



**LOYOLA UNIVERSITY CHICAGO  
STRITCH SCHOOL OF MEDICINE  
CENTER FOR COMMUNITY AND GLOBAL HEALTH**

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**TO:** 4<sup>th</sup> Year Class  
**SUBJECT:** Enrollment Open

**FOURTH YEAR ELECTIVE IN GHANA – CCGH 407**

This is to invite your interest and participation in the elective clerkship in Kumasi, Ghana, in conjunction with the Kwame Nkrumah University of Science and Technology (KNUST) School of Medical Sciences. Clinical rotations will occur at the Komfo Anokye Teaching Hospital. The elective is sponsored by Loyola faculty, Dr. Amy Blair and Dr. Amy Luke. On-site faculty elective supervisor is Dr. Jacob Phlange-Rhule, Department of Physiology. A particular interest in Inpatient Medicine, Surgery, Infectious Disease, Primary Care, and practice in low-resource setting is essential.

**Course Description**

Location: Kwame Nkrumah University of Science and Technology (KNUST)

<https://www.knust.edu.gh/>

**On-site Supervisors:**

Jacob Plange-Rhule, MD  
Clinical Supervisor, Kwame Nkrumah University of Science and Technology (KNUST)

Francis A. Yeboah  
Vice Dean, Kwame Nkrumah University of Science and Technology (KNUST)

The Komfo Anokye Teaching Hospital acts as the principal clinical site for Ghanaian medical students at KNUST. Visiting students will spend the majority of the time in a mixture of inpatient and out-patient settings alongside senior Ghanaian students. During your inpatient service at the hospital, you will be assigned a teaching firm/team and will attend clinical ward rounds and teaching sessions. You will be involved in the management of acute medical or surgical admissions. “Clerking” or performing thorough Histories and Physicals are followed by presentations to consultants at ward rounds. Opportunities to attend outpatient sub-speciality and HIV clinics also exist. During surgery weeks, you will be asked to participate in several procedures. In short, you will do as the other members of the firm/team you are assigned to. See also a description of clinic duties/ typical schedule and example patient case log from a prior year. (Appendix 1).

**Educational Goals and Objectives**

See attached educational goals and objectives, learning expectations and evaluation method for the four-week elective in Ghana (Appendix 2).

### **Evaluation Method**

Students will be evaluated by Dr. Jacob Plange-Rhule, the Vice Dean or other supervising clinical physicians. Feedback will be obtained from other participating faculty. Dr. Plange-Rhule or your clinical supervisor on your service will also complete the mid-rotation feedback.

All students will receive their final grade from the Director of the Center for Community and Global Health based on site-supervisor evaluation and post-rotation requirements (reflection, evaluation and patient log).

### **Who May Apply**

Fourth year students in good standing are eligible to enroll. Successful completion of a sub-internship experience prior to going to Ghana is required.

### **Site Details**

#### **Funding**

A limited number of positions and funding are available and will be considered on an “as available” basis. Loyola Student Affairs and CCGH may offset \$500 or more to cover travel and living expenses. Funding is awarded to students in the form of reimbursement for flight or elective costs and is available upon your return and successful completion of your post-rotation requirements.

#### **Estimated Cost for CCGH-407 Ghana**

The figures below are provided to help in the planning of your elective. The amounts listed below are *estimates* based on recent student electives. Each student is responsible for determining the final cost of her/his elective. CCGH is not responsible for planning individual student budgets for travel. Students must take into consideration additional expenses that may be incurred including travel to and from the elective site, visa application, CISI insurance, vaccinations and medications, baggage fees among other costs.

Flight and transportation	\$1200
Housing, 4 weeks	\$140
Elective Fee (paid to KNUST upon arrival)	\$500
Visa	\$140
<b>Estimated Elective Cost</b>	<b>\$1980</b>

## Visa

SSOM students are required to apply for a TOURIST visa for the country of Ghana. CCGH will provide students with some suggestions and resources for obtaining their visa, but students are responsible for making all arrangements to obtain their visa in a timely manner.

## Travel

Travel to Kumasi, Ghana will be a total of 30 hours of flights including:

- i. Flight from Chicago to Accra with one connecting flight
- ii. Flight from Kotoka International Airport, Accra to Kumasi by air from the same airport. – this flight can be purchased online at [www.vayama.com](http://www.vayama.com), [www.flystarbow.com](http://www.flystarbow.com), [www.flyaway.com](http://www.flyaway.com) or at the airport upon arriving to Accra.
- iii. A KNUST student picks you up from the airport and drives you to the medical school hostel where you will stay during your elective.

\*Some travel logistics will be facilitated through the CCGH and Dr. Luke in the Dept. of Preventive Medicine

## Lodging and Accommodations

KNUST provides accommodation in the Medical Student Hostel which is close to the hospital where you will be scheduled for rounds. Lodging and elective fees are due upon arrival and should be made in cash. Students are responsible for purchasing most of their own meals. Lunch is provided in the school cafeteria free of charge on weekdays but breakfast and dinner is available for purchase all week and on weekends.

Students will likely dorm with a roommate in the student hostel. Most rooms include a closet, shelf, refrigerator and bed. Wireless internet is available in the most parts of the hostel with the purchase of internet cards. Air conditioning is not available. The hostel includes indoor plumbing with running water which can be limited at times. An entertainment area is also available for students where they can play various games and watch television. A workout area is also available for students. A packing list is provided for students in Appendix 3 of this document.

## Travel Clinic

Loyola University Chicago requires 4<sup>th</sup> Year International Elective students to visit the Travel Clinic to obtain any necessary vaccinations for travel. When making a travel clinic appointment, please mention that you are traveling with the **STRITCH ISI group**. Students may be eligible for a discounted clinic rate.

Please refer to the CDC Travelers' Health website for a list of required vaccinations for travel:

<http://wwwnc.cdc.gov/travel/destinations/list> Some vaccinations may be covered by insurance. Please check coverage details with your personal health insurance before scheduling your appointment.

Loyola Travel Medicine Clinic is located in:

- o Loyola Outpatient Center (third floor) and

- Loyola Center for Health at Burr Ridge

Appointments can be made through <http://www.loyolamedicine.org> or by calling 888-LUHS-888. This service requires cash payment at time of visit.

### **CISI Insurance**

Under Loyola University Chicago Stritch School of Medicine (SSOM) international travel policy for students, evacuation/repatriation insurance is a requirement to do any elective abroad for elective credit. All Graduate Students participating in a study trip through Loyola University Chicago are required to use the insurance carrier. A copy of the insurance card should be submitted to the CCGH office. Students should also carry a copy of their insurance card during their elective. Enrollment and more info can be found at: <http://www.luc.edu/oip/travelcenter/graduatestudents/>

### **Pre Rotation Requirements**

All students are required to attend the International Elective Orientation held **in January** of M4 year.

Final approval for all electives requires completion of 4<sup>th</sup> Year International Elective Paperwork. Upon completion of required paperwork, students will receive grade sheet that is to be completed by the on-site clinical supervisor.

- Attendance at REQUIRED Orientation held in January
- [Emergency Contact Form](#)
- [Conditions of Participation in International Clinical Electives Form](#)
- [Acknowledgement of Risks and Responsibilities Form](#)
- [Assumption of Risk and Release Form](#)
- [CISI - Evacuation Repatriation Insurance Carrier](#) – Copy of your Card
- [International Evacuation Repatriation/Insurance](#)
- Certificate of completion of 10 modules found at: <http://ethicsandglobalhealth.org/>

### **Post-rotation Requirements**

Students are required to complete the following assignments within 2 weeks of the final elective rotation period for successful completion of the elective. Credit will not be awarded without the following:

- Clinic and Community Activity Log – including daily clinical and community activities
- Reflection – Please use the following questions and the [RFLCT Rubric](#) to help guide in your writing.
  - Description of travel, living conditions, clinical, community and leisure activities
  - What did you learn about the local health care system in relation to the US health care system?
  - What are you bringing home with you from this rotation that you will apply to your future practice as a physician?
  - Discuss a medical case in which you may have acquired new knowledge or skills that are unique to your elective site.
  - How did and will this experience influence the kind of person and physician you would like to become?

- Do you have any advice for future students to help prepare for their clinical and cultural experience at this site?
- Online Elective Evaluation
- Student Expense Report with valid receipts
- Grade Sheet completed and signed by your clinical supervisor

### **Grading**

All international electives will be graded according to the official grading system (Honors, High Pass, Pass and Fail). International elective grades are completed by a student's on-site supervisor and are based on elective performance and successful completion of elective requirements. The evaluation form requires the elective supervisor to provide written comments related to the student's understanding, skill development, professional attitude, demonstrated competencies, and any other criteria which were specified to be met during the elective. Final grades will be determined by Dr. Amy Blair.

Accepted students must pick up a paper grade evaluation from the CCGH office prior to their departure and are due to the CCGH office immediately upon a student's return.

### **Questions?**

If you wish to discuss this option further before applying, do not hesitate to make an appointment to see Assistant Director, Lucia Garcia.

### **Local Orientation**

Orientation to Kumasi and to the medical campus will be arranged by Dr. Plange-Rhule or other educational supervisors.

**Appendix 1:**

**Clinic Duties/ Typical Schedule:**

Typical days begin around 8 AM Monday through Friday. Students are assigned a teaching firm/team and will attend rounds. Attending physicians select interesting patients and lecture to the team for about an hour about the specific case. After morning rounds, students continue seeing patients on the floors or go to a specialty clinic for the rest of the morning. Specialty clinics include: endocrine, HIV, neurology, and hypertension. Students also attend daily lecture at noon consisting of a topic in medicine or surgery. After lectures, students participate in afternoon clinic, lectures, or the Emergency Room. Students participating in surgery rounds generally attend morning lectures and then general surgery clinic or the OR for the rest of the day.

**Appendix 1: Sample Patient Log with Typical Cases from Ghana Elective**

Date:	Describe Clinical Activities
3/26	Clinic: Doctors are on strike due to lack of funding for medical supplies in the hospital Morning rounds with medical students and house officers Meningitis 1 patient TB 1 patient HIV 1 patient ALL 1 patient Cellulitis of lower extremity 1 patient
3/27	Clinical: Morning rounds Anemia 1 patient DM1 1 patient Meningitis 1 patient Otitis media 1 patient Subdural abscess 1 patient Chronic pancreatitis 1 patient Pleural Effusion 1 patient Malignancy 1 patient Diabetic ulcer 1 patient Hepatoma 1 patient Noon lecture Afternoon lecture
3/28	Clinical: Morning rounds Anemia 1 patient Seizure 1 patient Meningitis 1 patient Otitis media 1 patient Subdural abscess 1 patient

3/29	Clinical: Morning rounds Dog bite 1 patient MI 1 patient HF 1 patient  Endocrinology Clinic RA 1 patient Hyperthyroidism 3 patients DVT 1 patient Goiter 1 patient EtOH withdrawal 1 patient Afternoon lecture Nighttime emergency admissions Stroke 1 patient SC injury 1 patient
3/30	Clinical: Morning rounds Anemia 2 patients Dehydration 1 patient Syncope 1 patient Meningitis 1 patient Otitis media 1 patient Subdural abscess 1 patient
4/2	Clinical: Changed teams Morning rounds: Subarachnoid hemorrhage 1 patient Infection 1 patient Umbilical hernia 1 patient Chronic kidney disease 1 patient UTI 1 patient
4/3	Clinical: Morning rounds: Pancreatitis 1 patient Pancytopenia 1 patient Cough 1 patient Abdominal pain 1 patient Pneumonia 1 patient Gastric ulcer 1 patient HTN clinic: HTN 7 patients Afternoon teaching rounds
4/4	Clinical: No clinic as physician was attending other professional obligations

4/5	Clinical: Morning rounds: COPD 1 patient Hemoptysis 1 patient Altered mental status 1 patient Pott's disease 1 patient Pericardial effusion 1 patient
4/10	Clinical: Morning teaching Aortic regurgitation 1 patient Pericardial rub 1 patient
4/11	Clinical: no clinic as lecturer is out of town.
4/12	Clinical: Double morning rounds MS 1 patient UMN lesion 1 patient Thrombotic disease 1 patient Dyspnea 1 patient Nephrotic syndrome 1 patient HTN 1 patient
4/13	Clinical: HIV clinic 21 patients Shingles 1 patient CKD 1 patient TB 1 patient Hemiplegia 1 patient Expressive aphasia 1 patient Cyanosis 1 patient Post herpetic neuralgia 1 patient Seizure 1 patient Depression 1 patient
4/17	Clinical: Morning lecture Physicians are on strike again Afternoon lecture
4/18	Clinical: Breast cancer mets to throat



	1 patient Anemia 1 patient Breast cancer 1 patient Abdominal hernia 1 patient
4/19	Clinical: Thyroid mass 2 patients  Indirect hernia 1

**Appendix 2: Educational Goals and Objectives**

**Goal #1- Medical Knowledge**

List the Specific Outcomes You are Trying to Achieve under Goal #1	How will you measure these outcomes?
<p>1. Know, understand and apply the basic concepts of the basic and clinically supportive sciences</p> <p>a. Learn the pathogenesis and treatment of diseases such as HIV/AIDS and TB. Gain exposure to diseases which are either less likely to occur in the US or whose presentation are generally not as advanced in the US.</p> <p>b. Principles of epidemiology- especially in relation to HIV/AIDS and TB, as well as other HIV associated disease processes. Gain a better understanding of the treatment programs set in place to treat HIV and the associated opportunistic infections. Gain a better understanding of funding for such programs (ie governmental vs NGOs, domestic vs international).</p> <p>c. Principles of health maintenance and disease</p>	<p>1. Keep a clinical activity log that will include the patients that you have seen with HIV as well as their treatment regimens.</p> <p>2. Record patient HIV associated infections. Examine the collective results upon the completion of the program. Note where the funding for patients is coming from and if there are specific deficiencies in this funding.</p> <p>3. Speak with patients about prevention strategies and basic healthcare maintenance programs, if any, they have been exposed to, both prior to and after their diagnosis. Inquire about such programs by asking various healthcare professionals.</p>

**Goal #2: Interpersonal and Communication Skills**

List the Specific Outcomes You are Trying to Achieve under Goal #2	How will you measure these outcomes?
<p>1. Work effectively with others as a member of the team in a variety of settings</p> <p>a. Outline roles and goals of various health professional team members--especially in this new environment. This will be a great opportunity to see how a hospital in a foreign country functions, especially how the roles of the different healthcare professionals varies from US hospitals. Gain valuable experience from exploring and defining your role in a foreign healthcare system.</p> <p>b. Be aware of strategies for resolving conflicts and communicating effectively with team members</p> <p>2. Communicate essential (clinical) information effectively with the team and in consultation. Work on being more assertive and confident in this new environment.</p> <p>3. Deal effectively with difficult situations</p>	<p>1. Rate how comfortable you have become in interacting with the healthcare team from the beginning to the end of the experience.</p> <p>2. At the end of the rotation reflect on the conflicts and potential conflicts you experienced. Note how they were resolved (if they were) and how they might have been resolved better.</p> <p>3. Measure this outcome by how independently you are functioning by the end of the rotation.</p> <p>4. Reflect on the difficult situations you have dealt with in your reflection paper.</p>

**Goal #3: Professionalism, Moral Reasoning and Ethical Judgment**

List the specific outcomes you are trying to achieve under Goal #3	How will you measure these outcomes?
<ol style="list-style-type: none"> <li>1. Behave professionally               <ol style="list-style-type: none"> <li>a. Be responsible, reliable, and dependable and treat my patients with the same level of respect I would treat any of my patients in the US.</li> <li>b. Demonstrate personal integrity, honesty, and self-discipline and in interactions with patients, peers, faculty, residents, and non-physician staff.</li> <li>c. Project a professional image in manner, dress, grooming, and speech in all interpersonal relationships</li> <li>d. Demonstrate commitment to service to patients in need</li> <li>e. Examine the role of spirituality and personal values in the context of a different culture.</li> <li>f. Demonstrate the ability to exercise sound judgment and function under pressure</li> </ol> </li> <li>2. Interact effectively with the patient               <ol style="list-style-type: none"> <li>a. Endeavor to understand the patient's perspective regarding his/her illness</li> <li>b. Respect the patient's rights and privacy</li> <li>c. Recognize the salient legal, ethical, spiritual, cultural and psychological issues that might affect the management of a patient's illness and modify management as appropriate</li> </ol> </li> <li>3. Recognize and effectively deal with unethical behavior of other members of the healthcare team taking into consideration cultural differences.</li> </ol>	<ol style="list-style-type: none"> <li>1. Self-report adverse outcomes with respect to the professional behavior goals.</li> <li>2. Delve deeper into patients' spiritual and cultural beliefs and how they may play a positive or negative role in regards to their healthcare. Record your findings in your log and reflection paper.</li> <li>3. Inquire into the cultural or spiritual basis of any ethically questionable practices you encounter, both for your own understanding and to provoke critical thinking of those practices by the healthcare worker involved.</li> </ol>

Goal #4. Clinical Skills and Patient Care

List the specific outcomes you are trying to achieve under Goal #4	How will you measure these outcomes?
<p>Gather and record essential and accurate information about patients</p> <ol style="list-style-type: none"> <li>1. Elicit and record other completed history, focused histories, patient fears and concerns, impact of an illness and treatment on the patient and the patient's family, non-biological factors including family, culture, age, gender, disabilities, and religious beliefs</li> <li>2. Perform and record complete screening physical examination. Focus on improving your skills during this rotation as you will have a great opportunity to see advanced pathology</li> </ol>	<ol style="list-style-type: none"> <li>1. Treat this rotation like any other clinical rotation and perform H&amp;Ps on patients just as you would any rotation.</li> <li>2. Perform A&amp;Ps complete with a different diagnosis just as any other rotation. Student must adapt these plans to the constraints if resources aren't available.</li> </ol>

<p>as well as work with doctors who have to rely much more on their physical exam skills.</p> <ol style="list-style-type: none"> <li>3. Organ-specific focused examinations including HEENT, cardiovascular, pulmonary, abdominal. Pelvis, breast, neurological including mental status, musculoskeletal, urologic.</li> <li>4. Integrate pertinent data to develop a relevant problem list, including organic, psychological and social issues.</li> <li>5. Generate an initial, prioritized differential diagnosis given what the most likely diseases are in Kumasi</li> <li>6. Develop outpatient management plans       <ol style="list-style-type: none"> <li>a. Construct appropriate management strategies diagnostic, therapeutic, and educational) for common conditions, both acute and chronic</li> <li>b. Develop care plans for patients with chronic with chronic conditions not amenable to immediate care, including rehabilitative services, care of chronically disables persons, and patients facing the end of life.</li> <li>c. Recognize and institute appropriate initial therapies for emergency and life-threatening situations</li> <li>d. Understand the principles of relieving pain and ameliorating suffering of the patient</li> <li>e. Develop diagnostic and treatment strategies that are sot-effective and sensitive to resource limitations present in Ghana</li> <li>f. Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to- date scientific evidence, and clinical resource availability present in Ghana</li> <li>g. Perform competently all medical and invasive procedures considered essential for entering any area of graduate medical education           <ol style="list-style-type: none"> <li>i. Seek out and perform routine,</li> </ol> </li> </ol> </li> </ol>	
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<p>basic clinical procedures including venipuncture, BLS, intravenous catheter insertion, arterial puncture,, lumbar puncture, nasogastric tube incertion, foley catheter insertion, suture lacerations</p> <p>h. Interpret the results of the most commonly used clinical tests: electrocardiogram, laboratory tests, radiologic tests</p> <p>i. Work collaboratively with healthcare professionals including those from other disciplines to provide patient-focused care.</p>	
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Goal #5: Life-long Learning, Problem Solving and Personal Growth

List the specific outcomes you are trying to achieve under Goal #5	How will you measure these outcomes?
<ol style="list-style-type: none"> <li>1. Demonstrate an investigatory and analytic thinking approach to clinical situations               <ol style="list-style-type: none"> <li>a. Pursue resources necessary to understand and solve diagnostic and therapeutic problems.</li> <li>b. Demonstrate openness to adopting new methods of acquiring information, especially in regards to the physical exam.</li> </ol> </li> <li>2. Demonstrate a commitment to individual, professional and personal growth               <ol style="list-style-type: none"> <li>a. Recognize personal limitations in knowledge and experience and need for immediate help/consultation</li> <li>b. Faithfully attend recommended conferences, classes, seminars, lectures, and other structured learning opportunities</li> <li>c. Accept performance feedback gracefully and modify personal behavior in response to correction</li> <li>d. Appropriately confer with and seek advice or assistance from supervisors, advisors, or consultants</li> </ol> </li> <li>3. Analyze practice experience and perform practice-based improvement activities using a systematic methodology--</li> </ol>	<ol style="list-style-type: none"> <li>1. Ask questions and take full advantage of this time to grow both professionally and as a person. Make every effort to learn from all the people you come in contact with. Learn more about the people of Ghana in general and reflect on these experiences through a personal journal.</li> <li>2. Compare and contrast the relative outcomes in patient care between the US and Ghana and think about reasons for such difference.</li> </ol>

Formulate questions regarding outcomes seen in patient care and consider simple methods of quality improvement, including improved patient satisfaction, decreased complication rates, improved clinical outcomes, and improved access to healthcare for patients from underserved groups	
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Goal #6: Social and Community Context of Health Care

List the specific outcomes you are trying to achieve under Goal #6	How will you measure these outcomes?
<ol style="list-style-type: none"> <li>1. Appreciate the importance of the many non-biologic factors that influence health, disease, disability, and access to care--Demonstrate understanding of how the patient's family, culture, age, gender, disabilities, and religious beliefs can influence healthcare decisions and outcomes in Kumasi.</li> <li>2. Know how types of medical practice and delivery systems differ from one another, including methods of controlling healthcare costs and allocating resources--Demonstrate knowledge of the Ghanaian healthcare system, including reimbursement mechanisms, the roles of government and private sector, and the ways patients pay for healthcare</li> <li>3. Practice cost-effective healthcare and resource allocation while noting how the constraint of fewer resources compromises or does not compromise the quality of healthcare delivered to the people of Ghana</li> <li>4. Become familiar with the complexities of the Ghanaian healthcare system with regards to patient navigation</li> </ol>	<ol style="list-style-type: none"> <li>1. Ask patients about barriers to their health care needs.</li> <li>2. Explore and ask questions about the healthcare system of Ghana and how it is paid for.</li> <li>3. Record instances when you feel limited resources significantly affected care.</li> <li>4. Record instances when the Ghanaian healthcare system did not work in favor of the patient</li> </ol>

### Appendix 3:

#### Packing List for CCGH-407 Ghana

##### Equipment you will need:

- Loyola student ID
- Students are asked to bring a stethoscope and diagnostic equipment set (ophthalmoscope, otoscope).
- Lab coats are expected for days in clinic
- Scrubs for surgical rotation
- Personal items: malaria prophylaxis, mosquito net, insect repellent, ear plugs

##### Additional items to bring and other tips for your stay:

- Yellow Book with current immunizations
- Towels
- Sheets
- Occasional blackouts occur on campus and hospital facilities. It is helpful to bring a handheld flashlight or install a light app.
- Facilities on campus do not have AC and the temperature is roughly 90 degrees all of the time. Students are able to purchase a standing fan in Accra, if they desire to do so.
- Clothing and laundry - Pants or skirts are fine. Take 7-8 days of clothing. You can hire someone very cheaply to do your laundry--Dr. Luke says well worth it!
- Blow dryers or other hair tools should be purchased in country due to electrical and wattage differences (your American blow dryer will blow up!)
- Payments for KNUST lodging and fees should be made in CASH
- Students are able to use bank ATMs to withdraw money in-country. You may want to call your credit card companies before you travel to let them know you'll be in Ghana.
- Bring BUG SPRAY!!! :)
- Bring snacks, bars, non-perishable small items
- Internet cards for wi-fi are available for purchase at KNUST, but internet is often slow and unreliable
- There is no hot water