“Start at the beginning, and when you get to the end, stop.” M. Hatter

“A surgeon may not always be right, but a surgeon is always certain”, or so one of my mentors was fond of saying. By that measure, my decision to head to Ghana as part of the Health Volunteers Overseas program was incredibly unsurgeon-like. I knew that the visit felt “right”; here was a program at a teaching hospital with fledgling residencies in orthopedics and plastic surgery. My partners at the University of Wisconsin are, without exception, regular participants in international, collaborative surgical programs. My parent organization, the American Association for Hand Surgery (AAHS) declared last winter that one of our chief focuses would be on Global Hand Health. Despite this, doubt more than certainty crept into my monkey-mind whenever I contemplated making this trip. I wondered whether I could bring any useful knowledge (would my experience and skillset be too esoteric and technology-driven); I doubted I could teach anything beyond what their professors already knew (they are fully trained in the European models); lastly, despite having travelled a bit internationally, I feared the unknown of a new country. Blame too many adventure stories as a youth.

Nevermind that Kumasi is a city of roughly 2 million, that the teaching hospital (Komfo Anokye Teaching Hospital, or KATH) houses 1000 beds, and that a recent report on internet connectivity suggested that Africa (and it seems, Ghana) will “leapfrog” ahead in connectivity since it relies heavily on unwired, mobile broadband.

(continues page 3, column 2)

WORDS OF WISDOM FROM MY ELDERS:

1) Learn the ways of KATH. They have evolved in this environment for a reason.
2) Set your goals low and meet them.
3) All forms of teaching are useful; repetition is the key to retention.
4) Even if you make changes, don’t be dismayed if they change back when you’re gone. Maybe the change never needed to really be made.
HAND SURGERY

Hand surgery at KATH mirrors, to some degree, the heterogenous practice world with which we are all familiar. Patients requiring care for hand/upper extremity complaints may find themselves working with Plastic Surgeons, Orthopedic Surgeons, or, on occasion, a fellowship-trained Hand Surgeon (originating from Orthopedics), Dr. Osman Saani. Just as in the USA, bone/joint injuries at the wrist or above tend to get funneled to Orthopedics or Dr. Saani. Nerve and soft-tissue injuries (read “burns”) tend to see the Plastic Surgeons (Drs. Owusu-Danso and Akpaloo). Dr. Saani will treat any of the above conditions.

My goal here, as it continues to be at home, is to help forge connections across all providers, offering them the opportunity to learn from each other and provide a more consistent service line. Part of that involved spending time with any surgeon doing any sort of upper extremity care: burn reconstruction with Dr. Owusu-Danso, muscle flaps with the Dr. Ativo (Trauma/Ortho), supracondylar humeral fractures with Dr. Awayuriah (Trauma/Ortho). The other part of the process centered on daily lectures provided after Trauma/Ortho fracture rounds. Attendance typically included Consultants and residents from Plastics & Ortho as well as residents from General Surgery and general Housestaff (pre-residency). Topics were designed to focus on problems appropriate to all levels of learning, from Hand Trauma Assessment, to Basics of Hand Fracture Management, Flexor Tendon Repair & Rehabilitation, Common Wrist Pathology, and Tendon Transfers. In addition, faculty and residents requested a few “interactive” sessions (read Indications complete with “pimping”) which they seemed to enjoy (though you have to remind the Consultants to keep quiet).

Days in the operative theatre are best divided based on case availability. Some days will yield multiple hand/wrist/arm cases; others may be filled with skin grafts and the occasional soleus or gastrocnemius flap. The Consultants enjoy all levels of visitor participation from scrubbing in to playing arm-chair quarterback.

IT’S ABOUT COLLABORATION AND CARING

Everyone in healthcare has at least one thing in common: we find fulfillment in the therapeutic relationship. HVO members add to that an interest in teaching and learning by establishing relationships with physicians and patients abroad. Kumasi offers a wonderful opportunity to build relationships that are fun and rewarding.

The language barrier that arises in many foreign countries is only occasionally an issue in Ghana. Most Ghanians speak English, and, for the uncommon patient who speaks only Twi or Fanti (the dominant Akan tongues), almost anyone working at KATH can translate. This means that obtaining a history is generally more accurate than when a translator is mandatory. It also allows some of the “subtle” personal touches to bridge the patient/physician interaction in the clinics and on the wards. Knowing a young man with post-burn finger webbing would really like to play Keeper for his football team makes the separation of digits in order to fit the Keeper gloves all the more significant.

The shared language also makes work alongside the local teams very similar to what we would expect at home. The same awkward OR humor translates across cultures and phrases like “The enemy of good is better” and “Pressure stops bleeding; all bleeding stops eventually” provide similar dark, but understandable comfort to host and volunteer.

In clinics, it is often possible to be confident that the patient feels understood, their concerns validated, and the recommended treatment genuinely accepted. The local team can usually help place patient concerns in the appropriate cultural context. This becomes extremely important in the context of hand surgery, as setting realistic expectations is critical to patient satisfaction and to engaging them in the often challenging (read as “self-directed”) postoperative therapy.

Beyond the surgical team, there are two physiotherapists (Fatima and Micheal) who dedicate a significant amount of time to hand therapy and who attend hand surgery consultation clinic (Fatima with Osman; Michael with Owusu-Danso).
A THOUSAND MILE JOURNEY BEGINS WITH…

…a great deal of planning. Rather than repeat the excellent advice provided by prior volunteers, I would refer you to the Hand Surgery Report by Don Lalonde from his November 2012 visit. I’ll expand on a couple of his points:

AIR TRAVEL

No matter where you start, you’ll enter Ghana through Accra. Presently, Delta has a direct flight from JFK to Accra (ACC) that takes roughly 10 hours and usually flies a slightly older Boeing 767 (read: no power jacks unless you fly business elite, no Wi-Fi). Immigration and Customs flow smoothly; you can change money while waiting for your bags pre-customs.

The second leg of your travel will be on one of the domestic airlines. AntrakAir, Starbow, Fly540 and AfricaAir all have regular flights to Kumasi. I had made a reservation online via AntrakAir, but it appears that was not necessary. Once you enter the Domestic terminal (see the ppt slides of where to walk), a series of small kiosks will be straight ahead to the left of the actual check-in desks. Current one way fare is roughly 100 sedis.

HEALTH

My travel clinic recommended the same prep as Don’s: hepatitis A, meningococcus, yellow fever, and oral (yes, live-attenuated) typhoid. Don’t plan any dinner parties after the first dose of oral typhoid. I started Malarone 2 days prior to departure, as recommended. I’m carrying DEET, and I treated 4 outfits with permethrin (Sawyer product at REI).

Experience would soon prove which pre-conceived beliefs held true and which I would need to change.

As a physical plant, KATH closely resembles an older city hospital (think Cook County) or possibly one of the older VAMC hospitals. The newest building, Accident & Emergency, houses 4 operating theatres as well as the overflowing ED (a program affiliated with the University of Michigan). Digital radiology is present, although viewing sites are limited, forcing the staff to print films for use in the clinics and OR. The ORs are spacious, well-lit, and house two full-size C-arms. Operating tables are functional (though positioning has a learning curve), but formal “hand tables” are lacking.

Resources begin to fall apart when volunteers begin looking for plates, screws, and instruments that we take for granted. The photo above shows the standard setup for screws when working with reconstruction plates (also presented in a similarly jumbled tray). Occasionally consultants will bring plates from their “private” practices, but this is rare.

Other items that are noticeably absent are fine instruments (a few sets do have fine-tipped hemostats), micro instruments, and any suture finer than 5-0. Forget about anything resembling the AO modular hand set. I did try to filch some CMF plates from the OMFS surgeons (filch is strong, they were willing to share); however, they didn’t have any small screws that would fit through the plates. Lastly, only two powered drills exist. Once the batteries are dead, no more fracture cases can be scheduled. I brought the two hand-drills seen on the front page, and they are already seeing use. Enjoy!

The flip side to the material resources are the consultant and resident intellectual resources. Despite the resource-limited ability of the staff to offer certain treatments, they were all able to carry on high-level conversations about potential treatment options. The residents in Orthopedics and Plastics proved well-read and demonstrated technical skills I would expect for residents at or above their training year in our system. Despite this, they still enjoyed didactic sessions and have great ideas for future visitors (continues page 4)
Hand surgery as a discipline is relatively new to the Trauma/Ortho Directorate. Given the high volume of long bone trauma the group treats, very little time can be/has been devoted to Hand Surgery education. In addition, the system for delivery of healthcare places an emphasis on trauma, leaving many “elective” hand cases in the lurch. The elective hand problems I did see treated included trigger fingers, ganglion cysts, and other benign tumors. Either carpal tunnel syndrome doesn’t exist here, or the population simply lives with it. Arthritic conditions, whether degenerative or post-traumatic, did not even present to any clinic I attended.

Even so, the consultants state that trainees are expected to demonstrate competency across the same breadth of Orthopedics/Plastics as their counterparts in the more developed world when they finally sit for their boards.

Given this requirement, HVO volunteers could definitely contribute by helping design a program consisting of Core Readings, lectures by visiting volunteers as well as the local Hand staff, and preparation of “indications” style challenges. These challenges could be live action (when a volunteer is present) or possibly something as simple as a powerpoint presentation with “Choose your own adventure” style questions and answers.

**ONE SPECIFIC NEED**

As it turns out, the entire Republic of Ghana is home to 8 Plastic Surgery Consultants. Four practice at KATH, three call the State Hospital in Accra home, and one works at the military hospital in Accra. Combining this with the incredible number of cases presenting with lower extremity trauma, many Grade IIIb fractures culminate in infected non-unions. The Trauma/Ortho attendings have taken the bold step of learning to perform their own flap reconstructions. While I was here, Dr. Ativo performed a soleus flap for an open fracture in a child, and two consultants (Drs. Quartey and Ativo) were gone my second week attending additional flap courses.

After presenting a lecture to the combined Ortho/Plastics team one morning, we all agreed that improving everyone’s knowledge and skillsets regarding local/regional flap options would be worthwhile. Microsurgery and free-flaps may still be a ways off due to materials issues. In order to offer the best educational opportunity and utilize available resources, we began a dialogue about future volunteer visits potentially containing a “Flap Course”. The medical school adjacent to KATH has an arrangement with the hospital morgue that allows them to obtain unclaimed bodies for anatomy classes for the students. Drs. Konadu (head of ortho) and Agebenkwu (head of surgery) both felt a similar arrangement could be made for a local/regional flap education course. As Hand/micro surgeons, we are likely better equipped to help coordinate such a course.

Whether or not you have taught in a similar course before, this could be a very exciting opportunity to contribute!

**HIT ME, BABY, ONE MORE TIME**

Sometimes you can never hear a topic often enough. I know that Don Lalonde gave a talk on flexor tendon repair during his visit last November, but I felt that it was an important enough topic to bear repeating. As I engaged the housestaff/residents in “interactive” aspects of the talk, it became clear that repetition would help. As it turns out, I gave a roughly 45-60 minute lecture every morning I was here except for Mondays (too many cases to clear up from the weekend). As much as I like the limelight, I became really tired of hearing my own voice. A couple thoughts come to mind: future volunteers might consider assigning a topic to a couple residents to present during week two of the visit. A mentor of mine once said that the only person who really learns anything from a talk is the person giving it. The HVO volunteer could “coach” the residents and help with the prep of the presentation. A second option would be to consider team visits by two volunteers at the same time. I had the benefit of sharing time with Dr. Rhianna Little (currently of Germany), which enabled us to play topics off each other. Definitely a benefit.
...AND WHEN YOU GET TO THE END, STOP.

But what if there is no end? A friend who visited a hospital in South Africa and ended up staying for 3 years told me that I should try to make small, positive changes but that things would continue in Ghana in largely the same fashion after I left. He emphasized that this is not a negative; sometimes the system has evolved based on need and resources. What I learned is that there is an enthusiasm for knowledge, and excitement (and maybe even craving) for what can be done, and a group of people who warmly welcome anyone who shares their interests and demonstrates an interest in their world. As I sit at Kotoka International Airport awaiting the boarding call for my flight back to the USA, I wonder when I will be able to return? The last few days with the teams were filled with big plans, thoughts about the future of hand training in Kumasi, dreams about what could be accomplished through collaboration with energetic and like-minded individuals. Perhaps there are really only more beginnings…

Contact me (a.salyapongse@uwmf.wisc.edu) or Don Lalonde if you want to see how far down the rabbit hole really goes.

The content of this trip report represent the biased, but undeniably sage, musings of A. Neil Salyapongse, MD. Any resemblance of the stories, names, places or faces in photos are completely intentional and should be construed to correspond to current reality. If you doubt it, volunteer and fact check me yourself!

KOMFO ANOKYE TEACHING HOSPITAL

Kumasi, Ghana
September 1-15, 2013

THANKS TO:

Don Lalonde, MD for mentoring me
Peter Trafton, MD for answering my incessant questions
Peter Konadu, MD & Oheneba Owusu-Danso, MD for welcoming me to their teams
David Korkor, MD for letting me pick on him in conference
Felicia & Eric for taking care of me and keeping me from playing in traffic
Rhianna Little, MD for getting me up to speed on KATH and helping me fill the empty guest house with music and stories (AND, for most of these pictures!)