- Cows are encouraged to wander onto the road. They are everywhere. Almost hit one. Reminded me of Vermont.
- There is no speed limit. The average speed on the two-way, single-lane road was 80 mph.
- The roads have no lines, and it doesn't matter what side of the road you drive on.
- When coming upon a biker (and there are many) you have to see exactly how close you can come to hitting them.
- You can pass slower moving cars at will.

Moi University Residents

- Initially I thought this was the worst place to live and I asked myself what the Americans did to deserve this, living in such temperatures. But, I learned to enjoy the snow, how white it was…Sometimes it was extremely cold but I kept warm.
- Every evening, we go to jog in the wonderful Brown University gym. Most weekends we have been walking around; we have been to Roger Williams Park. We went to Newport, a wonderful place. We also went to Boston. So we had fun.

PERSONAL GROWTH

Brown University Medical Students

- I think this is one of the most powerful things you can take from your experience – making the statistics and dispassionate descriptions we've read in books become more human, more emotional, and more real-enough to the extent that it will encourage us to find effective ways to address these issues in our future careers.
- The month in Eldoret has been an unparalleled learning and growth experience for me. It has strengthened my resolve to work in underserved areas here. I have enjoyed this month and am very grateful for the experience.

Moi University Medical Students

- [The Medical Exchange] helped us realize the importance of patient-centered care, helped me improve my clinical practices, helped me decide on future area of specialization, helped me become a competent doctor, encouraged me to take full responsibility of my patients.
- I am convinced that patients in Kenya die of things/illnesses that could be managed well.
- I was also able to see the accomplishments and achievements that can be made with teamwork and how much a change of attitude can accomplish in all aspects of life, for the betterment of humanity.
- The bridge between theory and practice of medicine was bridged and a wealth of valuable skills and knowledge on therapeutics was acquired.
- …the challenge now rests with us to make this a reality after having a chance to see it working at RIH.
- I am back to Kenya with a totally changed perspective of approaching life in general. A big challenge lies ahead of me in ensuring that the good things I learned are implemented for the betterment of everyone in the society and especially within the health sector.

Moi University Residents

- It is like when we came here, we were small babies…we have grown and matured medically.
- We realized that we are the generation of tomorrow. We have to work hard and change things in a positive perspective. ❖

The Rich Family's Mission to Eldoret

Kids recall babies, teens and lessons learned

Josiah D. Rich, MD, MPH is an infectious disease specialist and Professor of Medicine at the Alpert School of Medicine at Brown University. He and his wife, Pat, and their children, Nick, then 17, and Nola, then 14, spent the month of August 2010 in Eldoret. While Dr. Rich worked at the Moi Hospital, his family volunteered at a pediatric and teen center.

PHOTOS COURTESY OF JODY RICH, MD

JOSIAH D. RICH, MD, MPH

When we planned the trip our expectations were vague but we felt there was an opportunity to experience life in Eldoret that should not be missed. In preparation, we were concerned about where we'd stay, what we'd eat and how we would get along. But upon arriving in Eldoret, our concerns about ourselves were eclipsed by the community at IU house. We were quickly integrated into the rhythm of daily life and provided with many opportunities to help.

For each of us, the daily routine differed. Jody attended rounds, Pat and Nola helped out at the Sally Test Pediatric Center, and Nick volunteered at the Tumaini Teen Center. Each day we learned a little Kiswahili, a child's name, a way to comfort and a renewed belief in the strength of hope. The staff, patients and children we encountered, whether it was at the Moi Teaching and Referral Hospital (MTRH), Sally Test, the Tumaini Teen Center or the Imani Workshop, were endlessly generous with their time.

It was a privilege to visit MTRH/Moi and the lessons we learned about human dignity and the strength of hope will be with us forever. We are deeply indebted to Dr. and Mrs. Joe Mamlin for their generosity and vision in creating a collaborative community of support and education. ❖

NOLA RICH

In 2010, I spent a month at the Moi Hospital/Indiana University medical compound in Eldoret, Kenya with my father, mother and older brother. It was the summer before I would enter high school and start a new chapter of my life. My family and I prepared for this visit by getting vaccines and taking malaria medicine; reading up on Kenya, and packing carefully, bracing ourselves for this extraordinary trip. We were prepared for practically anything from mosquitoes to sunburns, but nothing could have prepared me for the emotional connection I felt for the people we met.

Upon arriving, we quickly settled into the compound where visiting faculty and their families lived. Everyone

ate meals together. We developed a comfortable daily rhythm in which we were able to check in with each other throughout the day and share our experiences.

Our daily routine had many highlights. Before leaving for Moi Teaching and Referral Hospital (MTRH) in the morning, my family and I took Kiswahili lessons from Wycliffe. He was a regular fixture in the common area of the compound waiting for his next student – always prepared with a lesson and always ready to engage anyone who passed with a Kiswahili greeting or short conversation. Wycliffe's lessons helped us progress from Kiswahili greetings to simple sentences and a sense of the culture. For instance, while we were learning the days of the week in Kiswahili, we also learned that in their culture Saturday is considered the first day of the week.

After our daily lessons with Wycliffe, we would leave the compound but never without salutations from Happy Michael, the compound guard. You couldn't help but smile back at Happy Michael as he stood waving with both of his hands as we walked up the rutted dirt road leading toward MTRH.

My father would go off to do rounds at the hospital and my brother helped out at a teen center for street children. My mother and I would go to the Sally Test Pediatric Center at the Moi Hospital. The Sally Test Center was set up to provide a place for children who were long-term patients at Moi to have some normalcy during their stay. It was an area where children could play or keep up with their lessons or just be cared for in a setting that was away from the clinical areas and be normal kids. Most of the children I met at the Sally Test Center had been abandoned. Victims of poverty, their parents often just don't have the means to pay or stay with a sick child. Unfortunately, this creates a steady supply of orphaned children to be cared for and demand for extra help and hands at the Sally Test Center.

I fell in love with the Sally Test Center and looked forward to each day there. My daily routine at the center consisted of holding baby Alex, who was only a few months old, and looking into his happy, chocolate eyes and hearing him try to turn his baby gibberish into my name. You wouldn't have known that he had been abandoned at the entrance to the hospital as an infant. He seemed so full of life and eager to explore the world around him. His little fingers would struggle to wrap around mine and he would look at me as though I was the most interesting person in the world. I will never forget the connection I felt to him.

When I wasn't holding Alex, I was playing with Sydney, a two-year-old orphan with malaria. Whether it was because I made a funny face or because he was being tickled or for no reason at all, Sydney was constantly giggling. He

had the most contagious laughter that would never fail to brighten my day. If Sydney was otherwise occupied there were always other children to attend to. For instance, there were the two young twin sisters who would always be tickling and wrestling with each other. They glowed with happiness and as soon as I met them I knew they had an incredibly strong connection with one another. They had severe burns all over their bodies because their father had lit their house on fire, killing their mother and other sister. However, if the burns weren't visible, I never would have known what tragedy they had endured. They were as happy and playful as any other children.

Each of these kids had a story, a history of courage, survival and perseverance that would devastate most human beings – but not these children. They were hopeful and happy, despite everything they had been through. They sang and danced and gave love with such ease. When we would sing, it would fill the room with love and happiness despite all that they had been through. They had accepted us and loved us with such ease that saying good-bye was truly heartbreaking. When they sang to me I appreciated the time I had with them, rather than think about the possibility of never hearing their voices again. I followed their lead as they showed me that our goodbye should be a happy moment, not a sad one. They were strong, and showed me how to be strong, too. ❖

NICK RICH

I can remember the scene vividly. I am passing around a soccer ball with friends on a makeshift field between a farm and a rushing grey river. The morning air feels clear and cool and from a distance, it might look like a typical day of good, healthy fun. But upon closer observation, the scene reveals itself as quite out-of-the-ordinary. Word has spread of the afternoon game for kids of all ages, and that participants can also attend a picnic afterwards. Kids pour in from every direction and mayhem seems imminent. We quickly form teams and start the game. The players run, pass, jump and kick with surprising agility and skill. Everyone is laughing and smiling and glistening from their exertion in the afternoon sun.

Despite the wholesomeness of the scene, there are a few hints that this is not taking place in Anytown, USA. Twice during the soccer game for example, the ball accidentally rolls into the nearby river. Each time, Javan, a sinewy 14-year-old, strips off his clothes and, in one fluid motion, plunges headfirst into the river to retrieve the ball. I look up in amazement at Javan's lack of hesitation to risk his health and wellbeing for a soccer ball. Burning trash heaps along the edges of the field teem with kids scrounging for scraps of food or metal to salvage. The field itself is located behind an industrial district and the river Javan dove into is a repository for both industrial and human waste.

The soccer game was actually an outreach activity in Eldoret, aimed at reaching homeless street kids; many addicted to sniffing glue. The purpose of the soccer game was to bond with the kids by playing a game, providing a meal, and telling them about the nearby Tumaini Center. The center is a drop-in program where teens could find refuge from their lives and struggles on the streets.

In the summer of 2010, while my father worked at the nearby Moi Hospital, I volunteered at the Tumiani Center and worked with its staff to help the street kids of Eldoret. The mission of the Tumaini Center is to provide hope for children who are considered a nuisance to society. As a volunteer, my role was to engage the participants by playing games and sharing meals that consisted of porridge or cooked corn meal.

The first meal I shared with them was particularly memorable. Not because it was an especially good meal, but because it was a rite of passage. To the street kids, I was a typical "Mzungu" – a white American. Sitting at the crowded table I lifted the mug of porridge to my mouth, and got the distinct sense that all eyes were on me. I suddenly realized how important this moment was to my relationship with these children. Although the purple-brown liquid smelled like rotten eggs and had the texture of old milk, I drank it down and managed a smile when I lowered the mug. In return, I received smiles of approval and a few giggles. Sharing their meals, the staple food that sustains them, helped dissolve a cultural barrier. Although I was still an outsider, they now accepted me as a friend.

Despite the distance, I still feel a strong connection to the Tumaini Center and the street kids. I hope that my contributions were as great as their influence was on me. I learned how the simple gesture of playing a game and sharing a meal can dissolve boundaries and create a trusting bond. I also learned how rewarding it is to go outside my comfort zone and learn about other cultures. I find it ironic that these kids, cast-off from society, have actually taught me so much about tolerance and hope. ❖

The Unexpected Path from Eldoret

JULIA GREENSPAN

Julia Greenspan is completing her yearlong AmeriCorps Vista program where she worked at the Rhode Island Free Clinic as a fund development coordinator. She plans on enrolling in an MPH program in the near future. She traveled to Eldoret in 2005 with her family, Dr. Neil Greenspan and his wife Debra, and brothers Aaron and Ben.

Despite being garrulous and outgoing, I have known people for weeks or months without them being aware that I traveled to Eldoret, Kenya, in high school. I often hesitate to share my experience, because despite the trip having immeasurable effects on me, my primary concern is that it will be minimized to be just a "cool story" to others. Like a stone dropped in a pond, the ripples from that trip have affected my entire life trajectory. The short, superficial synopsis of the trip is my parents decided to pack up my brothers and me and head to Kenya for a month in 2005. Needless to say, when I returned to Barrington High School that fall, I had quite a different summer vacation story than most of my peers.

As a 14-year-old, there were many different layers to my experience. First, the superficial memories – how strange I found it that there were wild lizards that would scuttle around inside the hospital; then, the poignant mental images – remembering how the path into town from the hospital was lined with shanty-style shops, all prominently advertising "COFFINS FOR SALE;" and finally, the core of my experience – having to leave the baby to whom I had grown attached crying in a crib as I walked away from the hospital for the last time.

I didn't know what to expect when we left Logan Airport in Boston for our trip, and I certainly couldn't have predicted the lifelong implications of that month. What I had seen in the pediatric ward, especially the impact of HIV, left an imprint on my brain that I couldn't seem to shake. When I left to begin school at Clark University three years later, I enrolled in a course called "The AIDS Pandemic." During the first few semesters at Clark, I wandered between academic fields, unsure how I could fulfill the desire to help others, which had been sparked on my trip. During the fall of my junior year, I first heard the words "public health." Intrigued, I researched the field. To put it simply, the rest has been history.

I have dabbled in various aspects of public health, interning at different types of organizations through the rest of my college career. In July 2013, I completed an AmeriCorps VISTA year of service at the Rhode Island Free Clinic, which allowed me to experience health disparities right here, in our state. At this point, I am unsure what my next step is, but I know I will be pursing my Master of Public Health in the next few years. By getting my MPH, I believe I will finally be able to feel like I am helping people in a way that I longed to as a 14-year-old in Kenya, but did not yet have the capability. The next time I return to Eldoret, I know that I will have the necessary skills.

Eight years later, it is not the details of my family's trip to Kenya that stand out for me, but rather it is the desire to find a way to help others. For our family, it is hard to explain the experience that we had, and I know that we all took away something different from IU House and Moi Teaching & Referral Hospital. For me, my time in Kenya introduced me to public health, the field in which I want to devote my career, and for that alone, the trip was truly life-changing. ❖

Family Trip to Eldoret: 'Shock and Awe'

LINDA NICI, MD AND LLOYD FEIT, MD

Dr. Lloyd Feit is a pediatric cardiologist in Providence and is an Associate Professor of Pediatrics at the Alpert Medical School at Brown University. His wife, Dr. Linda Nici, is chief of the Pulmonary and Critical Care section at the Providence VAMC and Clinical Professor of Medicine at Alpert Medical School at Brown University. They traveled to Eldoret with their three children in August 2005.

The term "life-changing experience" is often used rather blithely to describe a myriad of events that occur throughout one's lifetime. However, we would maintain that bringing three young and impressionable children (7, 11, and 15 years old) to a Third World country to work within its healthcare system is truly an appropriate use of the term.

My husband and I are physicians, a pulmonologist and a pediatric cardiologist respectively, so it seemed logical to volunteer our time to the Brown Kenya Program where our expertise might be valuable. As we contemplated this journey, we also considered how worthwhile it might be to bring our children with us to Kenya. Alyssa, Sara and Benjamin were growing up in a wonderful community but one where wants and needs were easily met and diversity was not the norm. We wanted them to experience a culture that would impress on them the realities of social and economic inequalities and perhaps give them a context upon which to base decisions about how to make their way in the world.

To be sure, the experience changed us more than we could have imagined, and far more than any help and expertise that we intended to bring to their system. Each of us initially reacted to the experience in Eldoret and the Moi Teaching and Referral Hospital with shock and awe – the sights, the smells, the incredible sadness of poorly treated illness, were at times horrific. At the same time, the kindness and humanity of so many of the people we met in the face of such conditions was incredible and inspiring. Lloyd and I spent our days teaching trainees and caring for some of the saddest cases we had ever seen; sad in part because bad outcomes were often related to lack of simple education or modest means. Alyssa, Sara and Ben spent their days in the childcare ward, playing with, caring for, and getting to know the remarkable children, some of whom had been abandoned by their families. They developed an empathy and understanding of a world that is so far away from their own experience, but enriches and informs it to this day.

We regularly recount our experiences, both happy and sad, talk about returning one day, and approach life with a perspective and appreciation that I can't help but think would not be there without having chosen to spend this time together. Perhaps most importantly, we hope our kids internalized the lessons learned from watching the program directors and founders – Dr. Joe and Sarah Ellen Mamlin. Despite the seemingly constant challenges from 'the system' and so many other roadblocks, these people had a vision of change and kept their eyes on the prize. Isn't that what any parent wants for their children? ❖

Unique opportunity to assimilate into the Kenyan experience

TOM NOONAN, MD

Tom Noonan is a cardiologist who is a member of the Memorial Hospital Rhode Island Cardiology Group working in Pawtucket, Rhode Island. He and his family traveled to Eldoret in July 2007.

I had the opportunity to visit Eldoret, Kenya, with my wife and four children for the month of July 2007. We were immediately made an integral part of the Brown Kenya Program. I engaged in teaching activities at the Moi Teaching and Referral Hospital, while my wife and children made the long hospital stays of the children in the Sally Test Pediatric Center more enjoyable.

Traveling to Africa is an experience all should enjoy. Our trip, however, allowed us to assimilate into the African culture in a way few others outside of medicine or mission work can understand. My children and I would walk daily to the hospital, stand in large crowds to enter, and shop in the city center. While downtown, they quickly realized the enormity of the crowds and the poverty. They always felt comfortable and wanted by the Kenyan people.

Two years after our trip, we invited a Kenyan whom we had befriended, to come to America for medical training over six weeks and stay in our home. My children came to better understand the difficulties living in Kenya through his eyes. This was a difficult time for him to travel, during the political clashes and violence. Despite this, he knew the opportunity could not be wasted. He explained to my children clearly how important it was to him and his family to fully utilize this opportunity.

Overall, the experience in Eldoret was life changing for all of us. We came to understand that many facets of life in the United States are taken for granted. Fresh water, living conditions, safety of travel (especially at night), personal safety/crime and infectious diseases are all challenges my family came in contact with first-hand. ❖