hi dr tarpley,

hope you are well. mike powers told me he talked to you recently at a dinner at your house.

i am currently working as an orthopedic surgeon at tenwek hospital in western kenya through a program sponsored by world medical mission (a division of samaritan's purse). i'll be here for at least two years.

would love to hear your thoughts on the integration of overseas medical missions with academic medical practice. also, are you coming to africa any time soon?

-will
Disclaimers

No commercial interests
No off-label uses recommended for pharmaceuticals or devices
No original ideas
No base pair substitutions or p values
Nigerian and West African perspective
Statements are my own, not the VA’s
Non-linear and a bit hyperkinetic
“..... taking care of these folks at Kijabe is very rewarding..... Good to know that it's possible to take effective care of patients without thrice daily labs, but I do realize how fortunate we are to possess the resources we have at home when people truly get ‘sick’.”

E-mail from Kenya 12 Sept 12

Andrew Jackson Murphy, MD, PGY IV, Vanderbilt
Some Lessons Learned from International Surgery Rotations: Bring ‘Em Back Alive

3rd UTSW Global Health Conference
Dallas, Texas
9 February 2014
Frank Buck—Animal Collector
Nigerian Proverbs

“No condition is permanent."

“Who knows tomorrow?”

“Would you like me to give you a formula for... success? It's quite simple, really. Double your rate of failure.”

Thomas J. Watson quotes (American Entrepreneur and Founder of IBM, 1874-1956)
Outline

Some History of International Surgical Rotations
ACGME and ABS
Finances
Registration and Credentialing
Travel: Air, Ground
Safety, Health, Housing & Security
Insurance/Evacuation
Technology—Modem
Ethics
What’s In It for the Hosts?
Relationships – Partnerships
Academics, Productivity, Outcomes
Going Forward; What’s Next?
Some History of International Surgical Rotations

• Not new
• Becoming formalized
VIS Time Line

• For at least the past 5 years, ACS, ACGME’s RRC for Surgery, APDS, ABS, and other invested groups studied feasibility of an international rotation

• 2010—Serious consideration undertaken by invested groups at the accreditation level

• VIS was inspired by resident and candidate interest, the success of VIA (Anesthesia), and leadership buy-in at section and department levels—with or without RRC-S approval

• March/April 2011—Guidelines announced

• April 2011-- Application submitted to Surgery RRC of ACGME

• April 2011—VIS is first program approved

• January 2012—Positive word from Kijabe about 2012-13
Starting Up

- Finding financial support
- Locating a host partner institution—Site visit
- Deciding which resident year is optimum
- Checking with the specialty RRC for the guidelines to follow for seeking approval
- Example: surgery guidelines emphasize:
  - Educational rationale
  - Safety as well as physical environment
  - Supervision including evaluation
  - Financial support (level field for residents)
  - Partnership aspects as evidenced by Program Letter of Agreement (PLA) or Memorandum of Understanding (MOU)
- Develop a procedures manual
ACGME and ABS

14 Requirements:

- Name and location of international site
- PGY level of the resident for whom the rotation is requested
- Dates of the rotation
- Must be elective
- Program in “Continued Accreditation” status
- ABMS boarded or equivalent faculty
- Competency-based goals and objectives of the assignment
- Educational Rationale
- Evaluation of the resident’s performance based on the stated goals and objectives

- Clinical experience including:
  - Type of center (governmental, non-governmental, private
  - Scope of practice of the host center
  - Center’s operative volume and type
  - Adequacy (or not) of the supportive anesthetic, radiologic, laboratory, and critical care infrastructure
  - Must include an outpatient experience
  - Resident must enter operative experiences into the ACGME Case Log System for credit
- All salary and all expenses covered
- Local educational resources detailed
- Appropriate physical environmental issues, including housing, transportation, communication, safety, and language
- Program Letter of Agreement (PLA)
Registration and Credentialing

• Regulations change
• Meeting deadlines – required paperwork not always simple from state licensing to locating the med school diploma
Finance and Liability Factors Related to the RRC-ACGME Requirements

• Adequate & safe accommodation, transportation
• Vanderbilt covers all travel, accommodation & licensing costs – except food. Funding comes from the section/department, philanthropy such as Hope Through Healing Hands (our residents become Frist Global Health Leaders), and other contributors.
• Liability and all health benefit coverage from Vanderbilt
GME: Salary and Benefits

CMS does not provide salary support for overseas rotations

Vanderbilt: 655 residents
   251 clinical fellows
   total: 906 FTEE

GME Cap: 445

4 weeks x 8 residents ~0.7 FTEE
VU Surgery Expenses for a Four-Week Rotation

- Registration with Kenyan Medical Council: $250
- Vaccinations, anti-malarials: $125
- Evacuation Insurance (ISOS at VU): $0
  - $4/day—Insurance estimate
- Air Travel: ~$2000
- Ground Travel: $125
- First Night in Nairobi: $75
- Housing at Kijabe: ~$350
- Modem and IT expenses: $40

Total: ~$2965
Procedures Manual
Vanderbilt International Surgery (VIS)

Elective Rotation for 4th Year General Surgery Residents at
AIC Kijabe Hospital
PO Box 20
Kijabe, Kenya 00220
Phone (254) 0738 661321
January 2014
Key Words

- Respect
- Partnership
- Mutual benefit
- Cultural sensitivity
- Educational content
- Flexibility
Lessons learned: Before the rotation

- Intern applicant aspirations ≠ 4th year resident realities
- Fellowship interviews
- First pregnancy or small children
- Housing availability at the host institution
- Host supervisor schedules
- May need a state license—which requires Step 3
- Busy residents require multiple reminders to submit required paperwork
- Evacuation insurance imperative
- Cultural sensitivity preparation including agreement to avoid interfering with surgery opportunities of local trainees
Lessons learned: On the ground

• What involves risk-taking behavior is not intuitive—no operating any type of vehicle, no overly strenuous or risky athletic activities, no traveling after dark
• Educational resources need to be suggested and supplemented
• Need to suggest a strategy for replying to requests for money
• Make certain that benefit accrues to the host institution who expends a great deal of time and energy making the rotation possible; win-win
• Avoid competing with local trainees
Lessons learned: Role of debriefing

• Continuous quality assessment and improvement
• Sample debriefing questionnaire available in *J Surg Educ.* 2013 Nov-Dec;70(6):709-14
• Working in a resource-challenged environment can take an emotional toll; forewarned is forearmed
• Good medicine can be practiced in resource-challenged environments with a heightened awareness of waste in our system
• Loneliness can occur in a compound with many persons, both expatriate and local—need preparation for leisure time such as books and DVDs and games
• So far pros greatly outweigh the cons
• “A life-changing experience”
Travel: Air, Ground

- Scheduling must work for both host and program
- Backup plans if interruptions occur (phone capabilities are vital—provided to resident)
- Avoiding night travel by road
Safety, Health, Housing & Security

- CDC medical recommendations followed
- Adequate & safe accommodation and transportation arranged ahead of time
- Housing can be a factor affecting schedule and family accompaniment
- Site visit provides security data
The BIG Risk

Road Traffic Crash

>>>>>>>

HIV, Malaria, etc.
Insurance/Evacuation

Must be in place!!!!
Technology—Modem

• Supply flash drive USB modem and a phone
Ethics for International Medicine: A Practical Guide for Aid Workers in Developing Countries

Anji E. Wall
What’s In It for the Hosts?

Education and Academic Partnerships
Working toward “Win-Win”
Relationships -- Partnerships

• No competition for cases and experience with local trainees
• Low-impact on resources—realistic expectations of accommodation and the environment
• Two-way traffic—host professionals should travel to program institution
Academics, Productivity, Outcomes

• Realistic expectations
• Commitment to giving credit to host colleagues
• Ethics of research, language barriers, informed consent, use of human and other resources
Going Forward; What Next?

The Consortium Model—Collaboration/Cooperation/Centralization

Where housed? ACS-Operation Giving Back?

Role of Association of Program Directors for Surgery (APDS)—Task Force
Academic Global Surgery

Oxymoron or Emerging Reality?
Calland, Petroze, Abelson, & Kraus: Engaging academic surgery in global health: Challenges and opportunities in the development of an academic track in global surgery.

Commentaries:
The agenda for academic excellence in “global” surgery
An academic track in global surgery
Academic Surgery and Global Health
Charity begins at home
The role of global surgery electives during residency training: Relevance, realities, and regulations

Surgery 153:316-332, 2013
Surgery 153, April 2013

Henry et al: The benefits of international rotations to resource-limited settings for U.S. surgery residents

Frank Lewis: Commentary on: The benefits of international rotations to resource-limited settings for U.S. surgery residents

Petroze et al: Estimating operative disease prevalence in a low-income country: Results of a nationwide population survey in Rwanda
Graduation –
Two More Pediatric Surgeons For Africa!

L to R: Mr. Justus Marete, Erik Hansen, Dr. Samuel Mwenda, Dr. Fred Kambuni, Dr. Situma, Dr. Lebbie, Dr. John Odondi, Mrs. Mary Muchendu, Dr. Ivan Stewart

The Pan-African Academy of Christian Surgeons
(PAACS) BULLETIN #113, November 2013
Aiah Lebbie, pediatric surgeon, and his wife Deborah, on the way to Sierra Leone
Vanderbilt gets $3M grant for anesthesia training of CRNAs

The Impact Africa grant is part of the GE Foundation's Developing Health Globally program.
Goal: to translate the Kijabe Kenyan anesthesia education program to one that can be easily duplicated. Ultimately the hope is to take the curriculum throughout sub-Saharan Africa.
How should academic surgeons respond to enthusiasts of global surgery?

Samuel R. G. Finlayson, MD, MPH

Confronting the Global Burden of Surgical Disease
Charles Mock

Proceedings of the 4th Annual Meeting of the Alliance for Surgery and Anesthesia Presence (ASAP): Building Sustainable Surgical Systems
Bickler and McQueen

World Health Organization Global Initiative for Emergency and Essential Surgical Care: 2011 and Beyond
Spiegel, Abdullah, Price, Gosselin, and Bickler.
Benefits for the Residents

Improve clinical skills

Increase cultural sensitivity

Increase appreciation of resource utilization

Improve “systems of “knowledge, infrastructure appreciation, and finances of care delivery

Gain appreciation in understanding the challenges of providing on-going care in technology-, personnel-, and resource-poor settings
Surgical care for the poor: A personal Indian perspective

“Surgical care for the poor is a neglected necessity all over the developing world and merits interchange and cooperation of all surgeons in all countries.”

T E Udwadia, Mumbai, India
The world cannot be allowed to exist half healthy and half sick.

— Dr. William Foege
“Perhaps the most important thing we can do with our careers is to improve surgical delivery in low-income countries... and the most efficient way to do so is through technical and intellectual expertise transfer.”

– Fiemu Nwariaku
February 14, 2008
Presidential Address
Association for Academic Surgery
Omnibus per artem fidemque prodesse.

“To serve all with skill and fidelity.”
Vanderbilt International Surgery

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What business are we in?
Julia Shelton, MD, MPH
First VU PGY IV VIS Resident to AIC Kijabe, Kenya  July 2012
Five Major “Surgical” Challenges

Safe airway and anesthesia management

Trauma\(^3\): prevention, long bone fractures, spine and head trauma, burns

Ante-natal and peri-natal care; women’s health issues

Cancer

Analgesia—peri-operative pain management; palliative care
Task shifting overcomes the limitations of volunteerism in developing nations

Michael Curci
Bulletin ACS 97:9-14, 2012
WACS: The West African College of Surgeons
COSECSA
NGO: Training National Surgeons at the District Hospital Level for Retention and Sustainability in Cooperation with African Colleges
VIA = Vanderbilt International Anesthesia

VIS = Vanderbilt International Surgery
Feel Free to Contact Us

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Definitions of Countries

High Income $12,276 or >
Upper Middle Income $3976-12,275
Lower Middle Income $1006-3975
Low Income $1005 or <

Gross National Income (GNI) per capita

Obstetrics and Surgery

• 99% of world maternal deaths occur in Africa, Asia, Latin America and the Caribbean

• In developing countries, pregnancy related complications are the leading cause of maternal death and disability for women 15-49

• Lifetime risk of death in childbirth
  – Angola: 1 in 7
  – Sweden: 1 in 29,800
Education and Academic Partnerships

What’s In It for the Host Institution?

Working toward “Win-Win”

Vanderbilt International Surgery