

*Appendix IV*

## **Country Summary Profiles**

1000obgyns.org

1/21/15

## MALAWI

### Partnership Information

- University of Malawi, Dr. Ron Mataya, rmataya@llu.edu
- University of North Carolina, Dr. Jeff Wilkinson, Jeffreywilkinson@gmail.com
- Summarize the goals of your partnership:
  - Teach and train registrars in Obstetrics and Gynecology, provide quality care and treatment, and conduct relevant research to enhance the health and welfare of the women of Malawi.
  - Support and leadership at MOH facilities and influence national RMNH policy.
- How many New OBGYNs could you train in 10 years given your current capacity.
  - 6-8 per year x 10 years = 30-40 new OB/Gyns.
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- How many New OBGYNs could you train with enhanced capacity?
  - With two Central Hospitals as our main training sites, we could really accommodate 10 residents/location/year if we were able to enhance our capacity (i.e. funding, more teaching faculty, additional resources, more teaching facilities, employment locations, etc.). This would give us 20 per year x 10 years = 100 new OB/GYNs.
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### National Data (from 2012)

- National maternal mortality ratio (per 100,000 live births): 460
- National infant mortality ratio (per 100,000 live births): 65.8
- Percentage who receive antenatal care from a trained health care professional: 97.5%
- Roughly how many OBGYN professionals are in the country: 9
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### Institutional/Departmental Information (from 2012)

- Current number of obgyn trainees per incoming class: 0 (faculty members currently in training in S. Africa).
- Size of incoming class you hope to admit in:
  - 2014: 6
  - 2019: 8
  - 2024: 8
- Current funding sources for residents:  
Government funded, NGO funded, salaried residents.  
Training is obtained outside Malawi. Potential candidates make their own training arrangements with institutions of their choice. However, these institutions must be recognized by Malawi Medical Council. OBGYNs trained at institutions not recognized by the council are assessed at Malawi's major hospitals by obstetricians at those institutions.
- Number of deliveries your institution handles annually: 3,500
- Current operating room capacity: 1,000
- Current clinical capacity: 10
- Number of current teaching faculty: 6
- Number of teaching faculty needed, including those you currently have (self-report): 10
- Physical infrastructure: HAS office space (NO library/journal collection, education coord., finance coord., data coord., transport).

2014 Information:

- Obgyns trained in 10 years:
  - At current capacity: 30-40
  - At enhanced capacity: 100
- Source of Certification for obgyns: MMed from University of Malawi
- Professional societies: Association of Obstetricians and Gynecologists in Malawi.
- Do residents in your program have high-bandwidth access to the internet? Sometimes
- Research training and important research questions: pre-eclampsia
- Deployment: MOH goal is 3 chiefs, 5 principle OBGYNs at each Central Hospital. After those numbers achieved; deployment to district hospitals.

## RWANDA

### Partnership Information

- University of Rwanda, School of Medicine, Dr. Stephen Rulisa, s.rulisa@gmail.com
- University of North Carolina, Dr. Irwin Merkatz, Albert Einstein, chairobgyn@aol.com
- Description of current partnership goals:
  - Albert Einstein to provide: ACOG/SMFM support, institutional support, faculty expertise and will not engage in clinical activities without an African counterpart. MOU has been signed between the partners.
  - Summarize the goals of your partnership (2014):
    - Training of OBGYNs in accordance with Rwandan MOH, RSOG and UR standards.
  - How many New OBGYNs could you train in 10 years given your current capacity?
    - At current rate of training 10 OBGYNs per year, 100 OBGYNs will be trained in 10 years.
  - How many New OBGYNs could you train with enhanced capacity?
    - Medical school class size will double in 2015 so, increased teaching faculty in the OBGYN the amount of residents could be doubled nationwide.

### National Data (from 2012)

- National maternal mortality ratio (per 100,000 live births): 340
- National infant mortality ratio (per 100,000 live births): 49.8
- Percentage who receive antenatal care from a trained health care professional: 68.9
- Roughly how many OBGYN professionals are in the country: 30

### Institutional/Departmental Information (from 2012):

- Current number of obgyn trainees per incoming class: 10
- Size of incoming class you hope to admit in:
  - 2014: Not reported
  - 2019: Not reported
  - 2024: Not reported
- Current funding sources for residents: Government funded
- Number of deliveries your institution handles annually: NR.
- Current operating room capacity: 2 OR's in Maternity, 1 day per week OR for FPMRS in main OR.
- Current clinical capacity: 60 beds for OB/GYN in maternity. L&D 4 labor beds 4 delivery beds Recovery room 4 beds OT 2 rooms OPD dedicated 1 room for OB/GYN.
- Number of current teaching faculty: CHUK Faculty 3, HRH 6+.
- Number of teaching faculty needed, including those you currently have (self-report): NR.
- Physical infrastructure: Need: running water, electricity, sterilization equipment, OR lights, internet, operating rooms, surgical equipment, medication, emergency OB kits, cell phones, teaching supplies, projector for the meeting room.

### 2014 Information:

- Obgyns trained in 10 years:
  - At current capacity: 100
  - At enhanced capacity: 200

- Source of Certification for obgyns: National body.
- Professional societies: Medical Council of Rwanda, Rwanda Society of Obstetrics and Gynecology.
- Do residents in your program have high-bandwidth access to the internet? Sometimes.
- Research training and important research questions: Trainees dedicate 1 day per week for research with faculty coaching. Research questions:
  - Prevalence of major OBGYN morbidities and mortalities
  - Barriers to fistula care
  - Validity of current hospital data
  - Impact on maternal mortality of OBGYN placement in district hospitals
- Deployment: MOH plan for deployment is constrained by lack of available OBGYNS. To increase deployment, expand training and create retention incentives.

## LIBERIA

### Partnership Information

- Liberian College of Physicians and Surgeons, Dr. John Mulbah, jmpolyclinic@yahoo.com
- Icahn School of Medicine, Mt. Sinai, Dr. Lise Rehwaldt, lise.rehwaldt@gmail.com
- Description of current partnership goals:
  - Build a robust residency training program that is sustainable.
  - Provide meaningful mentorship to all residents.
  - Meet the unmet OB/GYN physician needs of Liberia, including provision of OB/GYN at the regional, county and rural areas.
  - Develop or enhance monitoring and evaluation tools currently used for various aspects of the residency program training.
  - Produce Liberian OB/GYN who will serve as leaders and innovators in decreasing maternal morbidity and mortality.
  - Influence maternal health policy at the national, sub-regional and international levels.
- How many New OBGYNs could you train in 10 years given your current capacity.
  - 40 OB/GYN in 10 years
- How many New OBGYNs could you train with enhanced capacity?
  - 80 OB/GYN in 10 years

### National Data (from 2012)

- National maternal mortality ratio (per 100,000 live births): 770
- National infant mortality ratio (per 100,000 live births): 72.6
- Percentage who receive antenatal care from a trained health care professional: 79.3
- Roughly how many OBGYN professionals are in the country: 7

### Institutional/Departmental Information (from 2012):

- Current number of obgyn trainees per incoming class:
- Size of incoming class you hope to admit in:
  - 2014: 5
  - 2019: 5
  - 2024: 5
- Current funding sources for residents: Government.
- Number of deliveries your institution handles annually: 10,000.
- Current operating room capacity: at 65%.
- Current clinical capacity: 14,5000.
- Number of current teaching faculty: 2.
- Number of teaching faculty needed, including those you currently have (self-report): 10.
- Physical infrastructure: Has: Office space, Library and/or journal collection via internet, Personnel: Education Coordinator. Need: Research Coordinator/ Data Coordinator/ Administrative support/IT Support/Office equipment,Fax, Scanner, Computer. Want to improve technology at each site, including: introducing EMR at academic sites, telemedicine equipment and curriculum.

### 2014 Information:

- Obgyns trained in 10 years:

- At current capacity: 40
- At enhanced capacity: 80
- Source of Certification for obgyns: Liberian College of Physicians and Surgeons.
- Professional societies: LMDA-CME (advocacy roles for practitioners), WACS-Liberia, Liberian Public Health Association, WAPS-CME.
- Do residents in your program have high-bandwidth access to the internet?
- Research training and important research questions:
- Deployment: Residents currently required to spend 2 years working under the MOH upon graduation. MOH plans to assign graduates to various referral and county hospitals throughout the country.

## SIERRA LEONE

### Partnership Information

- University of Sierra Leone, Princess Christian maternity Hospital in Freetown, Dr. A.P. Koroma, apkoroma2@yahoo.co.uk
- Johns Hopkins, Dr. Jean Anderson, janders@jhmi.edu
- Description of current partnership goals:

### **Timeline / Action plan:**

	<b>Sierra Leone</b>	<b>Hopkins</b>
All term:	Political involvement / Political will	Funding
	Sustainability planning	
Short term:	Study visit / site assessment	Hopkins visit by Dr. Koroma (GR: Fistula's?)
(2014-2016)	Faculty development	Basic research collaborations / resources
	Detailed look at indicators	Make a GYN PIPES
	Database exploration	Research collaboration / resources
	Curriculum review and discussion with MOH&S for 3 year program and possible development of a Sierra Leonean College of OBGYN	Curriculum review and comparison with CREOG
	Protocol sharing	Residency book exchange



	Sierra Leone	Hopkins
	Medteams International	Simulation training
	Essential drug list	Equipment sending
Medium term:	Faculty member support	Global division
(2015-2017)	US faculty member presence	US faculty in Sierra Leone
	Regular Faculty / Resident Exchange	Regular Resident Exchange
	Development of Residency book	Development of Global Health pages in Residency book // Chapter in the Johns Hopkins OBGYN Manual
	Infrastructure and Equipment	Database
	OpenEMR (Electronic Medical Record)	
Long term:	Establishment of Resident programs	Involvement of Other departments: SPH, School of Nursing, School of Medicine
2017-	Development of the GYN program component	Increase care: for example MTX, leep, operative hysteroscopy.
	International OBGYN resident handbook	International OBGYN resident handbook
	Decrease identified gaps in Human Resources	
	Sustainability	

\*\* Currently available: hydralazine, STI, Malaria, Eclampsia

- \* How many New OBGYNs could you train in 10 years given your current capacity. And how many New OBGYNs could you train with enhanced capacity?
- In terms of the training capacity of OBGYN's, currently only one fully trained and qualified obstetrician is available. Discussions were held about options to increase this capacity with possible inclusion of Ghanaian trained OBGYN's to invite to Sierra Leone for a longer time (for example 6 months) to be part of faculty to increase the teaching capacity for the residents.
  - 10 – towards 20 OBGYN's in different stages of their training. Based on the following WHO statistics:
    - 1 : 10 000 midwife to population
    - 1 : 500 000 EMONC facility = OBGYN

- 12 : 6 Million = Total OBGYN for Sierra Leone

National Data (from 2012)

- National maternal mortality ratio (per 100,000 live births): NR
- National infant mortality ratio (per 100,000 live births): NR
- % Who receive antenatal care from a trained health care professional: NR
- Roughly how many OBGYN professionals are in the country: 1

Institutional/Departmental Information (from 2012):

- Current number of obgyn trainees per incoming class: NR
- Obgyns trained in 10 years:
  - At current capacity: NR
  - At enhanced capacity: NR
- Size of incoming class you hope to admit in:
  - 2014: NR
  - 2019: NR
  - 2024: NR
- Current funding sources for residents: NR
- Number of deliveries your institution handles annually: NR
- Current operating room capacity: NR
- Current clinical capacity: NR
- Number of current teaching faculty: 1
- Number of teaching faculty needed, including those you currently have (self-report): NR

2014 Information:

- Physical infrastructure: 1 ultrasound currently available, no colposcope, rectoscope, cystoscopy or radiotherapy. Only one autoclave available. 1 labor ward, 7 beds and 1 OR.
- Source of Certification for obgyns: WACS
- Professional societies: WACS, FIGO
- Do residents in your program have high-bandwidth access to the internet? Working on glass fiber connection.
- Research training and important research questions: To be explored.
- Deployment: Need to strengthen training before deployment.



## UGANDA

### Partnership Information

- Makerere University, Dr. Josaphat Byamugisha, byamugisha2001@yahoo.com
  - University of California, San Francisco, Dr. Meg Autry, autrym@obgyn.ucsf.edu
- Mbarara University, Dr. Joseph Ngonzi, jngonzi@gmail.com
  - Harvard MGH, Dr. Blair Wylie, bwylie@partners.org
- Summarize the goals of your partnership:  
To decrease maternal mortality by:
  - Developing a country-wide vision for training OB/GYN that involves the different medical schools training post-graduates: (MUST and Makerere).
  - Create a strategic and business plan to implement this vision and present this plan to the government and funding agencies.
  - Improve collaboration between MUST and Makerere and to increase collaboration between regional institutions.How many New OBGYNs could you train in 10 years given your current capacity?
  - Makerere: 150-200 residents
  - Mbarara: 80 residentsHow many New OBGYNs could you train with enhanced capacity?
  - Makerere: With 10 more senior faculty could train an additional 30 residents/year
  - Mbarara: With 5 more senior faculty could train an additional 7 residents/year

### National Data (from 2012)

- National maternal mortality ratio (per 100,000 live births): 310
- National infant mortality ratio (per 100,000 live births): 71.1
- Percentage who receive antenatal care from a trained health care professional: 94.1
- Roughly how many OBGYN professionals are in the country: About 500

### Institutional/Departmental Information (from 2012 – Mbarara):

- Current number of obgyn trainees per incoming class: NR
- Obgyns trained in 10 years (Mbarara) :
  - At current capacity: 18
  - At enhanced capacity: 100
- Size of incoming class you hope to admit in:
  - 2014: 9
  - 2019: 10
  - 2024: 15
- Current funding sources for residents: Student funded (tuition)
- Number of deliveries your institution handles annually: 10,000
- Current operating room capacity: We have 4 operating rooms in total. Two of these are dedicated to obstetrics and gynecological surgery. We have an average of 15 gynecological operations per week.
- Current clinical capacity: We have 4 operating rooms in total. Two of these are dedicated to obstetrics and gynecological surgery. We have an average of 15 gynecological operations per week.
- Number of current teaching faculty: 9
- Number of teaching faculty needed, including those you currently have (self-report): 25
- Physical infrastructure: Has office space, needs:
  - 1. Library

- 2. Personnel: Office secretary
- 3. Research coordination office
- 4. Dedicated high bandwidth internet

**Timeline / Action plan:**

	<b>Makerere</b>	<b>Mbarara</b>
Educational coordinator:	<ul style="list-style-type: none"> <li>• Program director as part of faculty, no supplemental funds for this</li> <li>• Residency administration chief exists</li> <li>• No administration coordinator</li> </ul>	<ul style="list-style-type: none"> <li>• Program director as part of faculty, no supplemental funds for</li> <li>• Developing the idea for a 3<sup>rd</sup> year leader/chief residency but currently not formalized</li> <li>• No administration coordinator</li> </ul>
Data coordinator:	None	None
Library	<ul style="list-style-type: none"> <li>• Small library with old journals</li> <li>• Access to e-journals through Makerere</li> </ul>	<ul style="list-style-type: none"> <li>• Limited access through MUST library</li> </ul>
Office Space:	Insufficient office space for faculty	One small office for 10 faculty members

2014 Information:

- Source of Certification for obgyns: MMED
- Professional societies: The Association of Obstetricians and Gynecologists of Ugandas
- Do residents in your program have high-bandwidth access to the internet? Often
- Research training and important research questions: NR
- Deployment:  
MOH goal: 2 OB/GYNs per regional referral hospital, 1 OB/GYN per district referral hospital.  
Barriers: Funding support for position, recruitment to neighboring countries (e.g South Sudan).

## ZAMBIA

### Partnership Information

- University of Zambia, Dr. Bellington Vwalika, vwalikab@gmail.com
- University of North Carolina, Dr. Ben Chi, benjamin\_chi@med.unc.edu
  
- Summarize the goals of your partnership:  
Short-term:
  - Develop a framework describing strategic needs of the Department of Ob-Gyn, focused on a phased and sustainable approach to improving capacity to train and retain talented specialists
  - Create an MOU that provides the framework for this collaboration
  - Engage relevant stakeholders to form steering and advisory committeesMedium term
  - Create annual work plans that move us towards the goals outlined by framework above.
  - Continue to secure funding for component parts across a variety of different mechanisms, including donors, private-public partnerships, and government.
  - Establish low-cost ways to continue building the partnership, including faculty and student exchanges and remote / teleconferencing fora.
  - Incorporate other partners as needed to reach the overarching goals.Long-term:
  - Develop a Centre of Excellence / Women's Hospital at UTH that can house this collaboration
- How many New OBGYNs could you train in 10 years given your current capacity? 50 completed in 10 years
- How many New OBGYNs could you train with enhanced capacity? 150

### National Data (from 2012)

- National maternal mortality ratio (per 100,000 live births): 440
- National infant mortality ratio (per 100,000 live births): 70.4
- Percentage who receive antenatal care from a trained health care professional:
- Roughly how many OBGYN professionals are in the country: 50

### Institutional/Departmental Information (from 2012):

- Current number of obgyn trainees per incoming class: 5
- Obgyns trained in 10 years:
  - At current capacity: 26
  - At enhanced capacity: 100
- Size of incoming class you hope to admit in:
  - 2014: 10
  - 2019: 15
  - 2024: 20
- Current funding sources for residents: Government
- Number of deliveries your institution handles annually: 17,000
- Current operating room capacity: 3 operating rooms
- Current clinical capacity: daily morning ANC seeing an average of 30-40 patients
- Number of current teaching faculty: 11

- Number of teaching faculty needed, including those you currently have (self-report): 18
- Physical infrastructure: Has office space, Library and/or journal collection via internet. Needs:
  - Satellite centers for care – expanded clinical teaching facilities.
  - Designated interests for specialty – concentrated knowledge and resources in the unit.
  - Classroom space.
  - Dedicated women’s Hospital – expanded labor ward, operating theatres, specialty clinics, dedicated office space.

2014 Information:

- Source of Certification for obgyns: University Senate provides certificate for graduates (Copperbelt and UNZA) HPCZ – medical license
- Professional societies: ZAGO and ZMA – tasked to advise government reproductive health matters
- Do residents in your program have high-bandwidth access to the internet? Sometimes
- Research training and important research questions:
  - Evaluating program strategies to see if they are effective in reducing maternal mortality
  - Beliefs, myths, practices around reproductive health influencing access and outcomes
  - Developing new interventions to reduce mortality and morbidity
  
- Deployment:
  - Deployment only at provincial hospital level, 21 general hospitals and 3 tertiary hospitals.
  - Many unfilled positions.
  - Establishment – 2 per general hospital + 10-12 per tertiary hospital.
  - As many as 16 per tertiary ideally.
  - Aspiration – every district hospital has at least 1 trained Ob-Gyn (81 district hospitals).
  - Establishment has provincial hospitals going up.

## THE GAMBIA

### Partnership Information

- University of The Gambia, Dr. Patrick Idoko, patidoko@gmail.com
  - Drexel University, Dr. Owen Montgomery, owen.montgomery@drexelmed.edu
  - University of New Mexico, Alan Waxman, awaxman@salud.unm.edu
- Summarize the goals of your partnership:  
Facilitate the establishment of an ob/gyn residency in The Gambia
  - Medium term goal, 3 year residency.
  - Develop faculty, train residents, ultimately reduce maternal mortality in 5 yrs.
- Next steps:
  - Patrick Idoko to approach the MOH and MOE with vision to get their support for concept of PG Residency education. He has contacts with MOH.
  - Short document and long documentation outlining his vision for ob/gyn residency.
  - Within next two weeks He will have first draft to submit to US partners for comments.
- Arrange meeting with MOH and MOE.
  - Once he has ministry support, will talk to other potential partners: UNFP, EU, others.
  - Push agenda to complete training of other 2 ob/gyns to get fellowship in WACS and GCPS.
- How many New OBGYNs could you train in 10 years given your current capacity? 0
- How many New OBGYNs could you train with enhanced capacity? 20

### National Data (from 2012)

- National maternal mortality ratio (per 100,000 live births): 360
- National infant mortality ratio (per 100,000 live births): NR
- Percentage who receive antenatal care from a trained health care professional: nr
- Roughly how many OBGYN professionals are in the country: 9: 2 part time faculty and 7 in practice

### Institutional/Departmental Information (from 2012):

- Current number of obgyn trainees per incoming class: 0
- Obgyns trained in 10 years:
  - At current capacity: 0
  - At enhanced capacity: 27
- Size of incoming class you hope to admit in:
  - 2014: NR
  - 2019: NR
  - 2024: NR
- Current funding sources for residents: No program currently
- Number of deliveries your institution handles annually: 6,000
- Current operating room capacity: Twin theatre with capacity to do 2 surgeries concurrently
- Current clinical capacity: Clinic Space for 4 Doctors each seeing 15 - 20 cases daily
- Number of current teaching faculty: 3
- Number of teaching faculty needed, including those you currently have (self-report): 6

### 2014 Information:

- Physical infrastructure: Currently has office space.



Needs:

- Ultimately need major construction, currently have office space, seminar room, ORs wards and clinics currently functional. Need clinical skills lab, currently in planning by university.
- Univ. just built 3 story building for undergraduate program. Could use it also for residency. Has library. Need to build digital library of women's health.
- Ob-specific simulation equipment for simulation lab. Laparoscopic trainer.
- Source of Certification for obgyns: NR
- Professional societies: NR
- Do residents in your program have high-bandwidth access to the internet? Sometimes
- Research training and important research questions: MOH values Millennium Development Goals. Tracking the appropriate parameters very useful. Presidential decree that all prenatal care and childhood care free to age 5. Resources didn't follow the decree. Tracking the parameters vital.
- Deployment: Govt. wants to deploy all forms of specialists. Deployed three people trained in ob/gyn locally; as a result they're not available to serve as faculty at the teaching hospital. Deployments at the direction of the President.

## BOTSWANA

### Partnership Information

- University of Botswana, School of Medicine, Dr. Doreen Ramogola-Masive, doreen.masire@gmail.com
- University of Pennsylvania, Dr. Jack Ludmir, jaludm@uphs.upenn.edu

### National Data (from 2012)

- National maternal mortality ratio (per 100,000 live births): NR
- National infant mortality ratio (per 100,000 live births): NR
- Percentage who receive antenatal care from a trained health care professional: NR
- Roughly how many OBGYN professionals are in the country: NR

### Institutional/Departmental Information (from 2012):

- Current number of obgyn trainees per incoming class: none
- Obgyns trained in 10 years:
  - At current capacity: 0
  - At enhanced capacity: 5-10
- Size of incoming class you hope to admit in:
  - 2014: 0
  - 2019: 2-4
  - 2024: 4
- Current funding sources for residents: Government
- Number of deliveries your institution handles annually: The main tertiary hospital in Gaborone, Princess Marina Hospital has 6000-6500 deliveries a year.
- Current operating room capacity: 2 operating rooms shared between obstetrics and gynecology
- Current clinical capacity: Daily morning ANC seeing an average of 30-40 patients
- Number of current teaching faculty: 3
- Number of teaching faculty needed, including those you currently have (self-report): 6
- Physical infrastructure: Needs
  - Administrative space in Hospital for faculty and trainees
  - Appropriate meeting rooms
  - On call and ablution facilities
  - Appropriate equipment including: ultrasound, fetal maternal monitoring, minimally invasive surgical equipment
  - Computers and reliable internet connectivity in Hospital to UB library facilities and external partner
  - Research infrastructure at UB

### 2014 Information:

- Source of Certification for obgyns: Currently to be certified by the South African Colleges of Medicine and to receive MMED qualification from UB.
- Professional societies: Currently there is existence of a General Medical Association for all doctors. No professional ObGyn society yet.
- Do residents in your program have high-bandwidth access to the internet? Often.
- Research training and important research questions:
  - Reliable maternal extreme morbidity and mortality data to determine trends in causes and health policies to remediate.
  - Causes for high rate of prematurity and possible prevention measures.

- Optimal management of prematurity.
- What are the rates of HIV seroconversion in pregnancy?
- Deployment
  - Goal:
    - Two ObGyns per district hospital (10 district hospitals)
    - Six ObGyns per tertiary hospital (2 tertiary hospitals)
  - Opportunities:
    - Unmet needs in the public sector.
    - Creation of new medical school (2009) with opportunity for post graduate training in ObGyn to be able to satisfy clinical service needs.
  - Barriers:
    - Commitment to fund the positions established by goals.
    - Willingness of physicians to serve in rural areas.
    - Medical School unable to recruit Chair to lead department and start training program.

## KENYA

### Partnership Information

- Moi University School of Medicine, Dr. Hilary Mabeya, mabeya4@gmail.com
- University of Indiana, Dr. Lee Learman, llearman@iupui.edu
- Summarize the goals of your partnership:
  1. Capacity building in education, research, programs, ToT,
  2. Sustainability through ownership
  3. Research and promotions
- How many New OBGYNs could you train in 10 years given your current capacity.
  - 80-100 trainees
- How many New OBGYNs could you train with enhanced capacity?
  1. Trainees
  2. Build up capacity with partnership with county facilities
- NB: Next steps
  1. Formation of 1000+ team in Kenya composed of Deputy Director Clinical Services MTRH, County Cabinet Secretary, MOE and MOH, Chair RH Moi.
  2. Use county health facilities to train new OBGYNs.
  3. MOH to increase sponsorship for trainees.
  4. Part of free maternity fee to be used to pay for trainers/staff.
  5. Get a medical Education administrator to form the secretariat.

### National Data (from 2012)

- National maternal mortality ratio (per 100,000 live births): 360
- National infant mortality ratio (per 100,000 live births): 51.7
- % Who receive antenatal care from a trained health care professional: 91.7
- Roughly how many OBGYN professionals are in the country: 400 (roughly 70% in Nairobi)

### Institutional/Departmental Information (from 2012):

- Current number of obgyn trainees per incoming class: 6
- Obgyns trained in 10 years: 50-60
  - At current capacity: 20
  - At enhanced capacity: 50-60
- Size of incoming class you hope to admit in:
  - 2014: 6-7
  - 2019: 8-9
  - 2024: 9-10
- Current funding sources for residents: Student Funded (Tuition), Government Funded, NGO Funded, Salaried Residents, hospital
- Number of deliveries your institution handles annually: 10-12,000
- Current operating room capacity: 2-3 rooms
- Current clinical capacity: 4 rooms
- Number of current teaching faculty: 7
- Number of teaching faculty needed, including those you currently have (self-report): 14

### 2014 Information:

- Physical infrastructure: Need:

- Space to expand the no of trainees
- Employ more faculty
- Internet for E-learning
- M –Health
- Simulation Centres
- Equipment for newborns, incubators, US machines
- Source of Certification for obgyns: University Certification and KMPDB
- Professional societies: KOGS, ESCAOGS role in coordination, education and advocacy and research
- Do residents in your program have high-bandwidth access to the internet? Often
- Research training and important research questions:
  - Health seeking behavior during delivery, is distance the cause? What are barriers to hospital delivery?
  - FP uptake - why low?
  - Questions of cervical cancer, fistula, preoperative assessment before C/S and outcome - Does it improve outcome
  - ANC attendance and facility delivery in hospital that have an operating theatre.
  - Is training of TBAs increasing hospital delivery
- Deployment:
 

Current government commitment: More extraneous allowance and related hardship allowances committed for implementation, more opportunities for subspecialty training.

## GHANA

### Partnership Information

- Kwame Nkrumah University of Science and Technology, Dr. Kwabena Danso, kadanso1443@yahoo.com
  - University of Michigan, Dr. Frank Anderson, fwja@med.umich.edu
- Korle Bu Teaching Hospital, Dr. Samuel Obed, obedamenyi@yahoo.com
  - University of Michigan, Dr. Frank Anderson, fwja@med.umich.edu
- NEW (2015): Ghana College of Physicians and Surgeons, Dr. David Ofori, dofori4950@gmail.com
  - Albert Einstein, Dr. Irwin Merkatz, chairobgyn@aol.com
  
- Summarize the goals of your partnership:
  1. RE ESTABLISH THE JOINT GOALS (Review of Elmina declaration)
  2. MORE SPECIFIC mutually agreed OBJECTIVES eg research capacity building faculties
  3. Discuss funding from both sides
  4. Look into clinical faculty visits eg maternal fetal medicine, gynaecology
  5. Equipment for sub-specialty training ( especially gynae-oncology)
- How many New OBGYNs could you train in 10 years given your current capacity? 300
- How many New OBGYNs could you train in 10 years with enhanced capacity? 400

### National Data (from 2012)

- National maternal mortality ratio (per 100,000 live births): 350
- National infant mortality ratio (per 100,000 live births): 50.3
- % Who receive antenatal care from a trained health care professional: 95.4
- Roughly how many OBGYN professionals are in the country: 141

### Institutional/Departmental Information: (KNUST) (from 2012):

- Current number of obgyn trainees per incoming class: 10
- Obgyns trained in 10 years:
  - At current capacity: 50
  - At enhanced capacity: 100
- Size of incoming class you hope to admit in:
  - 2014: 12
  - 2019: 15
  - 2024: 20
- Current funding sources for residents: Student Funded (Tuition), Government Funded, Salaried Residents
- Number of deliveries your institution handles annually: 10,000
- Current operating room capacity: 3 operating rooms
- Current clinical capacity: 8 consulting rooms
- Number of current teaching faculty: 13
- Number of teaching faculty needed, including those you currently have (self-report): 20

### Institutional/Departmental Information: (Korle Bu) (from 2012):

- Current number of obgyn trainees per incoming class: 10
- Obgyns trained in 10 years:
  - At current capacity: NR
  - At enhanced capacity: 150
- Size of incoming class you hope to admit in:

- 2014: 15
- 2019: 15
- 2024: 14
- Current funding sources for residents: Government funded
- Number of deliveries your institution handles annually:
- Current operating room capacity:
- Current clinical capacity:
- Number of current teaching faculty:
- Number of teaching faculty needed, including those you currently have (self-report):
- Physical Infrastructure: Has: Office space, Library and/or journal collection via internet, Education Coordinator, Data Coordinator. Needs: Computers, equipment for minimally invasive gynecological surgery, equipment for Urogynecology, establishment of Assisted Reproductive Unit, establishment of Maternal-Fetal Unit.

2014 Information:

- Source of Certification for obgyns: Supernational body.
- Professional societies: Ghana College of Physicians and Surgeons, West African College of Surgeons.
- Do residents in your program have high-bandwidth access to the internet? Sometimes
- Research training and important research questions:
  - Determinants of severe maternal morbidity and mortality.
  - What are the major contributors of our maternal mortality.
  - Auditing process.
  - Research into effectiveness of supervision or outreach services.
  - Investigate the effectiveness of clinical interventions/ family planning modules.
  - Investigate the causes of unmet needs for family planning.
- Deployment:
  - Goal:
    - 4 obstetricians per population of 200 000 OR a minimum of 2 obstetricians per district hospital (216 districts in Ghana) with an average of 15 000 per district. Minimum of 6 obstetricians per regional hospital. Requirements for a teaching hospital?
  - Opportunities
    - Expanding intake into existing training programs to churn out more obgyns. Currently Intake for the colleges currently is 15 per center (KBTH & KATH) leading to about 30 obgyns are produced per year.
    - Tamale and Cape Coast medical schools to be supported to train obgyns
    - Internal and external support for Tamale and Cape Coast.
  - Barriers
    - Pass rate for basic sciences entry exams, no expansion of infrastructure for training faculty for subspecialty training, districts are unattractive to the obgyn, poor infrastructure, lack of motivation/incentives for rural postings.

## ETHIOPIA

### Partnership Information

- St. Paul Hospital Millennium Medical College, Dr. Balkachew Nigatu, balkewnega@gmail.com
  - University of Michigan, Dr. Senati Fisseha, sfisseha@med.umich.edu
- Hawassa Univeristy, Dr. Zenebe Wolde, zenejijo@gmail.com
  - University of Wisconsin, Dr. Cynthia Anderson, ckanderson@wisc.edu
- Mekelle University, Dr. Sampson Mulugeta, samson.mulu@yahoo.com
  - Oregon Health Sciences University, Dr. Rahel Nardos, nardosr@ohsu.edu
- Mekelle University, Dr. Sampson Mulugeta, samson.mulu@yahoo.com
  - Northwestern University, Dr. Gelila Goba, gelila-goba@fsm.northwestern.edu
- Mekelle University, Dr. Sampson Mulugeta, samson.mulu@yahoo.com
  - Washington University, Dr. Lewis Wall, walll@wustl.edu
- Summarize the goals of your partnership:
  - Reduce maternal and perinatal morbidity and mortality through university partnerships that provide in-country training for highly qualified OBGYN physicians who are positioned to address the leadership, teaching, and clinical care needs of the country for generations to come.
  - There are three university partnerships represented at this meeting and some partnerships include more than bilateral, but may include three or more institutions.

As a collective:

- Establish a consortium of Universities coordinated and in collaboration with ESOG that can facilitate sharing of expertise, deployment of resources, prevention of duplication of efforts, ensure communication hub that is sustainable
- Create a joint document signed by all relevant parties to guide our overall work. Use Ghana/UM CHARTER as a guide and use the “Institutional Commitments” 15 points as a guide for adaptation to local context and needs with strong government support
- Work together to create sustainable, high quality OB/GYN residency training programs at various sites across Ethiopia. The context will include strategies to create an enabling environment that promotes retention of all cadres. Output will be resident graduates that are positioned to meet and address all of the following: clinical care for the population, leadership inside and outside academic institutions to guide health policy and curriculum development, production of high quality research in maternal health, graduates that have the appropriate skill mix that goes beyond technical skills to include advocacy, time management, communication, leadership training, research, mentoring, negotiation, effective presentations.

How many New OBGYNs could you train in 10 years given your current capacity.

Current national output this year will be 30 new graduates (AAU and Jimma)

National goal is to have 800 practicing in country by 2020

How many New OBGYNs could you train with enhanced capacity?

There is a national plan for expansion of residency training which is well articulated. The current capacity will not remain the same given the national plan and the initiation of new residency programs that have already launched at SPHMMC, Gondar, Mekele, Bahir Dar. In process of launching two new programs this year are Hawassa and Adama.



National Data (from 2012)

- National maternal mortality ratio (per 100,000 live births): 350
- National infant mortality ratio (per 100,000 live births): 59.2
- % Who receive antenatal care from a trained health care professional: 42.6
- Roughly how many OBGYN professionals are in the country: 235

Institutional/Departmental Information (St. Paul Hospital Millennium Medical College) (from 2012):

- Current number of obgyn trainees per incoming class: 7
- Obgyns trained in 10 years:
  - At current capacity: 21
  - At enhanced capacity: 160
- Size of incoming class you hope to admit in:
  - 2014: 15
  - 2019: 25
  - 2024: 30
- Current funding sources for residents: Salaried residents
- Number of deliveries your institution handles annually: 4500
- Current operating room capacity: CS room with capacity to perform 8 per day. Separate Gyn. OR
- Current clinical capacity: 60-80 cold cases a day
- Number of current teaching faculty: 7
- Number of teaching faculty needed, including those you already have (self-report): 20
- Physical infrastructure: Have office space, Education Coordinator. Need "We need a learning resource center with both online materials and hard copies, lecture room with the necessary teaching aids.

Institutional/Departmental Information (Hawassa) (from 2012):

- Current number of obgyn trainees per incoming class: 0
- Obgyns trained in 10 years:
  - At current capacity: 5
  - At enhanced capacity: 60
- Size of incoming class you hope to admit in:
  - 2014: 5
  - 2019: 10
  - 2024: 20
- Current funding sources for residents: Government funded
- Number of deliveries your institution handles annually:
- Current operating room capacity:
- Current clinical capacity:
- Number of current teaching faculty: 7
- Number of teaching faculty needed, including those you currently have (self-report): 14
- Physical infrastructure: Currently have: Library and/or journal collection via internet , Personnel: Education Coordinator. Need: To strengthen our OB/GYN clinics and available services in terms of training the faculty in areas of subspecialty, availing some equipment so that the residents would get better knowledge and skill.

Institutional/Departmental Information (Mekelle) (from 2012):

- Current number of obgyn trainees per incoming class: NR
- Obgyns trained in 10 years:
  - At current capacity: 20
  - At enhanced capacity: 160

- Size of incoming class you hope to admit in:
  - 2014: 12
  - 2019: 20
  - 2024: 20
- Current funding sources for residents: Government funded
- Number of deliveries your institution handles annually: 4,500
- Current operating room capacity: At Ayder hospital, we have 2 designated ORs for OB/GYN out of which one is always kept open for ob emergency. 24 hr in house anesthesia and OR team on call. We have 3 OR days for elective gynecology cases. At Mekelle referral hospital, we have 2 OR days for elective gynecology, 24 hr anesthesia and OR team on call. We perform about 720 elective major gynecology procedures per year
- Current clinical capacity: We have resident run clinics 5 days per week, with patient load of about 20 per day. Patients requiring surgery or admission will be referred to consultant attending clinic that is 3 days in a week with average patient load of 10 patients per day.
- Number of current teaching faculty: 6
- Number of teaching faculty needed, including those you currently have (self-report): 12
- Physical infrastructure: Has: Office space, Library and/or journal collection via internet , Personnel: Education Coordinator, data coordinator, finance coordinator and transport is pooled under the medical school dean's office.

2014 Information:

- Source of Certification for obgyns: The University itself with recognition from Ministries of education and health.
- Professional societies: ESOG, EMA, AFGO, consideration for development of a certifying body like ECOG that would have the legal ability to set standards and license specialists who have completed required training
- Do residents in your program have high-bandwidth access to the internet? Often
- Research training and important research questions: Establishing a health information system and the personnel and equipment that would allow you to accurately track maternal deaths and the case fatality rates- stratified by referral status- , cases of severe post partum hemorrhage, ectopic pregnancy, hypertensive disease of pregnancy, eclampsia, preeclampsia and the case fatality rate for referrals in and those who were booked. Additional data would include apgar scores, neonatal intensive care admission, early neonatal death/survival, and still births.
- Deployment: Goal is to have 800 OBGYNs practicing in the nation by 2020. The variation in numbers of OBGYNs across sites needs to be looked at critically. The health sector and educational sector development plans will guide deployment, which is currently not balanced.

## DEMOCRATIC REPUBLIC OF CONGO

### Partnership Information

- Universite Evangelique d'Afrique, Dr. Gustave Mushagalusa, machigera@yahoo.fr
- Partner, TBD
- Summarize the goals of your partnership:
  1. Increase the # of ob/gyns in their area of Congo and subsequently in the rural area/province.
  2. Increase the # of faculty
  3. Increase the # residents
  4. Exchange of curricula, teaching ideas, research training, mentorship
- How many New OBGYNs could you train in 10 years given your current capacity. 25
- How many New OBGYNs could you train with enhanced capacity?
  - If they manage to have 10 faculty in the department, then they could train 50 in 10 years.
- Final plans:
  1. Select a UM faculty to champion this collaboration (Diana and Frank will meet w/TJ when we return)
  2. Write up a MOU or declaration on Partnership with guidance from Dr. Johnson
  3. Regular phone/Skype/e-mail communication(s) between the parties (TJ, Diana, Frank, UM champion (to be named) and Gustave and Olivier.

### National Data (from 2012)

- National maternal mortality ratio (per 100,000 live births): NR
- National infant mortality ratio (per 100,000 live births): NR
- % Who receive antenatal care from a trained health care professional: NR
- Roughly how many OBGYN professionals are in the country: NR

### Institutional/Departmental Information (from 2012):

- Current number of obgyn trainees per incoming class: 3
- Obgyns trained in 10 years:
  - At current capacity: NR
  - At enhanced capacity: 14
- Size of incoming class you hope to admit in:
  - 2014: 5
  - 2019: 8
  - 2024: 10
- Current funding sources for residents: Student tuition, NGO funded
- Number of deliveries your institution handles annually: 3,600
- Current operating room capacity: 3 operating rooms with 6 tables
- Current clinical capacity: 175 beds
- Number of current teaching faculty: 4 professors and 3 assistants
- Number of teaching faculty needed, including those you currently have (self-report): 10
- Physical infrastructure: Need:
  - Ultrasound machines, techs and training
  - Hysteroscopy, training

- Electrocautery, training, LEEP
- Colposcope
- Medical records
- Data gathering
- Bakkri balloons
- Emergency transport (no ambulances, especially for pregnant mothers)
- Better MVA's
- Housing for some of the trainees
- Library/computers/IT-need for current ob and gyn textbooks, including subspecialty books (gyn onc, REI, pediatric and adolescent gyn)

2014 Information:

- Source of Certification for obgyns: National body
- Professional societies:
  - National Board of Physicians, with provincial offices.
  - Congolese Society of Ob/Gyn-advocate for maternal health in Congo, advocate for salaries, equipment, training, deployment of obgyn's to rural areas.
- Do residents in your program have high-bandwidth access to the internet? Often
- Research training and important research questions:
  - Which cancers are the most common and how can we prevent them? Especially with regard to gyn cancers?
  - Different causes of maternal mortality and methods to prevent
  - Leiomyoma and fibroma frequency per age (often very young in Congolese women (15-22yrs) have these and this affects their fertility; why are some young women's estrogen receptors in their uteri and breasts more responsive than others.
  - Mapping of the system of maternal care in Congo would help improve care (religious influences are important in this).
- Deployment: No known plan. There is a need for increased rural deployment of obgyn's.



## CAMEROON

### Partnership Information

- University of Buea, Dr. Thomas Egbe, obinchenti@yahoo.com
- University of Arizona, Dr. Mike Brady robert.brady@dignityhealth.org
  
- Summarize the goals of your partnership:
  1. CURRICULUM DEVELOPMENT – Obtain the WACS curriculum from this meeting and see how we can adapt this
  2. OBTAIN FUNDING
    - a. U of AZ – creating a fund with the U of AZ Foundation to make tax-deductible contributions
    - b. Partner with NGOs – equipment and pharmaceutical supplies to regional and district hospitals. There may be interest in identifying countries with which to partner.
    - c. Work with international Cameroonian community (USA and UK) re: donating equipment (U/S unit)
    - d. Business stakeholders who are invested in Cameroon and could sponsor program in some capacity – GUINNESS, SENORA,
  3. Honorary Visiting Professorship for U of AZ faculty
    - a. Will this meet the Univ. requirements for starting this program in 2015?
  4. Obtain Buy-in from the University of Buea and the Government. We are seeing the Vice Chancellor and the MOH. We should have a timeline for the end of Feb/March to have work with the secretary general of the MOH.
    - a. Consider the Univ. of Buea initiative as a pilot for the entire country
  5. We need conclusions from this document. Within a month, the document will be ready and we can circulate it for comments, within one month (March 2014). Circulate it among the team for comments.
    - a. Write a 'white' paper making our case of need on the importance of our partnership for publication
  6. Complete Signature of the MOU – between the U of Buea and the U of AZ within 1 month. We need the vice chancellor to sign, send us the 2 hard copies, and we will have the President of the U of AZ sign them and send you back one copy.
  7. Residency to start in 2015 with 2 residents. We aim to train and graduate 24 residents in 10 years (assuming no attrition). Start with 2 residents, 4 residents in 2<sup>nd</sup> year, 3<sup>rd</sup> year 6 residents, and maintain 6 thereafter through 10 years.
  8. Ultimate goal is to train OB/GYN specialists in Cameroon who will practice in Cameroon and make progress on MDG 4/5 to reduce the maternal and child morbidity and mortality in Cameroon.
    - a. Model for other specialties – PEDs, INT MED, SURGERY, etc

### SHORT-TERM GOALS to upgrade our hospitals:

1. Work with central hospital in Douala Trainees would spend 3 months in Douala.
2. RCOG (Konje) has contacts with the Nigerian requirements. The WACS requirements are not as stringent.

### National Data (from 2012)

- National maternal mortality ratio (per 100,000 live births): 690
- National infant mortality ratio (per 100,000 live births): 74.1

- Percentage who receive antenatal care from a trained health care professional: 83.4
- Roughly how many OBGYN professionals are in the country: About 200- most of them in Yaounde and Douala.

Institutional/Departmental Information (from 2012):

- Current number of obgyn trainees per incoming class: 0
- Obgyns trained in 10 years:
  - At current capacity: 0
  - At enhanced capacity: 20
- Size of incoming class you hope to admit in:
  - 2014: 0
  - 2019: 5
  - 2024: 5-10
- Current funding sources for residents: No current funding
- Number of deliveries your institution handles annually: Three sites (Douala, Buea, Limbe) total appx 2800 deliveries annually (Approximations: Douala - 1000, Buea- 900, Limbe-900). We believe that all the patient volumes can be significantly increased with the presence of a post-graduate (residency) training program.
- Current operating room capacity: 2-3 operating rooms at each of the three sites.
- Current clinical capacity: Large clinic capable of seeing 100+ patients per day in Doula. Buea and Limbe have smaller clinics.
- Number of current teaching faculty: 6
- Number of teaching faculty needed, including those you currently have (self-report): 6
- Physical infrastructure: currently none, as our intended start date is 2016. Need:
  - More computers with reliable high speed internet connections.
  - Administrative support person (like a program coordinator)

2014 Information:

- Source of Certification for obgyns: None
- Professional societies: The WACS will endorse the program to make sure it fits with what is offered in Ghana and other countries.
- Do residents in your program have high-bandwidth access to the internet? Sometimes
- Research training and important research questions: Research questions around the MDGs. Documenting rates of complications, OB outcomes, etc, and then track our trajectory and develop interventions to address the concerns.
- Deployment: We need at least 18 – 20 OB/GYNS (to serve the 12 district hospitals, and the regional hospitals) as a bare minimum.