

Foundation for African Medicine and Education

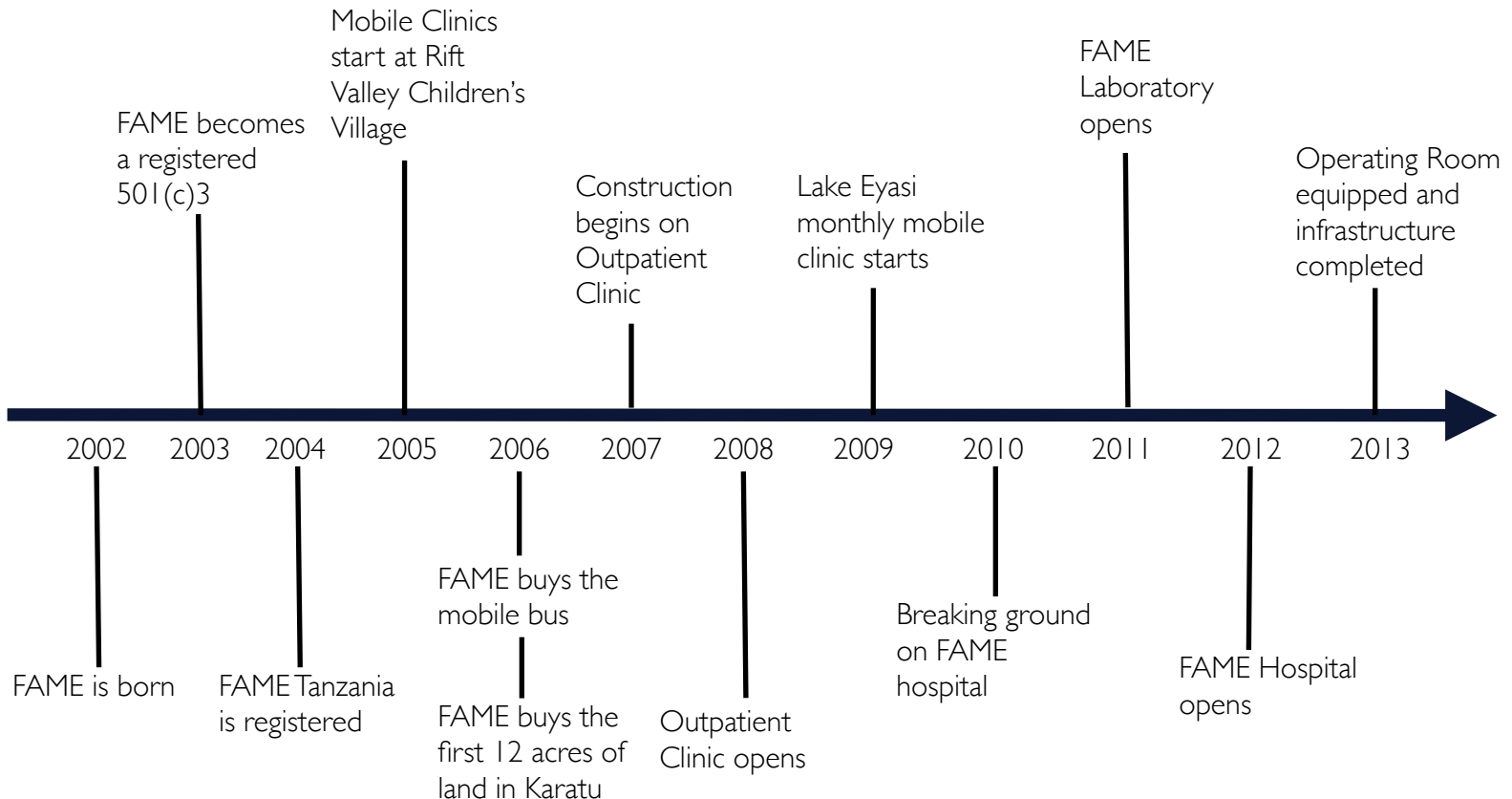


2013 Annual Report



"It is impossible," said pride. "It's risky," said experience. "It's pointless," said reason.
"Give it a try," whispered the heart...

Timeline



Dear Friends of FAME,

It seems like yesterday that we admitted our very first patient to the new inpatient ward. Yet, another year is ending and a new one is about to begin. Our first full year as a hospital, 2013, was marked by unanticipated challenges and moments of immeasurable joy. Whether it was the compassion with which our nurses responded to the toddler with burns over half his body or the skillful hands with which our team cared for the new mother — bleeding and septic — after a complicated delivery at home, we repeatedly found ourselves proud of our local team. Yes, the learning curve has been very, very steep, for us and for our healthcare workers. There were things we thought we could accomplish much faster: the rollout of our surgical program and labor and delivery services in particular. However, we knew if we tried to do so, it would be premature, overextend our staff and ultimately compromise the quality patient care already being provided. Staff recruitment and readiness, along with operating room infrastructure and expertise were among the many challenges we underestimated. We went from 5 nurses (mostly veterans) at the beginning of 2012 to 15 nurses at the beginning of 2013, many who were brand new to the field. In fact, most had never before worked in a well-functioning hospital. Recognizing these realities, we decided to focus our energies on the ward this year, orienting and training our new nurses, implementing systems that would insure quality inpatient care, and better equipping our team with the knowledge and skills they needed to appropriately respond to the variety of medical emergencies they were already encountering on a regular basis, ready or not. We were not disappointed. Despite the demands, our local team rallied again and again, going outside their comfort zone and rising to the occasion to care for patients for whom being referred elsewhere simply was not an option. Our senior doctors, nurses and lab techs here in Karatu, our volunteers and consultants from across the globe, our amazingly generous and committed donors, together, took a new hospital from a well-equipped “building” to a quality inpatient service.

Our hope is that these pages will provide you with an overview of what FAME has accomplished this year and a glimpse of all the work that still needs to be done. Dr. Joyce Cuff, long-term volunteer and very special friend, puts it well: “As we enter this new year, with the unwritten future before us and the wisdom of hindsight to guide us, we move ahead - certainly not blind but without the luxury of 20-20 vision...” With your continued support, less than perfect vision isn't so scary. In fact, it's pretty downright exciting.

With Love & Deepest Gratitude,



Susan C. Gustafson
Founder/Co-Director



Frank Artress, MD
Founder/Co-director



FAME Medical Health Center Outpatient Clinic

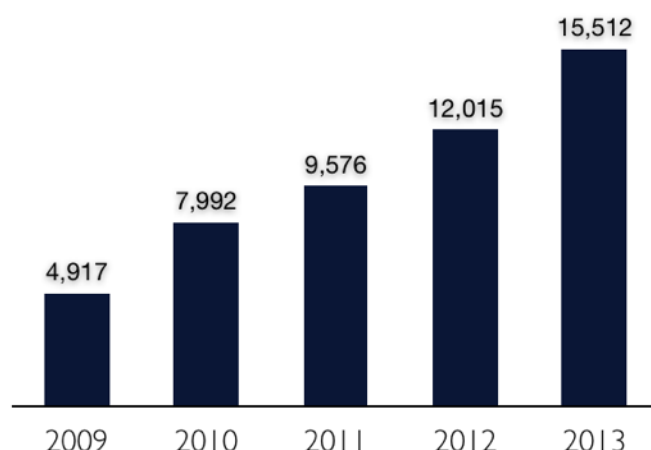
In its sixth year of operation, our Outpatient Clinic continues to grow, addressing an increasing variety of illnesses and serving an ever-widening catchment area. While we are located within the rural District of Karatu, we are seeing patients from all over the Arusha region, including the districts of Ngorongoro, Monduli, Babati, and Mbulumbulu. Patient visits increased from just over 12,015 in 2012 to 15,512 in 2013, a 30% increase in one year's time. FAME Medical is fast becoming a "go-to" medical facility for other dispensaries and health centers in the region, and we are pleased to be in a position to help. In response to the growing number of patients, we made two changes to the outpatient clinic this year. We converted one administrative space into an Ultrasound/EKG room (480 ultrasounds were conducted this year) and another into an additional patient consult room. In addition to Dr. Frank Artress, our Medical Director, we have six local clinicians treating patients full-time at FAME Medical. They include Dr. Fredrick Mshana, Dr. Gabriel Kissima, Dr. Ken Karanja, Dr. Abduel Mmile, Dr. Anne Ghati, and Dr. Isaac Kakwimba.

Perhaps most unique to providing outpatient care in rural Tanzania is the absence of an "appointment culture". What this means is that large groups of patients arrive at the same time, often on foot, sometimes on public transport. With this in mind, we decided to enhance our health education programming on-site to include "edutainment" in the covered outdoor waiting area. Rather than simply sitting and waiting to be called, our patients can now learn about disease prevention and healthy behaviors while waiting to see a doctor.

The top three diagnoses made in the outpatient clinic this year included respiratory infections, gastrointestinal infections, and urinary tract infections.



Annual Patient Visits



FAME Medical Health Center Laboratory



by Dr. Joyce Cuff, Volunteer Lab Consultant

Over 45,000 lab tests were performed in 2013, fulfilling lab requests for over 12,000 patient visits. This is a 33% increase in lab visits and a 50% increase in lab tests compared to 2012. The increase in tests per patient reflect the increase in the number of tests that can be performed, the broadening spectrum of illnesses represented in our patient population, and the increasing confidence of the medical staff in the quality of lab testing being conducted.

Having maintained a computer data base of lab results over the past 3.5 years has allowed us to measure the accuracy of lab testing for diseases whose prevalence is known, thereby providing clear quality control monitoring. The database is also allowing us to identify conditions of major concern and particularly vulnerable groups. One of our most alarming findings is the extremely high rate of anemia in our youngest cohort. Forty-two percent of children 5-years of age or under are moderately to severely anemic (World Health Standard = less than 10g/dL) and the

percentage rises to sixty if we include mildly anemic children (levels 10-11 g/dL). When one considers the negative impact of low hemoglobin on cognitive development as well as on resistance to infectious disease and overall health status, one must be seriously concerned about the long-term health prospects of this group. Of our patients who are women of childbearing age, 15% are moderately to severely anemic and this level increases to 24% when those who are mildly anemic are included. Since these are the people who are giving birth to and nursing young children, their health status affects not only themselves, but also their unborn and nursing children. These are additional strong reasons for FAME to move forward with its planned prenatal care program.

The blood chemistries machines that were purchased at the end of 2012 proved to be invaluable tools in 2013. A number of our hospital patients were effectively treated with the help of our expanded diagnostic testing capability. We were able to monitor levels of key metabolites, establish firm diagnoses on the levels of blood chemicals, and measure effectiveness of treatment.

Our Fine Needle Aspiration and Tele-pathology initiatives have also seen success in 2013. Between 12-15 patients have been diagnosed with leukemias or other cancers and have been referred to the Ocean Road Cancer Center in Dar es Salaam for further diagnosis and treatment. Although the status of many of the referrals is not yet known, our first tele-pathology patient, a 6-year-old acute lymphocytic leukemia patient has completed her primary chemotherapy in Dar es Salaam and has returned to us for follow-up therapy. She is happy, healthy, and fully embracing the life-extension she has been given as a result of this Tanzania-US collaboration.

Finally, as the number of patients who are suffering from chronic, treatable conditions or who are interested in preventative medicine has greatly increased, we have established databases for diabetics, those with cardiac health concerns, and thyroid patients. The purpose of the databases is to be able to remind patients to come into the clinic at appropriate intervals to have lab work done and to have their status assessed, and to maintain records that will help us to evaluate intervention strategies.



FAME Medical Health Center Inpatient Service

The year 2013 was our first full year of operation as a Health Center with fully functioning hospital capabilities. Upon opening the inpatient service and transitioning to 24/7 care in late 2012, we quickly learned that patients far sicker than we ever imagined would arrive at our new hospital — individuals who would be cared for in Intensive Care Units in other parts of the world. The sad reality in rural Tanzania is that reliable ambulance services, appropriately equipped emergency rooms, intensive care units, and trauma or critical care teams are virtually non-existent. Thanks to our supporters, FAME Medical is filling an enormous gap. Not only do we have an increasingly well-trained team of local healthcare workers, we also have an amazing specialist volunteer contingent and a well-equipped medical facility to support them. Our doctors and nurses found themselves treating the familiar and the rare, the straightforward and more complex — everything from severe pneumonias and gastrointestinal infections to complications of diabetes, cardiovascular disease, rare skin infections, and neurological anomalies. Needless to say, the learning curve has been extraordinarily steep, but between our volunteer specialist consultants and a very dedicated local team, patients are getting excellent care — patients for whom other options simply do not exist due to poverty and/or rural location.

Knowing that we would also be seeing patients in time-sensitive, emergency situations, we brought in a volunteer trauma team to introduce our healthcare workers to trauma response. While we still have a long way to go and more training on the horizon, this initial week-long intensive training definitely shaped how our team responded to the emergency situations we encountered this year. And we encountered quite a variety — everything from car accidents, falls, and poison arrows to heart attacks and strokes.



Our Hospital in 2013...

440 hospital admissions
34% of admissions pediatric patients
23% of these under five
Average hospital stay of 2 days



The top 5 reasons for admission to the new FAME hospital include:

1. Severe respiratory infections
2. Gastrointestinal infections
3. Diabetes and related complications
4. UTI (often during pregnancy)
5. Trauma (wounds, burns, broken bones)



FAME Medical Health Center

Staff Profiles

Gabriel Kissima, MD

In 2012, we had the pleasure of inviting Dr. Gabriel to join the FAME team. He was born in Moshi, Tanzania, where he began his education at Kilimanjaro Primary School. Excelling in math and science, Dr. Gabriel met the criteria for advanced studies in engineering or medicine. He chose medicine. "The needs of the community inspired me to be a doctor from the time I was in primary school", Dr. Gabriel explains. He earned his Medical Degree at Muhimbili University of Health and Allied Sciences in Dar es Salaam. During his time in medical school he was a member of the SVELIFE CLUB, a non-profit organization focused on providing peer education on health, especially reproductive health and behavioral change. He completed his internship at St. Joseph's Mission Hospital. Dr. Gabriel is passionate about helping the people of rural Tanzania, and he demonstrates his commitment day in and day out as he cares for our rural patient population. He embodies what it means to be a "life-long learner", always studying, researching, and consulting with colleagues on behalf of patients. Practicing medicine in Tanzania is not for the faint hearted. Continuity of care is a challenge and referral options are limited. Doctors very often must go outside their comfort zone and do the best they can to save lives. Dr. Gabriel is the kind of doctor who goes above and beyond for his patients. Seven year old Grace is a case in point. Diagnosed with leukemia at FAME last year, little Grace received her first round of chemotherapy at a pediatric hospital in Dar es Salaam. She has returned to Karatu, where the family has asked us to provide her follow-up care. Every month Grace comes to us for her chemotherapy, during which Dr. Gabriel oversees every aspect of her care, consulting closely with FAME oncology consultants online and with her treatment team in Dar es Salaam. This is a little girl whose family cannot afford to stay on in Dar es Salaam for the full treatment protocol, so she is counting on Dr. Gabriel and the FAME team to fill the gap and help her get well. She has a wonderful doctor in her corner, committed to seeing her through a tough and some times very difficult treatment process. Thank you, Dr. Gabriel, for your dedication, for being so patient-centered, for being the kind of doctor FAME is proud to have on our team.



Neema Lazier, RN



In 2012 Neema Laizer earned her diploma in nursing from the Machame School of Nursing. In November of the same year she joined the FAME Medical nursing team. Becoming a nurse was not easy for Neema. Neema's family, from Mawalla village in Kahe Kilimanjaro, could not afford to send her for further education despite her good grades, her desire to continue her studies, and her life-long dream of helping her Maasai community. Fortunately Neema refused to give up hope. And as things would have it, she soon crossed paths with Bev Stokebrand, an American woman eager to help her fulfill her dream of becoming a nurse. Bev and Duane Stokebrand sponsored Neema to Nursing School and were not disappointed! During the

school break of her final semester, Neema expressed an interest in volunteering in a rural hospital, where her Maasai community was being served. Bev knew of just the hospital, FAME Medical in Karatu, Tanzania. She knew about FAME from a fellow Nebraskan, Dr. Duane Koenig, a long-time FAME volunteer and supporter. The rest is history. While a very new nurse, Neema is working hard to develop her skills and has already been an enormous asset to FAME. Not only is she a bright, caring nurse, she understands Maasai culture and serves as a wonderful interpreter for our patients whose mother tongue is KiMaa. Neema's story just reinforces our belief that we are all connected — that the world is one big tapestry of the right people crossing paths at the right time. Thank you, Neema, for holding onto your dreams. Thank you, Bev & Duane, for helping to make dreams come true.



FAME Medical Health Center

Mobile Medical Services

We have been providing mobile medical services to the Oldeani community since 2005. Basing from the infirmary at Rift Valley Children's Village four days each month, 1800 patients were attended at over 20 drop-in clinics this year alone. Our partners at Rift Valley Children's Village continue to do a phenomenal job with the outreach and follow-up necessary to make these types of services translate into healthier communities.

Additionally, FAME has been operating a "mini-mobile" neurology clinic in the Mbulumbulu Ward since September of 2011, a remote area roughly 22 miles from Karatu. To give this service some context, the ratio of neurologists to people in Sub-Saharan Africa, is estimated to be only one for every one million to 2.8 million people. Needless to say, the vast majority of people living in rural areas like ours would never otherwise have access to this specialty. Spearheading this program is Neurologist Dr. Michael Rubenstein. Accompanied by residents from University of Pennsylvania who have a special interest in Global Health, Dr. Rubenstein joins our team for two weeks twice yearly, mentoring, teaching and ultimately identifying and treating individuals with a variety of debilitating neurological disorders, including epilepsy, movement disorders, headache, neuro-infectious



disorders, developmental disorders and neuromuscular disorders. Dr. Rubenstein's work is truly in the spirit of collaboration and capacity building, with our local doctors and neurologists from the U.S. working side by side in the interest of patients. Basing from government dispensaries, 150 patients suffering from neurological disorders were served this year, most never before treated.

FAME Medical Health Center Prevention & Community Health

In addition to Mobile Medical services, FAME implemented a variety of other programs this year focused on awareness, prevention and community health. Among these were the following:

- FAME clinicians provided medical checkups for 123 women and children from Lake Eyasi Girls Training Center, an NGO that serves young mothers who have dropped out of school following early pregnancy.
- The FAME community outreach team conducted a two day training at The Dageno Girls Center, during which 60 students learned about the prevention of HIV and other sexually transmitted diseases, female hygiene, understanding the female body, family planning and reproductive health.
- FAME provided First Aid support for the Ngorongoro Half Marathon, "Race Against Malaria" again this year.
- At the government's request, FAME hosted International Nursing Day for the District of Karatu during which 125 nurses from around the district were in attendance.



Mary Msuya at Dageno Girls Center



Nursing Day



Community Health Coordinator William Mhapa



Primary school students waiting for check ups

FAME Medical Health Center Construction & Equipment

The Hoffman House

We were exceedingly pleased to see the completion of another much-needed volunteer house this year. Thanks to the extraordinary generosity of Dr. Carl and Theresa Hoffman and Dr. Joyce Cuff, we can now host larger numbers and longer-term volunteers at FAME Medical. The Hoffman House is located on the FAME campus, making it possible for our volunteer doctors and nurses to be at the hospital at a moment's notice. The house has three bedrooms, a sitting room, a kitchenette and three bathrooms, and was completed just in time for Thanksgiving. Will Bowman, our new Volunteer Coordinator, arranged for a traditional Thanksgiving dinner on the verandah. Not only does the verandah make for a great place to eat, it's where volunteers gather to decompress and support one another after a long day and/or night of caring for patients.



A Generator for FAME

Thanks to Mr. Marshal Merriam, FAME now has a 50KVA F.G. Wilson generator. Given the frequency with which we experience power outages in Karatu, we desperately needed a generator that would switch on automatically, a “work horse” that would enable us to run vital, often life-saving lab and hospital equipment when the grid is down. To put this in perspective, here is an email sent to Mr. Merriam shortly after the arrival and installation of this much-needed piece of equipment:

“We have just learned that Karatu will be without electricity from 6 a.m. to 6 p.m. for two weeks....Not only is the community without electricity, many are also without water because the pumps can't run. If we did not have the generator, we would be in big trouble in the ward and in our lab. Because of YOU, things are running smoothly despite the situation....We can run the lab and we can run the oxygen concentrators and other electricity-dependent equipment. THANK YOU for your extraordinary support.”

Surgical/Medical Equipment and Infrastructure

In anticipation of our surgical wing opening in early 2014, volunteer surgeon, Dr. Duane Koenig, donated a literal plethora of new surgical instruments and devices to assist our team with the general surgeries they are most likely to be doing in the months ahead. He also donated a new skin grafting machine for dealing with the growing number of burn cases we see at FAME. We completed plumbing and installation of the medical gases this year as well. Our amazing supporters also enabled FAME to purchase a new, modern autoclave for the operating room and a second ultrasound machine to be designated for our labor and delivery service in the second ward.

Lab Equipment

We were able to purchase a bio-safety hood this year, both as an instrument to provide safety for our technicians when conducting hazardous procedures such as tuberculosis testing and as a necessary piece of equipment as we attempt to move into the area of bacterial culturing and sensitivity during 2014.



FAME Medical Health Center Scholarships & Continuing Education

We believe in lifelong learning at FAME. Thanks to our supporters, we have been able to make continuing education opportunities a mainstay of what we do.

- FAME Clinician, Ivan Mwaluko, is fast approaching completion of the Assistant Medical Officer Training Program at the Tanzanian Training Centre for International Health. We are delighted to report that he will be returning to FAME in October of 2014.
- Medical Student, Zachariah Maggas, completed his academic program in October of this year and will soon begin his internship year at Haydom Hospital, a government approved program for medical interns.
- Dr. Ken Karanja will be attending a Clinical Officer Refresher Course in May of 2014 in preparation for AMO Training.
- Dr. Isaac Kakwimba will attend a one month intensive course in Ultrasound late next year, at the Institute of Sonography in New Delhi, India.



These scholarships have been provided by a very special couple from New Jersey who have asked to remain anonymous. They also enabled us to purchase a much-needed ultrasound probe and solar water heater for the second ward. Our heartfelt thanks to two amazing individuals!

Supporters of our scholarship program are also helping Emanuel Tluway, currently a housekeeper at FAME Medical, take the steps necessary to fulfill his life long dream of becoming a nurse. Educated in a poor government school, he will likely need to resit exams and/or begin his nursing education in a two year Nurse Assistant certificate program. He is in the process of filing applications, securing interviews, and improving his English.

Technology is becoming increasingly central to our continuing education emphasis at FAME Medical. Recognizing the role technology can play in equipping healthcare workers with critical knowledge and information, Dr. Ron Reece, a California dermatologist and FAME supporter, donated iPads to FAME this year. This technology, coupled with the internet access FAME already provides for research and telemedicine purposes, gives our doctors access to invaluable medical applications that help in the treatment and education of patients. Dr. Ron voiced his delight at being able to provide doctors in the developing world with access to the same information, resources, and updates that doctors in the US and Europe routinely have at their fingertips. Thank you, Dr. Ron!

William Mhapa and Mary Msuya, our Community Health team, attended a week-long training in Uganda entitled "Pushing Healthcare Beyond the Clinic Walls". Given our efforts to combine facility-based medical care and mobile medical outreach over the years, this workshop was especially fitting. Our sincere thanks to the Segal Family Foundation for sponsoring this event and making it possible for William and Mary to attend. They returned to FAME bursting with new ideas and enthusiasm.



FAME Medical Health Center Volunteers Supporting Our Team

2013 brought volunteers from all backgrounds and areas of expertise. They served on the ground with us in Tanzania and in a telemedicine capacity from overseas. The dedication and generosity of these incredibly busy medical and non-medical professionals has been extraordinary — be it the Critical Care Nurse Practitioner helping us stabilize a trauma patient for transport or a volunteer consultant helping us diagnose several cases of leukemia in pediatric patients — our volunteers played a central role this year in helping us help our patients. Our volunteers also were integral to continuing education efforts at FAME, providing lectures and trainings on a variety of important topics as well as providing hands-on support and consultation in our outpatient clinic and patient ward. An enormous thank you to all of our volunteers on the ground and abroad.

On-site Volunteers

Chris Wall, MD, Internal Medicine, California
 Danielle Becker, MD, Neurology Fellow, Pennsylvania
 Duane Koenig, MD, General Surgery & Family Practice, Nebraska
 Elaine Penner, RN, Surgical Nursing, Nebraska
 Graham Pierce, Paramedic, Trauma & Medivac Specialist, Arizona
 Guy Bizak, MD, Emergency Medicine, California
 Jackie Bilbro, RN, Emergency Medicine, California
 Jeanne Artress, Technical Support, California
 Joe Hawkins, Logistics & Technical Support, Nebraska
 Joyce Cuff, Ph.D., Laboratory Science, New Hampshire
 Kandi Hawkins, Logistics & Technical Support, Nebraska
 Kathy Gaines, RN, Case Management, New Hampshire
 Katrin Speidel, Wellness Specialist & Acupuncturist, Germany
 Kellie Iramina, RN, Emergency Medicine, California
 Kent Petrie, MD, Family Medicine, Colorado
 Kim Brooks, RN, Emergency Medicine, Arizona

Kris Taylor, Photographer, Texas
 Lesha McPeak, Nurse Practitioner, Emergency Medicine, California
 Liz Stoebe, PA, Cardiology, Minnesota
 Lynne Kershaw, Acupuncture, Australia
 Marjorie Boor, Ultrasound Technology, California
 Michael Rubenstein, MD, Neurology, Pennsylvania
 Monica Ferraro, Clinical Laboratory Science, California
 Nancy Allard, RN, Nursing & Architecture, Canada
 Pam McLendon, Volunteer Coordinator, Tennessee
 Penny LeGate, Journalist & Photographer, Washington
 Reed Shnider, MD, Cardiology, Washington DC
 Rich Mahon, MD, Pulmonology, Washington DC
 Robyn Bryde, Medical Student, Georgia
 Sally Knowles, MD, Internal Medicine, New Jersey
 Toni Pryor, RN, Women's Health Oncology, New York
 Will Bowman, Volunteer Coordinator, Kentucky



On-line Volunteer Consultants

Alan Feiger, MD
 Albert Rosengarten, MD
 Bruce Smoller, MD
 Bill Griffiths, MD
 Carrie Kovarik, MD
 Cesar Fernandez, MD
 Danielle Becker, MD
 Dave Gordon, MD
 David Schulman, MD
 Donna Valerie, DVM
 Ermani Sidereal, MD
 Gerald Escovitz, MD
 Glenn Alper, MD
 James MacMillan, MD
 Joe Neal, MD
 Joe Tessera, MD
 John Dyhrberg, MD

Justin O. Schechter M.D., F.A.P.A.
 Katie Williams, MD
 Katherine Reese, MD
 Ke Zhang, MD/Ph.D. student
 Marie Nevin, MD
 Martin Roitman, MD
 Margaret Goni, MD
 Mark Eisenberg, MD
 Meredith Fishbane Gordon, MD
 Michael Rubenstein, MD
 Michael Sharon, MD
 Milton Klein, MD
 Najma Khanani, MD
 Paul Phillips, MD
 Reed Shnider, MD
 Ron Gutmann, Ph.D.
 Ron Eggert, MD

Ron Reece, MD
 Sabine Paul, MD
 Sue Miesfeldt, MD
 Ted Williams, MD
 Trish Scanlon, MD
 Tom Heywood, MD
 Ulli Winkler, MD
 Kim Pruett, MD
 NBBJ Architects

CME Curriculum Development Team

Marjorie Luckey, MD
 Frank Lee, Ph.D.
 Mikki Ashin, MD
 Lawrence S. Lessin, MD
 Audrey Corson, MD
 Erin Fierman, MD
 Duane Koenig, MD
 Laura Bachrach, MD



FAME Medical Health Center Volunteer Profiles

Michael Rubenstein, MD



Dr. Michael Rubenstein began volunteering at FAME Medical in 2010. A practicing neurologist for over 24 years, he is not only experienced in general neurology but also sub-specializes in Tourette syndrome. Currently, Dr. Michael is an Assistant Professor of Neurology at the University of Pennsylvania, and an Attending Neurologist at Children's Hospital of Philadelphia, where he provides resident education in the departments of neurology. "Dr. Michael" travels to Tanzania twice

annually, where he volunteers with us, providing patient care and clinical neurology education to healthcare workers at FAME Medical. On one of his early visits, he recognized the neurology needs of patients in our area and subsequently spearheaded a program designed to address them. "I realized that it could be incredibly effective to develop a Neurology 'mini-mobile' clinic that would bring a small group of caregivers to the villages in the Karatu District to see patients who couldn't travel to FAME for their evaluations and care. While patients with neurological disorders technically have access to "free" medicines at designated hospitals in Tanzania, the poorest of the poor do not have the resources to reach those hospitals, nor do those hospitals necessarily have the resources to truly help them. In rural areas like ours, very often epilepsy patients are kept inside and out of view, their condition often attributed to witchcraft. With the help of Dr. Michael and FAME's community outreach team, these attitudes are changing. Communities are beginning to understand that debilitating neurological conditions, like epilepsy, are medical conditions that are treatable. The future is increasingly bright for this program, with Dr. Michael now bringing residents with him to learn as well as train local healthcare givers. Thank you, Dr. Michael for giving so many people a new lease on life.

Nancy Allard, Arch. EPFL, BS, RN/ Farr-5

A long-term volunteer, Nancy shared her time and expertise with the FAME team for almost a full year! Her skill set is exceedingly unique and Nancy's volunteer stint could not have come at a better time. An accomplished nurse, having worked the last several years at Beth Israel Deaconess Medical Center in Boston, MA, and a gifted architect, who trained at the Swiss Federal Institute of Technology in Lausanne, Switzerland, Nancy wore a variety of hats at FAME. She tirelessly cared for critical patients in



our ward and served as an invaluable resource to our nurses and doctors. At the same time she produced architectural drawings and design concepts for critical construction and infrastructure projects. Her dedication was extraordinary. Nancy was always willing to do whatever needed to be done, be it working with the construction supervisor out in the hot sun, or doing dressing changes on a badly burned patient. Her enthusiasm and dedication also inspired others to give. Among these generous donors are Boston-based NBBJ Architects who graciously provided information and advice on our future x-ray building, HMFH Architects, also in Boston, who donated a much-needed architecture drafting program, and Tanzanian-based Power Foods Industries Limited, who supplied FAME with *Plumpynut*, a therapeutic food for severely malnourished children. Reflecting on her experiences in Tanzania, Nancy puts it well: "Tanzanian culture and language is complex and fascinating; the traditions are interesting, beautiful, rich and unique. Living conditions, on the other hand, are incredibly difficult in this part of the world and practicing medicine in rural Tanzania is not an easy task....The resilience of the African people is inspiring and I now understand why, "you can leave Africa but Africa will never leave you."



Our Volunteer Coordinator of two years, Pamela McLendon, left FAME this year to pursue a career in anthropology. During Pam's time with us, she conducted research exploring local perceptions around maternal health in rural Tanzania. Having conducted hundreds of interviews in the District of Karatu, Pam's research findings will be used to enrich maternal health services at FAME Medical. Thank you Pam for your enormous contribution to FAME as Volunteer Coordinator and advocate for women in rural Tanzania.



FAME Medical Health Center

End of Life Care: A Volunteer Reflects

by **Cardiologist, Dr. Reed Shnider**

The askari knocked softly on the door and signaled for me to follow. We walked silently by the light of his flashlight and the Tanzanian moon. Arriving at the hospital, we found a distraught family surrounding a very sick old man. Dr. Anne and Dr. Mshana worked intently to relieve his severe chest pain and improve his low blood pressure but without much success.

The patient's son looked upon the situation with great worry. Our initial goal was to stabilize the patient who, it turned out, was seen in our clinic the day before. A 79 year old man with atrial fibrillation and a prior stroke, he was accompanied by several family members who, then as now, appeared both concerned about his condition and appreciative of the care provided to him. The old man struggled mightily with the pain. Though he was cooperative, his condition proved stubborn. Responding little to the medications administered—atropine, epinephrine, insulin, aspirin, morphine and oxygen—his condition progressively worsened, and it seemed increasingly unlikely that he would recover.

Eventually, we shifted our approach from curative to palliative care. With his family by his side and FAME doctors and nurses close by, he grew weaker and finally died as dawn approached, his pain gone, holding his son's hand.

I was most impressed with the gentle and compassionate way the staff explained the father's condition to his son, as if they were



all one family. They reassured the son that he had done everything possible to help his dad, which is after all, a universal wish. The father's death was dignified and peaceful, with his family by his side.

That he died without pain, quietly, was largely thanks to the compassionate environment provided by FAME doctors and nurses. In my 28 year career as a cardiologist, I have witnessed many deaths under many circumstances. I can honestly say that none was more gentle and peaceful, a reflection of the values and quality of the FAME staff. I hope to teach many things during my future visits to FAME and Karatu. But in this area, I can only be a student.

To my Tanzanian family, thank you.



FAME Medical Health Center In Memory of Those We Lost

Providing medical care in rural Tanzania brings with it some of the most deeply gratifying moments life has to offer — those moments during which doctors and nurses are reminded of the life-altering difference they can make in the lives of others. Thousands of patients have been given back their health, many times their lives, this year at FAME Medical. However, there are also those individuals whose lives we were not able to save. Among them, our young patient who ran out of his insulin while far from home, the child suffering from cerebral malaria who arrived already in a coma, the boy in late stage rabies, the elderly man whose heart gave out, the little girl who died from leukemia, and the grandmother who lost her fight to complications from Stevens-Johnson Syndrome. We honor these individuals here. Their courage, their gentle spirits, their extraordinary strength despite tremendous adversity will remain in our hearts always.

"The heart hath its own memory, like the mind. And in it are enshrined the precious keepsakes, into which is wrought the giver's loving thought."

- H.W. Longfellow



FAME Medical Health Center Fundraising Tour

We all know how much work is involved in hosting a fundraising event. We also know how hard it can be to ask friends and colleagues for money, even when it's for a cause we believe in. We were humbled once again by the outpouring of support we received upon asking our friends and supporters to do just this. FAME founders Frank Artress and Susan Gustafson found themselves traveling all over the U.S. introducing people to FAME's work in Tanzania and reuniting with long-time supporters. At the end of a seven week journey, more money had been raised than ever before during this annual tour. Our heartfelt thanks to our incredibly gracious hosts and to all those who attended events and donated to FAME. We deeply appreciate all you have done and continue to do to make our work possible: Jan Smith, Lyn Ross & Tom Klein (Atlanta, GA), Richard & Mary Morgan (Houston, TX), Dr. Duane & Vi Koenig (Beatrice, NE), Paula Key & John Murphy (San Francisco, CA), Jeanne Artress & Dr. Ron Reece (Redding, CA), Graham Pierce (Phoenix, AZ), Drs. Marjorie Luckey & Sidney Bender (Taos, NM), Peter & Katie Mondavi and Chris & Chris Madrigal (St. Helena, CA), Craig & Aya Wainscott, Bart & Joe Smith, Barbara Crook & Richard Ely (Seattle, WA), Dr. Paul & Mrs. Bonnie DeChant (Ripon, CA), Drs. Glen & Lynne Alper (Orinda, CA), Sacramento Valley Sertoma Club (Citrus Heights, CA), Bill & Harriet Harris (Newport Coast, CA), Dr. Tom Heywood & Mrs. Stephanie Wilde (Solana Beach, CA), Toni, Lindsey & Sam Pryor (NYC, NY), Bob & Sarah Gould (Hamilton, MA), Tara Greenberg & Tim Algeo (Hudson, MA), Paul Sturm (Baltimore, MD), Jan Solomon, Ken Simonson, Dr. Audrey Corson & Dan Kazzaz (Washington DC).



The Harris Family

We would also like to thank The Rotary Club of Arusha and The Arusha Cycling Club for hosting our very first fundraising event in Tanzania, The Walk/Run/Bike for a Healthy Heart event.



Walk/Run/Bike for a Healthy Heart Event



Hal Scott of Sacramento Valley Sertoma Club presenting Frank & Susan with a service award and donation



FAME Medical Health Center

2014 - Another Big Year for FAME Medical

Our goal has always been to build a medical facility that becomes an integral and vital part of the community and region, a medical service that is dynamic and responsive to patient needs. From the beginning, we have envisioned a program that creates a space for a predominantly local team of healthcare providers to share and exchange knowledge and expertise with professionals from overseas medical communities, thereby creating a rich learning environment, building local capacity, and providing a quality service for patients. The growth and professional development of our local team has been remarkable. The temptations, of course, include trying to do "too much too soon" or attempting to be "everything to everyone" in a place where needs exceed resources in almost every domain. As we move into 2014, we are preparing ourselves for the delicate dance of stepping up to the plate when no one else can, while at the same time focusing the bulk of our resources on those areas of care that will have the greatest impact on our patient population.



Dr. Duane Koenig, Elaine Penner, Joe & Kandi Hawkins and Digna Kiwia

So, what comes next? Thanks to Dr. Duane Koenig, a long-time FAME supporter and a team of surgery-savvy volunteers, our operating rooms are ready for action. We are delighted to report that emergency and elective surgical services will be available at FAME in early 2014. We will be developing and introducing a prenatal program for women in our catchment area and incorporating the necessary education and outreach components to reach those who need it most. Likewise, we will be rolling out our Labor & Delivery services at FAME Medical for those identified as "high risk" pregnancies and others who simply opt to deliver in hospital rather than at home. We look forward to taking our diagnostic service to the next level in 2014 as well, introducing antibiotic sensitivity testing in an effort to address the growing problem of antibiotic resistance in Tanzania. Finally, we will ramp up our

education and training efforts, working with volunteer teams in the U.S. and Europe to develop learning modules and more formal curriculum specifically tailored to the needs of our local clinicians and nurses. Yes, FAME is looking at another seriously big year!



Financial Report & Summary

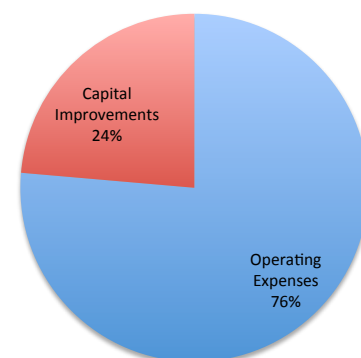
Statement of Operations

Revenues for FAME U.S. for the year ending December 31, 2013 totaled \$1,066,824. Of this, contributions of \$831,112 were received from 792 donors. Grants totaled \$224,050 from 4 foundations. Volunteer Program Fees to offset program costs in Tanzania totaled \$10,665. Interest income for the year was \$997.

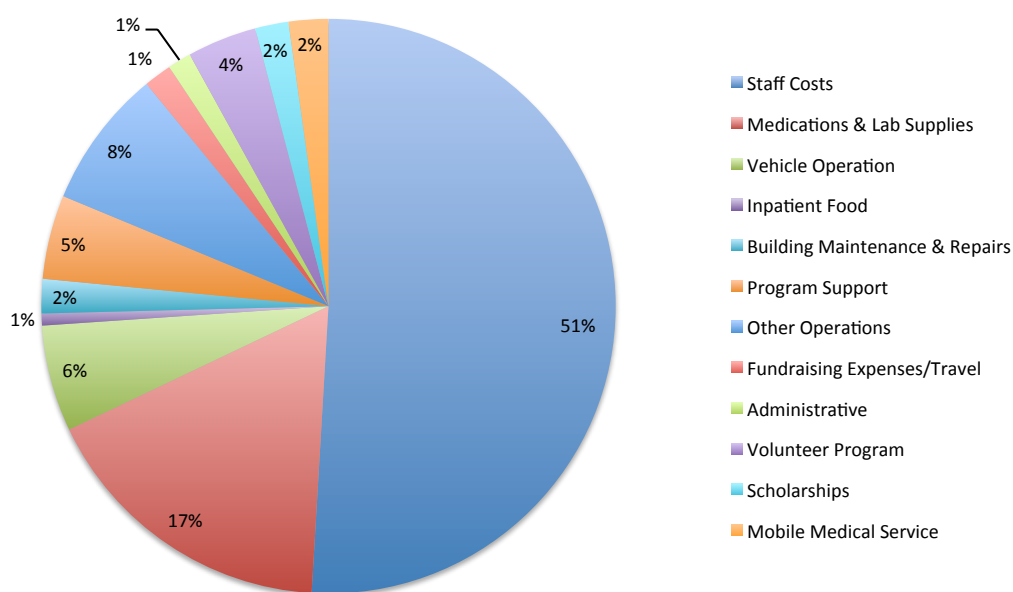
FAME (Tanzania) was successful in fundraising as well, receiving \$18,162 in grant funding. In addition, individual contributions in the amount of \$18,515 were received and volunteer fees of \$611 were collected. Patient fee income from the outpatient clinic and inpatient facility increased from \$133,394 in the prior year to \$211,406 in 2013, an increase of 58%. Patient fees for service covered 30% of the health center's operating costs with donor support covering the other 70%. Interest income for FAME (Tanzania) was \$54. The total amount that FAME (Tanzania) raised was \$248,748.

Operating expenditures for FAME (USA) and FAME (Tanzania) combined were \$789,877. Of this fundraising expenses and administrative costs were 2.9%, while staff costs, medications and supplies, vehicle operating costs, and mobile medical services combined accounted for 76% of all operating expenses.

Total Capital expenditures for the year were \$244,310. This represents 24% of total expenditures and mainly went towards diagnostic equipment, volunteer and staff housing and infrastructure & site development.



FAME US and TZ Operations 2013



Financial Summary 2013

Statement of Activities for FAME US and FAME Tanzania

Support and Revenues		Expenditures	
Donations by designated use		Operations	
Unrestricted	682,541	Staff Costs	402,332
General Operations	221,831	Medications & Lab Supplies	134,304
Scholarships	22,815	Vehicle Operation	47,251
Mobile & Neurology Clinic	1,125	Inpatient Food	5,320
Ultrasound & Equipment	49,650	Building Maintenance & Repairs	15,254
Staff Housing	35,000	Program Support	37,353
Volunteer Housing Construction	42,200	Other Operations	61,761
Grants received at FAME Tanzania	18,162	Fundraising Expenses/Travel	12,395
Donations received at FAME TZ	18,515	Administrative	10,513
Total Donations	1,091,839	Volunteer Program	30,886
		Scholarships	14,879
		Mobile Medical Service	17,629
Other Revenue		Total Operating Expenses	789,877
Patient Fees	211,406		
Volunteer Program	11,276	Capital Program	
Interest Income at FAME TZ	54		
Interest Income at FAME US	997	Hospital Construction	18,294
Total Other Revenue	223,733	Volunteer House	63,028
		Staff Housing Construction	6,490
Total Income for FAME US & TZ	1,315,572	Medical Equipment	42,855
		Generator	24,309
		Land	53,875
		Infrastructure Development	8,410
		Water Catchment System	5,238
		Canteen Construction	18,816
		Structural Landscaping	2,995
		Total Capital Improvements	244,310
		Total Expenditures	1,034,187
Statement of Financial Position for FAME US			
Assets	959,373		
Total Assets	959,373		
Liabilities			
Long Term Liabilities	10,000		
Total Liabilities	10,000		
Net Assets			
Unrestricted Assets	797,396		
Designated Funds	151,977		
Total Net Assets/Fund Balances	949,373		
Total Liabilities & Net Assets	959,373		



FAME Medical Health Center

Donors, Partners and Friends in 2013

Lasting change takes time. Providing quality medical care takes infrastructure, buildings and facilities, medical equipment and supplies. It also takes dedicated and well-trained healthcare workers and support staff — individuals capable of providing the care and services patients need. One without the other makes for a compromised and broken delivery system.

At FAME, we have been fortunate enough to attract individual and organizational donors that appreciate and embrace this fundamental reality and share our vision for FAME Medical in Karatu, Tanzania.

Many, many thanks to every individual who opened up their wallets or checkbooks for FAME this year; who pulled out their credit card and pressed the “donate now” button on our website, who signed up for a monthly giving program or spent personal resources to host a fundraising event or to purchase a piece of medical equipment, who schlepped a duffel bag clear over to Tanzania to help us help our patients or who made an “in-kind” donation in support of what we do. It is an understatement to say, YOU make our work possible.



We would also like to thank the Tanzanian Ministry of Health and Social Welfare and their Regional and District Representatives for supporting our efforts over the years and throughout our expansion from Outpatient Clinic to Health Center.

Finally, we would like to acknowledge those individuals and partner organizations who played an absolutely vital role in shaping FAME's progress this year; most of whom have embraced our vision from the very beginning. We remain eternally grateful for your extraordinary financial support over the years and your faith in our ability to carry out FAME's vision for FAME Medical in Karatu, Tanzania.

“I would maintain that thanks are the highest form of thought, and that gratitude is happiness doubled by wonder.”
G.K. Chesterton

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Izumi Foundation
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It is with great pleasure we introduce our newest Member to the Board

Craig Wainscott, Director
Seattle, Washington

**The Foundation for African Medicine & Education (FAME)
is a registered 501(c)(3) not-for-profit organization in the U.S.**

Please direct all inquiries and donations to:
FAME
4553 Crimsonwood Drive
Redding, CA 96001
(530) 229-1071

Credit card donations can also be made through the Network for Good on our website or through our California office. For more information, go to our website at www.fameafrica.org or contact our US Treasurer at (530) 229-1071.

FAME is also a not-for-profit corporation registered in Tanzania, holding a Certificate of Compliance with the Registrar for Non-Governmental Organizations. For inquiries regarding how to donate to FAME from outside the United States, please contact, Caroline Epe, Director of Development, at famedevelopment@gmail.com.

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