

Orientation for Alliance Volunteers

Welcome to the Alliance for Global Clinical Training (Alliance) Surgical Education Project at the Muhimbili University of Health and Allied Sciences (MUHAS). Your month rotation promises to be an exciting academic, clinical and cultural experience. This orientation letter will take you step by step through the process of preparation, travel to Tanzania and integration into the MUHAS Department of Surgery.

Alliance Volunteer Surgical Educators and Residents

All Alliance surgical educators must be Board Certified surgeons. Accompanying surgical residents should have at least three years of clinical training prior to the rotation. Please submit your CV and credentialing package (see below) online at either <http://www.agct.info/documents-upload-faculty/> or <http://www.agct.info/documents-upload-residents/>.

Credentialing Package

All surgical educators and residents must be credentialed for practice in Tanzania. Ashley will forward to you a credentialing package containing a blank credentialing application and examples of all the required accompanying documents (from Dr. Schechter's application) as a guide to help you complete the application process quickly. Because it takes approximately 4 months to receive the appropriate credentials, please submit your credential documents to Dr. Ali Mwanga, MUHAS Alliance Coordinator at alimwanga@yahoo.com with a copy to Dr. Kitembo Salum Kibwana, Mumbili National Hospital (MNH) Alliance Coordinator at kkitembo@yahoo.com with another copy to Ashley. You may e-mail your credentials without sending a hard copy.

Travel to Tanzania

There are no direct flights between the United States and Tanzania. There are flights via London, Amsterdam, Zurich, Istanbul, Johannesburg and Dubai. Some of our volunteers prefer the flight to Dubai with an airline provided overnight stay at a hotel adjacent to the airport because the connecting flight is the next day. The connecting flight from Dubai arrives in Dar at 3 PM in the afternoon as opposed to some of the other flights arriving after 9 PM from Europe. If traveling from the West Coast of the United States, we recommend a stopover of at least one night in Europe or North Africa to rest prior to the long flight to Dar es Salaam. We also recommend arriving in Dar es Salaam on Friday to allow time to sleep over the weekend, recover from jet lag and get organized. If you need assistance with travel arrangements, Vicki Bromiley at Fugazi Travel is excellent, very responsive and has extensive experience making travel arrangements to Tanzania. Vicki can be reached at 415/874-4434; her email address is vbromiley@fugazitravel.com.

Lodging in Dar es Salaam

Most volunteers elect to stay at the Kalenga House, a large house owned and operated by MUHAS 3-5 minutes' walk to the MUHAS compound. The Kalenga House is a two-story building with eight rooms (two with a shower and toilet within the room, the rest with shared facilities on both floors). It is located within a walled compound with a security guard. The house contains a dining room, parlor, kitchen (with a stove, refrigerator/freezer and full set of utensils, cookware, and dishes) and a washing machine. There is a clothesline in the back of the house. An attendant lives in an adjacent small house within the compound. The cost of lodging is \$70.00/night for one person and \$75.00/night for a couple. You can learn more about the Kalenga House on its website: <http://dcepd.muhas.ac.tz/index.php/kalenga-guest-house> The administrator in charge of the Kalenga House is Ramadhan Rashid (ramadhan.chikalile@gmail.com).

There are hotels in Dar es Salaam located further from the hospital. The traffic in Dar es Salaam however is quite challenging and lodging within walking distance of the hospital is a distinct advantage.

Total Cost of Volunteering for One Month

The total cost of volunteering at MUHAS for one month (including air fare, lodging, food and visa) is approximately \$5,000.00.

Supplemental Funding for Residents

The Pacific Coast Surgical Association established a Resident Global Surgery Scholarship to encourage resident participation in Global Surgery clinical rotations. Applicants must have completed three years of surgical training, be enrolled in a residency training program associated with the Pacific Coast Surgical Association and be accepted in a Global Surgery clinical rotation. For more information, consult www.pcsaonline.org and click on the Scholarship link at the top of the webpage.

Staying Healthy in Dar

Dar es Salaam is in the tropics and there is risk of malaria all year long. Malarone or doxycycline are recommended for malaria prophylaxis, as well as the use of bed nets and mosquito repellent.

You should avoid eating raw vegetables or fruit that can't be peeled. It is best to eat only well-cooked food and drink only bottled water. This recommendation includes brushing your teeth with bottled water as well.

The sun is very strong and you should wear a hat, use sun screen and cover your shoulders when exposed to the sun.

In addition to malaria prophylaxis, be sure you have been vaccinated for hepatitis A and B. You should also be up to date with routine vaccinations against tetanus, polio and yearly influenza. Typhoid vaccine is also an option but careful eating should protect you.

Post-Exposure HIV Prophylaxis

Post exposure prophylaxis (PEP) reduces the risk of HIV transmission. Universal precautions and careful attention to sharps on the wards and in the OR are important. The Alliance has purchased a PEP kit [we will send it to you prior to your departure or leave it in the Kalenga House if a volunteer is present the month prior to your service]. The kit contains the appropriate drugs and detailed instructions including contact information for advice and counselling. Some volunteers experience emotional distress after a needle stick injury. Consultation with an Infectious Disease Specialist and obtaining phone access to your home institution needle stick hotline is advisable prior to your trip.

Obtaining a VISA for Tanzania

All volunteers have entered Tanzania on a 1 year multiple entry tourist visa which will allow you to stay in Tanzania for a period of 90 days at a time. The visa costs \$100 at the border. If asked, tell the passport inspector that you are visiting MUHAS (which is true). If you say you are working at MUHAS, they will give you a different visa which costs \$300. You must pay in cash with a brand new \$100 bill. \$20 bills have also been accepted but a new \$100 bill is preferred. The waiting time at the border for a Visa is often two hours (an unpleasant experience after a long flight, especially since there is limited seating). You may prefer to obtain a visa prior to leaving by using a visa company. One such company is CIBT (telephone (800) 929-2428, website: www.cibt.com). The cost of using a company to obtain a visa is close to \$300. You may obtain this from Tanzanian Embassy prior to travel for \$100 – but takes time.

Communicating with MUHAS Before You Leave

It is best to send a brief introductory message to Drs. Mwanga [alimwanga@yahoo.com] and Kitembo [kkitembo@yahoo.com], the MUHAS/MNH Alliance coordinators prior to your arrival with the survey form contained in the credentialing package in which you will describe your practice and clinical interests. Drs. Mwanga and Kitembo will try to schedule cases and activities (eg. Lectures, simulation labs etc) for you based on your indicated interests so you can hit the ground running after your arrival.

Travel from the Airport to the Kalenga House

MUHAS will provide a driver who will pick you up at the airport. The cost of travel is \$30.00 (US) from the airport to the Kalenga House. Please send your flight itinerary (date and time of arrival, airline, flight number) to Ramadhan Rashid (ramadhan.chikalile@gmail.com). You should receive confirmation of the driver's availability. You can also travel by taxi from the airport but most of the taxi drivers do not know exactly where the Kalenga House is. If you find yourself at the airport without transport, tell the taxi driver that you want to go to the Muhimbili National Hospital in Upanga. The address of the Kalenga House is Plot 490, Kalenga Road (Barabara ya Kalenga in Swahili). There are no signs saying Kalenga House outside. The Kalenga House attendant will greet you when you arrive and see you to your room. It is best to bring some bread or pastries with you from Europe as you will likely be arriving late at night and no stores will be open.

What to Do the Day after Arrival

The day after arrival you should do 5 things: 1) exchange dollars for Tanzanian shillings, 2) obtain a cell phone, 3) purchase some food, 4) sleep and recover from jet lag and 5) call Dr. Ali Mwanga.

1. Exchanging dollars: A U.S. dollar is equivalent to approximately [2100] Tanzanian shillings, so be prepared to carry a number of bills. However, Visa and/or American Express Cards are accepted in most restaurants and many stores.
2. Obtaining a cell phone: The Alliance has purchased a cell phone which we will leave at the Kalenga House. You can also purchase a Nokia cell phone for approximately \$20.00 (US). Purchase of a Sim card and enough minutes for a month will cost about 30,000 Tanzanian Shillings. If you confine your overseas calls to Skype, the 30,000 shillings will probably last the entire month. The cellular stores may be able to provide you with a Chumba Bundle, which is a package of minutes and texts for a flat fee but this requires loading the phone with this plan (in Swahili). If not, you can easily buy more minutes at any kiosk including the kiosk across the street from the Kalenga House. There are a number of cell phone companies. AirTel has good coverage in Dar es Salaam and Zanzibar. You can also purchase a modem for your computer if you want uninterrupted reliable service (there is Wi-Fi at the Kalenga House but it can be unreliable). You may have to purchase a one-year plan to get unlimited internet access via the modem.
3. Purchasing food: There is a good food market several blocks away at the end of Kalenga Road but the largest selection is at Shopper's Plaza a 15-20 minute cab ride away or downtown in the building across from the Serena Hotel.
4. Sleep and recovery from jet lag: Melatonin taken before bed time is helpful in rapidly restoring a normal pattern. Expect vivid dreams because of the malaria prophylaxis.
5. **After you get your cell phone, give Dr. Ali Mwanga a call. His cell phone is: 0782440309. He will arrange to meet you Monday morning and make sure you get to the Department Meeting at 07:30. If Dr. Mwanga is not available, call Dr. Kitembo at 0784607682 or Dr. Larry Akoko at 0768815681. Dr. Akoko is a close associate of Drs. Mwanga and Kitembo and a friend of the Alliance.**

Getting Cash

Barclay's Bank ATM's are a cab ride away and offer cash with your debit card at no cost for the transaction. There is an ATM within the hospital grounds as well as a bank that charges for the transaction. The ATM at MUHAS is located kitty corner from the Emergency Room and the bank is located at the entrance for the MUHAS buildings at the main entrance to the Medical campus. . Ask someone where it is the first time as it is not obvious. By the time you pay for the cab ride, there is no difference between the ATM within the hospital grounds (a short walk away) and the Barclay's ATM. **It is a mandatory to notify your ATM company that you will be in Tanzania. Several volunteers have had a hold put on their ATM cards after multiple withdrawals from banks in Tanzania.**

Getting Around Dar

The easiest way to get around is a taxi. Two reliable drivers are Godfrey (0784463913) and Hamisi (0787922254)

Clothing

The dress is formal outside of the OR. People wear nice black dress shoes, slacks and freshly pressed dress shirts. Short or long sleeves are acceptable. Ties are optional. Bring your white coat, as you will need it for major ward rounds and clinic. Bring a handkerchief to wipe your brow if you sweat a lot in heat and humidity. The monsoon rains are torrential. A hat and umbrella can help.

Rounds

The registrars and residents generally make morning rounds after the 7:30 a.m. conference called Morning Report – this means generally between 8:30 and 9:00 a.m. Postoperative care is limited by severe resource constraints. Wound care, monitoring and recording of vital signs and fluid status remain challenges.

Weekly Schedule

Monday

0730 Morning Conference, Sewahaji Annex
0830 Firm I Cases (Operating Theatre)
08:30 Firm 2 Cases (Operating Theatre)

Tuesday

0900 Firm I Clinic, OPD (near Maternity Ward Gate, where you enter MUHAS from Kalenga House)
1400 Tumor Board, Kibasila Annex

Wednesday

0830 Firm 2 Cases (Operating Theatre)

Thursday

0830 Firm 1 Major Ward Rounds
Clinic for Firm 2

Friday

0830 Firm I Cases (Operating Theatre)

For those of you who are interested in teaching operative surgery, a good strategy is to attend all of the operating sessions of both firms. You will quickly be asked to assist with difficult cases. The pre-operative assessment is not what you are used to in the US and you will find that you will frequently make suggestions to alter the operative plan (or even cancel the operation on occasion). You also will find that both firms will schedule high risk cases on

“non-operative days” in order to get your assistance on as many cases as possible during your stay. If this is your first visit, remember that it may take some time to develop the interpersonal relationships leading to case referrals (as it would in the US). If you elect to return, you will find yourself getting busier and busier.

Clinic

Clinic is Tuesday for Firm I and Thursday for Firm II. It is in the OPD building, on the map, and if you go – you will see 15 or so patients. If you wish to schedule someone for surgery, send them to see the registrars to get signed up. There should be a medical student or resident there to help you translate.

The clinic begins at 09:00 a.m. but don't be surprised if you are the first person there. Ask the nurses for a room and they will put you in it. Wear a white coat, the rooms are air conditioned.

Surgery Wards

The main block is the Kibasila block – Firm I has women's ward 9 and men's ward 13, Firm 2 has men's wards 11 and women's 12. Ward 10 is the intermediate care ward which is underutilized.

ICU

There is an ICU which is adjacent to the OT (see map) and has six beds. Think of this as a ward with 1:1 nursing and ventilators. Patient can received mechanical ventilation in this unit. Oxygenation is monitored with pulse oximetry as blood gas results take 6-8 hours to return. Intravascular catheters are rudimentary. If the ICU lacks required drugs or equipment, you can often get it in the EMD. They have most drugs and you can often get things that the ICU says don't exist (e.g. adenosine).

EMD (Emergency Medical Department)

This is one of the better-supplied and more efficient departments in the hospital as it is funded by the Abbott Corporation. The current director of the Emergency Department is Dr. Terry Reynolds who is a UCSF Emergency Medicine faculty member.

Patients present LATE and it is hard to instill what we would consider an appropriate sense of urgency into trauma evaluations/resuscitations. There is an EMD operating room available, but even hypotensive trauma patients can take disturbingly long (1+ hours) to get to the OR. There are many causes for these delays. Most patients who survive long enough to arrive at the ED are likely to survive the requisite wait for the OR.

The Operating Theatre

The American faculty and residents are here primarily to teach our Tanzanian colleagues. Of course education is a two way street and we have learned far more than we have ever taught. Nevertheless, a collaborative attitude in the OR including sharing cases as much as possible is the key to success.

Scrubs and OR shoes: There are plenty of scrubs but we suggest you bring 2-3 pairs of your own. You cannot wear your own shoes in the OR. There is huge pile on unmatched shoes. We find a pair that fit, and keep them in a plastic bag. A cloth grocery bag works well for transporting scrubs, OR shoes etc.

Protective Eyewear: This is something in very short supply at MUHAS, and you should plan to bring your own; even the disposable clear goggles from your home OR would serve. Loupes, on the other hand, are rarely used in the OR, but if you need them, bring them, and carry them with you.

Careful attention to the conduct of anesthesia is important. A pre-operative discussion of the case with the anesthesiologist, assistance during induction, and discussion of the postoperative plan with the anesthetic team will avoid a lot of problems. The anesthesia is usually administered by anesthesia technicians with variable degrees of supervision. Intra-operative monitoring of fluid and hemodynamic status, blood administration, etc., is problematic. Post-operative mechanical ventilation is not routine. If you think your patient requires postoperative ventilation, insist on it. Otherwise the patient will be extubated.

You will gown and glove yourself; there is a side room to each OR with a scrub sink but no scrub brushes – just wash. You open your own gloves prior to scrubbing. The gowns have no cuffs and are made of cloth so it is imperative to wear one of the aprons beneath it, otherwise your scrubs get soaked.

Instruments: the scrub nurses speak limited English. The best method I found is to say “Naomba” (can I have) that is pronounced like “number” with a REALLY thick Boston accent (nomBah) and then the name of the instrument. It generally is easier if you ask for things as they know them - the best we can figure:

1. Debakey = smooth dissecting forceps
2. Rat tooth / English = toothed dissecting forceps
3. Crile = small artery forceps (or artery Ndogu - Swahili for small)
4. Bovie = diathermy
5. Uzie = stitch
6. Kisu = knife
7. Metzenbaum scissors = fine scissors
8. Suture scissors = stitch scissors
9. Raytec = swab (but no radio-opaque strip)
10. Lap pad = abdominal pack
11. They call stitch sizes as 3-zero and 2-zero, etc.
12. The needle drivers are of variable size and quality, often there is only one

Patients frequently present with advanced disease including stage IV breast and colorectal, pancreatic and esophageal cancer. Emergency cases include trauma and many cases of acute abdominal pain, bowel obstruction and incarcerated hernia. Generally only one or two big elective cases and one or two small cases can be done on a given day. Many cases must be cancelled due to lack of available blood, hypertension etc. Check out each patient prior to surgery. One of the most important teaching points is when not to operate. It is sometimes necessary to cancel unindicated operations in the OR itself. The operative schedule for the coming week is made during a meeting that immediately follows that firm’s major ward rounds. and being present for this is enlightening and usually results in getting asked to help with cases. Attendance at this conference is important.

Tumor Board

This conference takes place in the Siwahaji Annex at 2:00 p.m. on Tuesday. Many patients with advanced tumors are presented and discussed. This is an emotionally challenging experience for most volunteers as there is little respect for patient privacy or dignity on the part of the visiting oncologists. It is worth attending this conference once but many of us have chosen not to attend regularly.

Resident Presentations

If you present a case at the weekly Morning Meeting (Mondays at 0730), there is a projector and a computer connection for a PC – if you have a Mac, you’ll need the adaptor to connect to the PC-specific connecting cord. As you will see, case presentations in the MUHAS format are usually heavy on background information (history, exam, etc.) and lighter on analytic thinking... feel free to mix that up a bit, and give (model) the type of presentation you’d give at your home institution. You can even have your attending introduce it as such, to deflect any criticism of a different approach in advance.

Case Reporting

Please keep a careful record of all operative cases and complications. There is a blank case report excel file located in the orientation packet. Please use this to record your cases. There is also a blank rotation evaluation file in Word in the orientation packet. Please forward this excel file with an evaluation of your rotation to Sonia at ssilva@sfghsurg.ucsf.edu.

Advice from Previous Volunteers

Eating Out:

Eating on campus: There are three canteens: Student, staff and faculty – marked on the map. All are clean and inexpensive. The staff and faculty cafeteria are more helpful– breakfast and lunch for TS4-5,000 per person. It is a great place for lunch after cases.

Suzu shop: go out the Kalenga House door, turn right and walk 100 feet – it is across the road. The locals eat here. No one speaks English very well. We went there for chips mayai, soda and an occasional quarter chicken (kuku robo) for TS5,000 per person. A few flies around but we never got sick.

Mamboz Siz Grill: Grill, Chinese, Indian – great outdoor vibe, close by, lots of food for about TS15,000 for dinner. The taxi should cost about TS5,000 maybe a bit more if they wait.

Delhi Dar Bar: It is across the street from Mamboz and serves Indian and Chinese food.

Addis in Dar: This restaurant is a bit farther away but serves excellent Ethiopian food. The ambiance is wonderful. It's worth a trip at least once. The cost is TS20,000-40,000 per person and a TS10,000 or more for cab ride.

On the waterfront, the main restaurant is at The Slipway, which is the big tourist plaza. You are going to find yourself here to exchange money (\$100 bills get the best rate) and shop for gifts. There is an excellent little craft market around the side of the main building – between The Slipway and the Doubletree Hotel. Dinner on the Indian Ocean watching the setting sun is should not to be missed, try the Cajun Tuna! This is one of the more expensive options at TS30,000 per person + TS10,000-30,000 for cab ride, based on how long you wait and which driver you choose.

Gifts:

The craft market at The Slipway – if you are looking at the main Slipway building, turn left, walk towards the Double-tree Hotel and it will be about 300 yards down the road on your right, down a little hill. Good prices, nice products, lots of paintings in the back.

Check out the Tinga Tinga arts cooperative, near the Slipway. It is a big building with lots of artists working. Try to negotiate with the artists directly as the ladies in charge tend to jack up the prices, just walk around until you find one you like and see who approaches you. The artist seem to be “all” men while the managers are “all” women. Even a moderately large painting is only TS25,000-30,000. The artists outside the co-op are also very good.

Trips:

We did a lot of our travel through Coastal Aviation. Their travel agency is called Coastal Travel and is located in The Slipway. It is easy to arrange last minute trips through this company. They book the flights and the accommodation.

Zanzibar for the weekend – a great trip. We went to Stone Town and snorkeled around Prison Island. If you do go, make sure to have dinner at the Emerson Spice Hotel (you need a reservation) – it is fixed price at \$35 to 40 USD/person but totally worth it! You have dinner on top of a building above the skyline of Zanzibar's Stone Town while the sun goes down and evening calls to prayer go out. The portions are relatively small. We also set up a dhow ride through the hotel and got to see giant land tortoises and to go snorkeling on a big reef. Don't forget to wear sunscreen! If you're looking for something more quiet, the far side of the island has some amazing isolated beaches. Pongwe Beach Hotel is a great spot for a couple to get away, though a bit more expensive. Mafia Island is, likewise, a short flight with Coastal Airlines from Dar. It has several hotels (some at modest rates inclusive with the

airfare) and world class snorkeling available in the late morning (depending on the tides). Diving reservations can be made through the hotel.

Selous game reserve for safari. An action-packed two days if you do the sundown cruise, walking safari and game drive, about a 45 minute flight from Dar, arranged through Costal Aviation. Excellent food, lots of animals. A bit pricey at \$600-\$650/person but how often are you going to be in Africa?

Keeping that in mind, the Serengeti and major game parks are a short flight to the north. There are countless options for setting up a safari, but to do it justice you probably need at least 3-4 days.

Kipepeo Beach Village– take a cab to the Kigamboni ferry (a short ferry ride for 200 Tanzania Shillings/ person or 12 cents USD). Sit on the top deck of the big ferry and if you are lucky, you will catch the act of a fantastic contortionist. Then catch a Bajaj auto rickshaw to the beach resort (TS7,000). It costs TS 5,000 to enter the resort but you get a free soft drink when you sit down next to the shaded tables on the beach. The food is good and the beach is beautiful. It is a great place to spend an afternoon (you can also spend the night there). We also set up a dhow ride there and went snorkeling. A dhow is an Arabian boat that is low in the front, high in the back, with sails that are shaped like triangles. It was not as great as the snorkeling in Zanzibar but was a lot of fun and better than hanging out at the Kalenga House all day.

We hope that this Orientation Letter will prepare you for an exciting, challenging and perhaps life-changing experience at MUHAS.

Warmest wishes,

The Alliance