Global Health Program

ZIMBABWE PARTICIPANT GUIDE

April 2018
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Dear Participants,

On behalf of the Global Health Office of Zimbabwe at the University Of Zimbabwe College Of Health Sciences, it is my pleasure to welcome you to our beautiful city of Harare! As a participant in our clinical exchange program, you will be exposed to the health care and medical education systems of Zimbabwe. We will strive to provide you with the best possible educational experience enriched with the cultural traditions of our lively city. We hope that you will enjoy your 6-week clinical rotation here in Zimbabwe and return home with great memories and knowledge.

In this Guide you will find all the information necessary for your rotation. Please take time to read through it carefully. Should you have any questions or concerns, our local Global Health Office team is always at your disposal for assistance.

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Dear Global Health Participants,

Mauya! Welcome to your global health rotation in beautiful Zimbabwe, the Jewel of Africa! You will be working at Parirenyatwa Group of Hospitals and the University Of Zimbabwe College Of Health Sciences. Parirenyatwa is a center of excellence and the main hospital for the region. During your rotation, you will be at the hub of subspecialty care, academic training, and medical research in Zimbabwe. Your hosts will strive to provide you with the best possible educational experience, enriched with the cultural traditions and attractions of Harare and beyond.

In this Guide you will find all the information you need regarding your rotation in Harare. Please take time to read through it carefully. Should you have any questions and concerns, the local Global Health team is always available to answer questions.

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Zimbabwe is a landlocked country in the southeastern part of Africa. It shares borders with South Africa, Botswana, Namibia, Zambia, and Mozambique. Zimbabwe’s geography is dominated by a high central plateau, around 1500m in elevation, known as the Highveldt. Much of Zimbabwe’s mineral wealth is contained in the hilly “Great Dyke” that runs north-south through the middle of the country. The plateau slopes downwards to the north and south, getting as low as 150m in the region of Zimbabwe’s largest national parks, in the lowveldt.

The population is estimated to be around 14 million. There are 16 official languages in Zimbabwe representing the major people groups, with the largest being Shona and Ndebele.

The economy is based on mining, timber, agriculture, and tourism, although the latter two have seen a significant decline in the past two decades. The country was formerly one of the most prosperous in Africa, but is presently recovering from economic collapse. As a result, a very large percentage of the country’s population is living in extreme poverty.

The predominant religion in Zimbabwe is Christianity (Protestant and Catholic). There are also many syncretistic religions that combine elements of Christianity with customary beliefs, the most notable being the “mapostori” who can be seen wearing white on Saturdays and Sundays when they meet outdoors. Other religious groups – Jews, Greek Orthodox, Hindus, and Muslims – are present in smaller populations, especially in Harare.

As is the case in all African countries, many social norms in Zimbabwe remain conservative compared to the US. As a whole, African cultures are strongly male-dominated and this is evident in how families and societies are structured. However, women have the same rights and status as men under the law, and women are strongly represented in the medical profession.

Abortion and homosexuality are examples of illegal and taboo topics.Pornography is also illegal. It is not uncommon for visitors to be asked personal questions about religious beliefs, marital status, or political beliefs. General advice for foreigners is to steer clear of controversial subjects in casual conversation and to avoid offering personal details to strangers.

Up to date information on Zimbabwe can be found in the CIA World Factbook:

**Brief History of Zimbabwe**

Zimbabwe derives its name from "Great Zimbabwe" (houses of stone), the largest stone structures in Africa after the pyramids of Egypt. Great Zimbabwe was built in stages somewhere between 800 and 1500 A.D. European penetration into the land that is today called Zimbabwe began through Christian missionaries who befriended King Mzilikazi in 1858. They were followed by fortune hunters, soldiers, and land grabbing settlers.
Cecil John Rhodes and his British South African Company bought the Rudd Concession from King Lobengula ostensibly for mining purposes, but, Rhodes then brought an army and settled in present day Harare in 1890. Thereafter, Rhodes declared war on Lobengula and overthrew him and named the country Rhodesia. From 1960 onwards, major contradictions developed between colonial policy in London, which now wanted change, and the Rhodesian administration, which opposed majority rule, resulting in the Unilateral Declaration of Independence (UDI) of 1965 by the Rhodesian Prime Minister, Ian Smith. Despite judgments by the highest courts in Rhodesia and England that the rebellion was illegal and treasonous, the British government refused to send troops to quell the rebellion, but rather imposed economic sanctions, which were to last for fourteen years.

The indigenous population resisted British rule from the beginning of European settlement. After King Lobengula was defeated in 1893, Africans in both Mashonaland and Matabeleland took up arms in the First Chimurenga War of 1896-97, which was led by Mbuya Nehanda and Sekuru Kaguvi. The uprising was suppressed by the use of unparalleled brutality and torture of the prisoners of war and civilians. For the following 60 years there was no armed opposition to British minority rule.

The Second Chimurenga (liberation war) against the British began with the Chinhoyi Battle in 1966. Up to 1970, freedom fighters fought sporadic battles with Rhodesian security forces. The Rhodesian security forces were largely supported by the South African Army. This period was followed by sustained war led by the Zimbabwe African National Union (ZANU) and the Zimbabwe African People's Union (ZAPU) supported by independent African states, especially Zambia, Mozambique, Tanzania, Botswana, and also by China and the Soviet Union.

The liberation war ended in December 1979, following the Lancaster House Conference, at which the Rhodesian regime and the British government conceded defeat and granted independence under a democratic constitution. Zimbabwe emerged as an independent state on 18th April 1980 with Robert Mugabe as Prime Minister and Canaan Banana as ceremonial President.

Robert Mugabe became the President in 1987, and held onto power until November 18, 2017 when the citizens of Zimbabwe united with the armed forces in a spectacular non-violent Solidarity March demanding Mugabe’s resignation in light of the economic crisis that developed during his 30-year presidency. President Emmerson Mnangagwa took over as the interim president on November 24, 2017.

Language

Zimbabwe has 16 official languages. The ones you will encounter the most are English, Shona and Ndebele. In the hospital, all rounding and formal business is carried out in English. However, doctors in Shona-speaking areas such as Harare, will often speak to patients in Shona. English-speakers will find that Shona, just like Spanish, is pronounced phonetically.

A few phrases in Shona:

- Ndinonzi: My name is...
- Mangwanani: Good Morning
- Makadii: How are you?
- Maswera sei?: How was your day?
- Ndeipi?: What’s up? (slang)
- Ndiri bho: the positive response to the previous question
- Chipatara: Hospital
- Murwere: Patient
- Chiremba: Doctor
- Ndinobva ku...: I come from....
- Mai: *Mother*
- Baba: *Father*
- Sekuru: *Grandfather* (Also a polite way to address an elderly man whose name you do not know)
- Mbuya: *Grandmother* (Also a polite way to address an elderly woman whose name you do not know)

**Climate**

Zimbabwe has extremely pleasant weather. As it is in the southern hemisphere, summer occurs from November to April. During summer, lower elevation locations may get very hot, but Harare generally stays around 70F. Summer is the rainy season, with late afternoon and evening rain showers most days. Winter occurs from May to October, and is characterized by cooler and much drier weather. Nights can be cold with frost in some areas, but never snow. **Definitely bring a couple of warm sweaters/hoodies/fleece/jacket if you are staying in Zimbabwe in winter!!**

**Cuisine**

The national staple of Zimbabwe is sadza which is made from corn meal. It is eaten by hand – you roll a small ball of sadza and use it like flatbread to eat the side dishes, often beans, vegetables (muriwo), and beef/chicken stew. Braais (barbeques) are a favorite activity in Zimbabwe where friends and family come together to eat and socialize.

*Peter Saikali, Norwalk Hospital Resident, 2016*

**GENERAL INFORMATION**

**About the Program**

The Robert Larner, M.D. College of Medicine at The University of Vermont and Western Connecticut Health Network Global Health Program provides motivated medical students with an introduction to global health through participation in US-based didactics and experiential learning at various international sites. Our global health faculty members have worked with a diversity of underserved populations, both within the US and overseas, and each brings their unique experience to the program. Ultimately, the Global Health Program aims to inspire medical students interested in working with medically underserved populations around the globe and to better prepare them for practice in low resource settings.
THE TEACHING HOSPITALS

There are two main teaching hospitals associated with the University Of Zimbabwe College Of Health Sciences (UZCHS): Parirenyatwa Hospital and Harare Hospital. Both hospitals follow an academic model similar to University of Vermont Medical Center. Each service is largely run by Residents known as Senior House Officers (SHOs) or Registrars, as well as Junior or Senior Resident Medical Officers (JRMOs/ SRMOs). JRMOs are first year interns, while SRMOs are second year. Attendings, known as Consultants, together with Senior Registrars do most of the teaching on ward rounds. Senior Registrars are usually staff who have completed their Master of Medicine degree and are doing their mandatory final year of training prior to being registered as Specialists in their relevant field e.g. Internal Medicine, Surgery, Orthopedics, Pediatrics, Obstetrics & Gynecology etc.

Both hospitals use paper charts, with the exception of the outpatient HIV clinic at Parirenyatwa that has computerized records. Additionally, patients have their own handwritten medical notebooks that they take home. Laboratory results are eventually available on computers on each ward, but can be obtained earlier from handwritten ledgers available at the laboratories.

Parirenyatwa and Harare Hospital house most major clinical departments, surgical specialties (general surgery, ophthalmology, orthopedics, cardiothoracic, pediatric surgery, urology etc.), laboratory medicine (hematology, microbiology, chemical biology, histopathology), nuclear medicine, and medical rehab. There are also outpatient clinics, an emergency department (i.e. Casualty), and operating rooms (i.e. Theatres). Most basic laboratory assays are available in-house—CBC with a diff (Full Blood Counts—FBCs), lytes (Urea and electrolytes—U&Es), and Microscopy, Culture, & Sensitivities (M/C/S). A wide variety of specialized assays can be sent to local private labs.

Parirenyatwa Hospital

Parirenyatwa (pronounced parry-wren-YAT-wa, but called “Pari” around town for short) is on the outskirts of Harare’s central business district (CBD), surrounded by many of the city’s foreign embassies. The medical school and student apartments (“Med res”) where you and other visiting students stay is on the Pari campus, right across the street from the hospital. It occupies a large campus, with a central 3-story, 2000-bed hospital and many satellite clinics, labs, and hospitals.

Pari was historically the more affluent of the two university hospitals, being mainly for White people during colonial rule. The patient population has since equalized between Pari and Harare Hospital. Most patients at Pari today are Black and come from very limited resources. Although staying overnight is free, procedures,
labs, imaging, and transfusions do require up-front payments. As a result, it is not uncommon for patients to stay for extended periods while attempting to raise funds.

**Harare Hospital**

Harare Hospital is the other UZCHS teaching hospital. It is about 10km from the Pari campus. A shuttle is available for medical students from Pari to Harare Hospital. It departs each morning from the main entrance to Pari and the Med-res around 0730 and returns at 1130 (although it commonly runs 15 or so minutes late). Harare Hospital has 1200 beds (but usually more than 1200 patients) and was historically the general hospital for Black people — comparatively more crowded, higher acuity, and more under-resourced compared to Pari. Depending on which service you select and how the program is structured when you visit, you may spend time at Harare Hospital.

**MEDICAL EDUCATION**

Medical school is five years long, and most students enroll directly after completing high school (“A-level”). The school enrolls over 200 students and the numbers keep increasing. The first two years of training is classroom-based (basic and behavioral sciences), while the last three years are mainly clinical. On the floor, medical students are part of a team and learn through a combination of rounds and lectures. At the conclusion of the last year (end of January), students take their final exams, which are a series of day-long exams in every subject, including an oral exam.

After graduating, doctors undertake a two-year internship (JRMOS/SRMOS) at a teaching hospital in Harare or Bulawayo, where they intensively rotate through medicine, pediatrics, surgery, and OB/GYN services. After internship, they complete one year of supervised general service in a rural “district” hospital. Some doctors, however, can continue training in the central hospitals and then join the Master in Medicine training programs. A resident that has completed the above requirements is now qualified to practice throughout the country as a general practitioner. In Zimbabwe, the word “physician” is only used for Internal Medicine specialists/attendings/consultants. Residents that return to a teaching hospital, but haven’t started specialty training, are known as a Senior House Officers. Residents that are undergoing training in their specialty are referred to as Registrars.

It is not uncommon for consultants to work in private practice in addition to holding a post at the University Centers. Many consultants at the UZ have completed some or all of their training abroad, including in the US and UK.
Rounds can range from quick glances at patients on the wards, to day-long, intensive “pimp” sessions, depending on the consultant running the team. As a general rule, expect a more formal approach than you often find in the US. The team will be dressed well and attentive. Checking facts on your smart phone is not acceptable. Memorization is a skill that is admired in the Zimbabwe medical system. You will find that most of the registrars are very well read. If you are asked a question on rounds that you cannot answer, be assured they will ask you the next day if you found the answer while reading overnight. Occasionally, a treatment modality will strike you as outdated. If you are polite and professional, feel free to ask why things are done a certain way.

**Medicine Department**

Students between their first and second years of medical school are assigned to one of the medical services for their global health elective. 

**Morning Rounds** - Morning rounds usually start at 8am, but it is best to check each day with your team to confirm for the following day. The team will round and discuss a plan for each patient, but nothing will get done while you are rounding. Blood draws and lumbar punctures will occur after morning rounds and hence tend to be conducted in the afternoon. Family visiting time is 1-2pm and it is a great experience to see how many people come to see patients during this time. Doctors are usually not around at this time. Of note, many patients will have TB, but are considered non-infectious if they are on the general medicine floors. If confirmed to be infectious, these patients will be transferred to one of the side wards or to the Wilkins Infectious Diseases Hospital which is just down the road from Pari.

**Clinic** - There are different clinics on different days, and you can ask the students about the specific schedule in order to join them. If clinic is occurring, you will find fewer residents, juniors, and students rounding on the floor, and therefore probably less teaching in the wards.

**Afternoon Physical Exams** - This is the best time of the day for medical students. Throughout the morning you will see at least 20 patients. The doctors on the team will discuss the patients and examine them. Many patients will have interesting cardiac, lung, and abdominal exams. Make note of which patients have unique findings so that you can return during the afternoon to examine them yourself.

**Casualty** - Each team has call one night per week in Casualty (ED). They usually arrive after dinner and stay late into the night admitting patients. The busiest hours are 6-8pm. This is an ideal time for students to join to help with procedures and admitting patients. It is best to check with your team to determine when they want you there and whom you should join.

In Casualty, the junior doctors wear scrubs. Bring a pair of scrubs with you to avoid having to wear your dress clothes from earlier in the day. Once there, the junior doctors will be happy to orient you so that you can assist with blood draws and other appropriate procedures depending on your level of comfort and training. The junior doctors are very busy, and since you cannot efficiently interview patients due to the language barrier, assisting in other ways is a huge help and it will go far in building a rapport with the team.

**Sample Schedule**  
*varies by wards*

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
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</thead>
<tbody>
<tr>
<td>0800-1200 - Walk Rounds</td>
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<td>0800 – 0900 – Resident teaching conference</td>
</tr>
</tbody>
</table>
Walk Rounds - Monday-Saturday, starting around 8am (9am on mornings with morning lectures or grand rounds), each team goes on walk rounds. If you have admitted patients the previous day, you are usually joined by the attending and senior resident, and a group of medical students. Other days, it may just be you and the intern. Medical students generally come in around 7am to pre-round on patients. It is expected that every new patient is “clerked” and presented by a medical student. At times the team will spend an hour at the bedside of a single patient, meticulously going over history, exam, differential, and treatment plan.

Lectures - The medical students generally have a busy lecture schedule that takes them away from walk rounds about half the time. Lectures are occasionally held at the bedside (e.g. with a nutritionist or teaching rounds with an attending). You can decide when you want to attend these lectures versus continuing to work with the team on the ward.

Grand Rounds (or Clinical Meetings) - Grand rounds are held weekly in one of the main medical school lecture halls. Check with your ward/team members for the time and location. They have a similar format to a morning report in the US. A resident presents an interesting case on PowerPoint, with pauses where a moderator asks members of the audience for their input on the case. At the end, there is usually a presentation on the final diagnosis (in pediatrics, often this section is delivered by a guest speaker, such as a microbiologist/pediatric surgeon/etc.).

Patient Care - After rounding is finished, residents work on their to-do lists, much like residents do here in the US. Medical students are not expected to be present, but there can be great learning opportunities and the residents generally appreciate the help.

Outpatient Clinics - There are several options. Each attending usually has a clinic one day each week when they see recently-discharged patients for follow-up (held in the OPD wing of the hospital, on the first floor). Medical students attend, and there is usually a fair bit of teaching. The “OI clinic” (Opportunistic Infections) is held in a satellite clinic on the Pari campus. This is where patients with HIV are followed. It is a great opportunity to observe counseling with the patients, see ART regimens chosen, diagnose treatment failure, and see second-line therapies that are in use.
Pediatrics Department

For senior medical students and residents, Pediatrics rotations can be done at Parirenyatwa Hospital, Harare Hospital, or both. Harare Hospital offers its own Children’s Hospital in a separate building. Both hospitals offer a strong teaching environment with teaching rounds and very accomplished pediatric attendings who take responsibility for medical student education.

Structure of Wards - There are four general pediatric medical wards in Parirenyatwa hospital (A3, A4 General, A4 Special, and A5). There is also a dedicated pediatric Heme/Onc ward on A4 Special. A2 ward serves as the Pediatric casualty where patients are admitted for observation. Ward census can vary considerably, but 20-30 patients is fairly average. The individual wards rotate days for admitting patients. There is also a four-bed PICU and a 20-bed NICU, but neither site currently hosts medical students.

Common Pediatric Pathologies

At any given time, a good percentage of patients on the floor will have “bread-and-butter” pediatric conditions that are commonly encountered in the US (asthma, bronchiolitis, CAP, neonatal jaundice, rule out neonatal sepsis, DKA, seizure workups, post-op patients, etc.). A significant percentage of the ward also reflects the primary pathologies of sub-Saharan Africa (HIV, TB, malaria, malnutrition, sickle cell anemia, etc.). Other common conditions include hematologic conditions such as Fanconi’s anemia and hemophilia, typhoid fever, unrepaired congenital or rheumatic heart disease, pediatric malignancies, etc. In a country where about 15% of the population (and >40% of the hospital population) is HIV positive, AIDS and associated conditions exert a huge influence on everything you see on the wards. As a major referral center, you can also expect to see a variety of “Zebras,” as well as advanced pathology.

Malnutrition - The former designations of Marasmus and Kwashiorkor are no longer used in Zimbabwe. Instead, malnutrition is characterized in the hospital by its onset (acute or chronic), level of severity, and as non-oedematous or oedematous. The most common type of malnutrition that leads to hospitalization is Oedematous Severe Acute Malnutrition (OSAM). The majority of cases occur within a few months after a child has been weaned from breastfeeding due to inadequate complementary feeding (typically Sadza—the staple cornmeal dish). These children develop gastroenteritis or other acute illnesses. Treatment of OSAM has high mortality rates due to electrolyte abnormalities, latent infections, and severe anemia. Carefully following WHO treatment guidelines significantly reduces mortality.
**Tuberculosis** - TB is endemic in Zimbabwe. It is on the differential diagnosis for most chronic presentations seen in children such as failure to thrive, lymphadenopathy, recurrent pneumonia, neurologic deficits, etc. Nearly every child receives the BCG vaccine at birth, which significantly reduces susceptibility to TB meningitis and miliary TB. However, it does little to prevent pulmonary or other extra-pulmonary TB manifestations. TB can be notoriously difficult to diagnose in children, and the treatment course is long and difficult. A history of a strong TB contact can be a specific (but poorly sensitive) historical detail. Mantoux tests (PPDs) are among the most widespread diagnostic modality, but may be falsely negative for many reasons, e.g. being HIV positive or malnourished. CXRs are also available, but are difficult to interpret in children as they are less likely to develop cavitary lesions. Most children as less contagious than adults because they do not produce sputum when they cough. This however, makes acid fast staining very difficult. Often gastric aspirates suctioned through an NG tube several mornings in a row are taken to look for bacilli in swallowed sputum.

**Malaria** - At over 1000m of elevation, Harare is outside of the habitat of the Anopheles mosquito which transmits Malaria. However, many other regions of Zimbabwe are endemic, and most severe cases are frequently referred to Parirenyatwa and Harare Hospital for management. By far the most prevalent form of malaria in sub-Saharan Africa is Plasmodium falciparum (this prevalence is primarily due to the fact that most Africans are Duffy antigen negative, which the other species of malaria require for RBC entry). Severe malaria can present in many ways, but often closely mimics septic shock. Many children develop profound anemia, with hemoglobin <4. Malaria infection is screened across the country (including at most rural posts) using rapid diagnostic tests (RDTs), which are quick immunoassays that require only 1 drop of blood. However, these can be poorly sensitive so a thick-smear microscopy (called an “MP” for “Malaria Parasites”) is usually needed to rule out malaria. Malaria is treated based on a number of criteria, such as whether it is partially-treated, uncomplicated, complicated, or cerebral.

**HIV** - Zimbabwe unfortunately has one of the highest burdens of HIV in the world, with estimates of approximately 15% of the population being positive. Despite widespread testing and treatment initiatives to prevent maternal-to-child transmission, a large number of infants in Zimbabwe still acquire the virus. Reflecting WHO policy, exclusive breastfeeding is recommended for at least the first six months even with HIV+ mothers. Currently, the mainstay for Prevention of Maternal-to-Child Transmission (PMTCT) is placing all HIV+ pregnant and breastfeeding women on HAART, and giving infants prophylactic Nevirapine (an NNRTI) for the first six weeks of breastfeeding (data shows the greatest risk of breastmilk transmission occurs early on in breastfeeding). Do, however, check with the latest ART guidelines for initiation and treatment recommendations. Infants’ HIV status is tested at regular intervals, and if at any point they are found to be HIV positive, they are switched from prophylaxis to a triple-drug based HAART therapy (WHO guidelines recommend this treatment to HIV+ children under the age of 5, regardless of staging, although Zimbabwean policy does not yet reflect this). A considerable amount of stigma remains in Zimbabwe surrounding HIV. Be mindful of this when discussing this information with patients in crowded, public wards. Specific medical terminology is used to speak about HIV status. Children born to HIV+ mothers are said to be “PMTCT code 1”, for example, and HIV testing is called “PITC” (Provider-Initiated Testing and Counseling).

**Surgery Department**

Senior medical students may elect to rotate within the Surgical Department. The Surgery Department at Parirenyatwa Hospital is comprised of General Surgery, Cardiothoracic Surgery, Plastic Surgery, ENT, Ophthalmology, Orthopedics, Urology, Neurosurgery, Maxillobuccal Surgery, etc. The services are all run slightly differently depending on the consultant leading the team at the time. Some teams have longer rounds than others, and the amount of time spent teaching at the bedside varies.
The hospital has approximately 20 theatres, though the volume of cases can be low as patients are required to pay upfront in cash for any surgery. Since Parirenyatwa is a hospital mostly for the working poor, few can afford the fees. Each team operates one day per week and has one day and night on call. The call night tends to be scheduled for the night before the OR day. Once per month, an entire team is on call for a weekend. Most registrars moonlight, so even though there are blocks of free time in their schedule, they are often working at the private hospitals.

Sample Schedule

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<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
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<tr>
<td>0800-1200 - Teaching Rounds</td>
<td>0800-0900 - Radiology Conf.</td>
<td>0800–1200 - Wound Exposure</td>
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<td>0900–1200 - Teaching Rounds</td>
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<tr>
<td>1200–0200 – Clinic</td>
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<tr>
<th>THURSDAY</th>
<th>FRIDAY</th>
<th>SATURDAY</th>
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<tbody>
<tr>
<td>0930–1200 - Teaching Rounds</td>
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<tr>
<td>1200–next day - On Call</td>
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**Teaching Rounds** – Rounds are slightly more formal than in the US. It is best to prepare the evening before. The consultant will ask many questions about anatomy, pathophysiology, and treatment options. They are interested in what the latest literature has to say, which does not always line up with the standard care at Parirenyatwa depending on available resources.

**Radiology Conference** – A number of plain films are presented and everyone is asked level-appropriate questions. This is one of the week’s highlights. Often, advanced diseases not encountered in the US are discussed.

**Clinic** – Clinic can be somewhat hectic, but the department Chair often sees patients and teaches during this time. You will have the opportunity to participate in a great number of procedures during these days. Don’t be surprised when procedures that we would normally perform in the OR (e.g. lymph node dissections, melanoma excision) are performed under local anesthesia in the clinic.

**Wound Exposure** – Due to limited resources and the surgical dogma in Zimbabwe, wounds are only exposed once per week.

**Grand Rounds** – A patient is chosen to be the subject of grand rounds on Tuesday or Wednesday of each week. Extensive preparation is necessary. The department Chair will ask challenging questions to determine whether or not you have read broadly on your topic. As a visiting student from the US, you will be expected to know epidemiology and current treatment modalities. Grand rounds are generally held at the patient’s bedside.

**On Call** – A cell phone is very helpful for call nights so you don’t have to stay in the hospital. Expect to be called a few times during the night.

**Theatre** – The operating room can be an exciting and sometimes startling experience. Please note that the prevalence of HIV among surgical patients is somewhere between 20-50%. Nonetheless, US standards of sterility do not apply here, though there is some effort to maintain a sterile field. The equipment— with the exception of the anesthesia machines and operating tables—is quite dated. Surgical instruments are sometimes dull or mismatched.
For many complicated reasons, the nurses, technicians, and anesthesiologists will assume that you have a greater level of training and skill than they do. It is important to be honest with everyone about your skill level and that you are there to observe or you may end up managing a situation that is far beyond your training. Personal protective gear varies from surgeon to surgeon. Some double glove and wear eye protection at all times, while some wear the bare minimum.

Surgical technique and competency varies. The consultants are technically proficient, but they rarely operate outside of private practice and are often absent unless an interesting case presents itself. As such, the registrars tend to operate alone. They have typically seen the operation performed a few times and might have assisted. Sometimes, they are operating based solely on what they read the night before. Although they are “book smart,” you will observe that they are not necessarily competent in proper surgical technique.

Blood loss can be massive for basic procedures. It is important to remember that although it might seem exciting to be involved in surgical procedures (especially since you may be permitted to be more involved at your current level of training than you would in the US), this is not the reason you are there. They may express that they would greatly appreciate your help, but be aware that it is under these circumstances that needle sticks and other exposure accidents are more likely to occur. We ask that you NOT participate in surgical procedures that you are not fully competent performing here in the US. The techniques and OR etiquette in Zimbabwe may differ from what you have seen here, and as mentioned above, the skill level of the registrar may be limited, thereby increasing your risk to an unacceptable level.

Obstetrics and Gynecology Department

Senior medical students or residents may elect to rotate in OB/Gyn.

Wards - SRMOs, SHOs, and Registrars are assigned to a team under a Consultant. They do not rotate through the services monthly as residents do in the US. Thus, you can be doing labor and delivery, MFM (or antenatal ward), GYN floor work, and GYN surgery all in the same week.

Prior to arrival, email the secretary to the chair, Mrs. Guri (obsgynpari@gmail.com). She will assign you to a “firm.” You may be assigned to Parirenyatwa, Harare Hospital, or a combination of both.

Sample Schedule

<table>
<thead>
<tr>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
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<tbody>
<tr>
<td>0800-0900 C2 Rounds</td>
<td>0800-0900 Labour Ward Rounds</td>
<td>0800-0900 C2 Rounds</td>
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<tr>
<td>0800-1800 Main Theatre Cases</td>
<td>Scheduled C-Sections</td>
<td>0900 – 1200 Antenatal Clinic</td>
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<td></td>
<td></td>
<td>Coverage Day (Casualty)</td>
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<tr>
<td></td>
<td>0400-0530 Labour Ward Rounds</td>
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<table>
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<tr>
<th>THURSDAY</th>
<th>FRIDAY</th>
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<tbody>
<tr>
<td>0800 – 0930 Antenatal Ward Rounds</td>
<td>0800–1800 – Theatre</td>
</tr>
<tr>
<td>0930–1200 – Gyn Clinic</td>
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<tr>
<td>1200–next day - On Call</td>
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</table>
Journal Club - Ask the secretary about the “Journal Club” schedule for the month at Parirenyatwa. This is the didactic time for the residents. It is usually on Tuesdays and Fridays at noon, and can include grand rounds or defense of research dissertations.

Patient Care - In general, remember to be advocates for our institution and the collaboration with WCHN/University of Vermont and the University of Zimbabwe. Always work with the team to find your role and have an open mind as to why US ‘standard procedures’ or protocols are not always implemented. Differences usually stem from limited resources or different governing body recommendations. Obstetricians in Zimbabwe tend to follow the Royal College of Obstetrics and Gynecology guidelines, as well as WHO. Consultants and registrars are eager to ask how we practice differently in the United States. Always offer your experience with a lens of cross-cultural exchange, and not as the ‘only’ way to perform obstetrics. It is not wrong to make a suggestion, but always honor the fact that you are a visitor from an immensely different environment.

Parirenyatwa has a separate maternity hospital called Mbuya Nehanda Maternity Hospital. Approximately 9,000 deliveries take place at Mbuya Nehanda. Harare Hospital has approximately 14,000 deliveries per year. Residents spend 6 months at each hospital.

Mbuya Nehanda is a 4-story building that operates somewhat independently of the main hospital. The fourth floor is a private ward. The entrance on the first floor has an admission and triage area, where patients are initially seen by a midwife and then further triaged by an intern. Most admissions are referrals from smaller clinics. Common reasons for referral are hypertensive disorders of pregnancy, patients desiring TOLAC, preterm labor and PPROM, as well as prolonged first stage of labor or ‘fetal distress’ as noted by meconium. The first floor also contains the post-natal ward for vaginal deliveries, where women stay for 6 hours and are then discharged.

The labor ward is on the second floor. There are 7 holding/antepartum rooms. These are for patients with severe pre-eclampsia who need close monitoring, or patients in early labor with a previous uterine scar. There is also a one-room High Dependency Unit (HDU) for patients with severe antepartum/postpartum diseases including preeclampsia, eclampsia, cardiomyopathy, and HELLP syndrome. Women who are hemodynamically tenuous from post-partum hemorrhage may also be in this unit. There are no ventilators, so anyone needing respiratory or cardiovascular support is transferred to the ICU in the main hospital. On the opposite side of the floor are 5 delivery rooms where patients are transferred when they are in active labor.

The physician team on the floor that day will make their first rounds at 8am. Sometimes nurses round with them, but usually orders are written in the chart and the nurse then comes later to execute orders. The SRMOs then make continuous rounds throughout the day, with or without the midwives. Doctors usually do not participate in normal vaginal deliveries or laceration repairs. Because there is a School of Midwifery at Mbuya Nehanda, vaginal deliveries are usually attended by a midwifery student and a midwife. Always ask if you can help with a delivery. On overnight shifts, the midwives will gladly accept your help because there are usually no midwifery students present.

Note to US Residents: Midwifery students may be unsupervised while performing repairs depending on how busy the unit is. This is an excellent arena for you to practice your teaching skills. Because midwives are the primary birth attendants, often times you will not have an assistant for resuscitation of an infant unless you ask for help prior to the delivery. Midwives are competent in managing both the mom and the infant, so if you are performing a delivery alone without a midwife, be prepared to perform neonatal resuscitation. Start with drying the infant, stimulation, and then high flow oxygen. Do not hesitate to call for help or ask for extra equipment such as a suction catheter for meconium. A pediatrician will come assess the baby, but usually not until it has been fully assessed by a provider. Common reasons for NICU admissions are low APGARS, low birth weight, or RDS. All women receive 10 Units IM Pitocin after delivery. Pitocin and Misoprostil are the only available uterotonics for PPH. The hospital does not use Hemabate or Methergine, and rightly so as about 50% of women have some type of hypertensive disorder of pregnancy.
The SRMOs, SHOs and Registrars perform cesarean sections (cesars) in the two operating rooms on the second floor. There are usually a few scheduled cesars in the morning, which may be bumped for more urgent cases. The training system provides for minimal supervision in the operating theater. SRMOs usually assist a SHO or Registrar a few times and then are expected to perform cesars independently.

As stated above in the Surgery section, and repeated here, it is important to remember that although it might seem exciting to be involved in surgical procedures (especially since you may be permitted to be more involved at your current level of training than you would be in the US), this is not the reason you are there. They may express that they would greatly appreciate your help, but be aware that it is under these circumstances that needle sticks and other exposure accidents are more likely to occur. We ask that you NOT participate in surgical procedures that you are not fully competent performing here in the US. The techniques and OR etiquette in Zimbabwe (even details like where to place your hands) may differ from what you have seen here, and as mentioned above, the skill level of the resident may be limited, thereby increasing your risk to an unacceptable level. In addition to these factors, cesarean sections are often performed rapidly if there is concern for fetal distress, thus increasing your risk even further. You can learn just as much about cesarean sections by watching. Please see the surgery section for more details about the OR in Zimbabwe.

Other areas of teaching: There is one “CTG” or Electronic Fetal Monitoring machine on the unit. Doctors in training may welcome your teaching about NSTs or intermittent monitoring and ultrasound.

Antenatal Ward - The third floor of Mbuya Nehanda is the antenatal ward. The NICU is also on this floor. Definitely visit the NICU, it is quite impressive! The antenatal ward is always busy, and has about 30 beds. The most common reasons for admission are pre-eclampsia (about 90%) and PPROM. Patients on the antenatal ward are also in early labor, or undergoing “induction of labor” for an indicated reason. Midwives will monitor their progress and discuss with the SRMO any necessary changes. Each team or firm is responsible for rounding on their patients, ordering lab tests and ultrasounds, and following up those tests. Usually an SRMO will do most of the floor work and then go to an assigned clinic for the day. Teaching rounds here highlight how our management in the US often differs from theirs. Remember to acknowledge variations in management with respect, and offer appropriate suggestions for care within the resources available at Pari. Many women may not be able to afford an ultrasound scan. Blood tests are usually covered, but the reagents for a full HELLP Syndrome work-up may not be available. If patients are able, they are often requested to get lab work drawn at a private lab, which can be $80-100.

Gynecology – Wards C1 and C2 are the gynecology wards, which are located in the main hospital. C1 is the oncology ward, and C2 is the benign gynecology ward. Patients must pay out-of-pocket for non-emergent procedures. The most common reason for admission to the oncology ward is cervical cancer. Early onset, late stage disease is extremely common secondary to the high prevalence of HIV.

Gynecologic oncology patients have access to radiation and chemotherapy at Parirenyatwa for cervical cancer and this is usually scheduled outpatient. There are a few patients admitted post-surgically to the benign GYN C2 ward status-post myomectomy or hysterectomy. Patients with sepsis s/p cesarean section or patients with threatened abortions will be admitted to C2 as well. The usual management of missed abortions is inpatient medical management, followed by evacuation early the next morning to ensure all uterine contents are expelled. This happens before the scheduled cases in the morning.

Rounds on this ward are thorough teaching rounds. Medical students will get ‘pimped’ and are expected to present a full history of the patient. They usually do not present the physical exam. Check with your team about scheduled cases for the week. There are usually a few open procedures and occasional laparoscopic surgeries. Registrars may operate independently of or with the consultant.

Casualty - Acute and non-acute problems are evaluated by an SRMO. It is often difficult to evaluate patients on your own if they do not speak English, but helping the SRMO perform pelvic exams and also offering management options is always appreciated. Often, patients do not utilize outpatient clinics, therefore they may present with problems similar to that seen in an outpatient clinic setting.
**GYN Clinic** - The GYN clinic is located in the main hospital near Casualty. The members of the firm covering clinic arrive after finishing rounds around 10am. Upon arrival, all of the patients to be seen that day have arrived and are sitting in the waiting area. The Registrars, SRMOS, and SHOs divide themselves amongst the 3 exam rooms. The medical students do the same. One-by-one, on a first-come-first-served basis, each patient is seen. The range of patients seen is vast and includes abnormal uterine bleeding, pediatric gynecology, pre- and postoperative visits, and a large number of invasive cervical cancers. This clinic differs from the typical GYN clinic in the US, the latter of which sees the majority of patients for preventative health and screening pap smears/breast exams. Here, patients present when they have a problem. Speculum exams are often limited here by the lack of good lighting. Patients requiring surgery are given instructions on how to schedule surgery but must pay an upfront cost, which frequently results in delayed care.

**Antenatal Clinic** - The structure of the antenatal clinic is similar to that of the GYN clinic. The teams divide rooms and see patients on a first-come-first-served basis. Usually, like the GYN clinic, there is one consultant present. The patients seen at the antenatal clinic are referred from clinics around Harare for more specialized care. Examples of their increased risk factors include hypertensive disorders of pregnancy, prior cesarean sections, multiple medical comorbidities, multiple gestation, fetal demise in past pregnancy, and preterm births. Each patient is presented and discussed amongst the team and a plan of care is decided upon and written in the patient’s medical record, which the patient takes with her. Frequently these patients are only seen one time in this clinic during their pregnancy. Each patient has a thorough exam pertaining to their presentation, and they are sent for ultrasound and lab work at another facility.

**Research** - There are many opportunities to conduct research at Parirenyatwa Hospital. However, patience and persistence is key in getting IRB approval. Our recommendation is to first discuss your proposal with the Department Chair. Make sure it is feasible to conduct your research including applying for IRB approval within the timeframe of your visit. Keep in mind that even if the proposal does not need ethical review (such as a chart review), it will still need to go through the process to get exemption from ethical review. All research proposals need to apply for ethical approval starting with the presentation to the Joint Research Ethics Committee (JREC). Professor Ndhlovu is a good resource for any questions that you may have about the process, but in general the steps are as follows:

1. Discuss with the Chair of the Department what projects they are interested in performing and in what capacity. Identify a project that is feasible and meaningful for you.
2. Go to the office of the Secretary of the Clinical Director of Parirenyatwa Hospital in the Administration Department. Request official forms for performing research.
3. Fill out this triplicate form and assemble 3 copies into 3 flat folders with all documents required by the JREC ([www.jrec.uz.ac.zw](http://www.jrec.uz.ac.zw)). Professor Ndhlovu can show you some examples. There should be dividers for each section: Application, Executive Summary, Full Proposal, and Consents. You should also include curriculum vitaeas for all investigators listed on the proposal.
4. Have the Chair or sponsoring consultant sign and STAMP the Parirenyatwa research proposal form, along with the matron of the ward on which you will be performing the research.
5. Submit all three folders to the Clinical Director’s office. Once approved, they will call you to take two of the folders to the JREC office, which is on the 5th floor (Deanery Floor).
SITE SPECIFIC PREPARATION FOR YOUR ELECTIVE

How to Obtain a Visa

A 30-day visa is issued upon entry into Zimbabwe. A valid passport, itinerary, exit ticket, and cash payment are required. Make sure you have exact change.
Get a tourist visa and do not mention you are coming as a student. The easiest way to extend your visa is to travel to Victoria Falls after week 3 in the hospital, cross over into Botswana for a safari, and get a new visa upon your return into Zimbabwe. Multiple entry visas are not available upon arrival.
If you wish to travel to different countries within Africa, you will have to apply through the Zimbabwe Embassy in Washington D.C.

Medical License and Health Insurance

Physician license:
Upon arrival at the university, you will be asked to fill out a form for a temporary student practitioner license that will allow you to work in the wards. You’ll need to bring 2 passport-sized photos to submit with your application. The cost is $150 cash and it is a covered expense for students. Resident licenses are more
expensive but are also covered by the WCHN Global Health Program. Make sure you check the current information on the Medical and Dental Practitioners’ Council of Zimbabwe (MDPCZ) website at www.mdpcz.co.zw. Mrs. Chuma Vunganayi (Student Coordinator) will have a support letter for you to attach to your application when you arrive. A UZCHS driver will take you to the MDPCZ offices, which are within walking distance of the Parirenyatwa Hospital.

**Healthcare Insurance:**
Before the trip you need to contact your health insurance provider to verify that your plan has international coverage that includes Zimbabwe. It is your responsibility to acquire proper medical coverage in case of disease and accidents.

If you need to see a doctor while in Zimbabwe or require emergency medical care, other than seeking help at Parirenyatwa Hospital where you will be posted, there are excellent private medical facilities in Harare which you can visit. A $40-60 consultation fee is required by most private facilities if your care is not covered by health insurance.

- **Trauma Centre Borrowdale** (1 Borrowdale Lane, 15min from Pari by taxi), +263-242-886-921 or +263-776133599 or +263-773174123 – ED is open 24hrs.

- **Avenues Clinic Casualty Department** (Cnr. Baines & Mazowe St) - The Avenues Clinic is a private hospital 10mins walking distance from Pari. Casualty (ED) is open 24hrs.

- **Corporate 24 Medical Centre** (6 Bath Rd, Belgravia – 15-20 min walking distance from Pari), +263 242 700 401 Ext 700410 – ED open 24hrs.

- **Private Ambulance Services** – MARS (Medical Air Rescue Service), +263-242-771-221 or +263-712-600002 – Accepts most international medical insurances, & EMRAS +263 242 250011 or +263 772 141 610.

- **Kensington Pharmacy** (Kensington Shopping Centre – 15min walking distance) & Shamrock Pharmacy (Avondale Shopping Centre – 15min walking distance) – Very well stocked pharmacies and the pharmacists are extremely helpful so feel free to ask them for help.

**Personal Health and Safety**

Your well-being and safety are very important to us! However, participation in an elective outside the U.S. increases your exposure not only to minor inconveniences, but also to serious threats to your personal health and safety. Please review the Code of Conduct regarding how to reduce risk when traveling abroad and the general elective guide for health and safety information. The information below relates specifically to Zimbabwe. As always, your travel health provider and the CDC are the best and most up to date resources for health information.
Prior to your elective:
- You will need to visit your health care provider to get post-exposure prophylaxis (PEP) in case of HIV exposure. This is an obligatory requirement and particularly important when working in Zimbabwe with its high HIV/AIDS rates.
- You should be fitted for an N95 mask as you will be exposed to TB in Zimbabwe. Bring these with you.

During your elective:
- Carry your HIV PEP medications at all times. If you are exposed, take the first dose immediately. Let your supervisor know that you have been exposed, and also let Professor Ndhlovu know so that you are referred for assessment as per the Zimbabwean PEP protocol. You will need to familiarize yourself with this protocol as per the latest Zimbabwe ART guidelines. See our latest standard treatment guidelines e.g. EDLIZ.
- Wear your N95 mask in any situation where you might be exposed to TB.
- Crossing the street can be very dangerous. Please note that Zimbabweans drive on the left. Always be on high alert for vehicles.

After your elective:
- Upon return to the US, schedule an appointment with your primary care provider or travel clinic for evaluation for any communicable diseases.

Previous students have reported living and travelling in Zimbabwe feels incredibly safe and the people of Zimbabwe are some of the most relaxed and friendly you will meet. Zimbabwe has much lower violent crime rates than many nearby countries, especially compared to neighboring South Africa. Many of the typical hazards encountered by travelers there are absent in Zimbabwe. Although you should always be alert for pickpockets, it is uncommon to be aggressively followed by hawkers or those asking for money. As is prudent advice for travel anywhere, don’t bring expensive jewelry and keep bling to a minimum.

General Precautions
- Stay up-to-date regarding local news and official travel advisory information from the US Embassy.
- Avoid walking alone at night especially in poorly lit areas.
- Do not carry large amounts of money or valuables with you that might attract unwanted attention.
- Do not leave valuables like laptops and cameras in common areas.
- Keep a small amount of spending money in an easily accessible place, with the rest of your cash and important documents somewhere safe and hidden.
- Keep the apartment locked with windows closed when you are not home.

Food and Water
- Wash and/or sanitize your hands often.
- Drink only bottled or boiled water.
- Avoid municipal tap water and ice cubes. Borehole water is ok.
- Avoid street food.
- Avoid fruits and vegetables that haven’t been washed, peeled, cooked, or boiled.
What to Bring With You

Clothing
- Professional clothes you would wear to the hospital in the U.S. – button-down shirts, slacks, dresses and skirts at knee length or below. No low cut blouses or shirts.
- Casual clothes – jeans, t-shirts, sneakers etc. – for your free time
- White coat
- Comfortable closed-toe shoes for the hospital
- Sneakers/Walking shoes

Items for the Hospital
- Hand sanitizer
- N95 masks
- Stethoscope
- HIV prophylaxis medications carried in your pocket at all times on the ward
- Optional medical equipment includes: reflex hammer, blood pressure cuff, pulse oximeter, surgical masks, alcohol prep pads, pen light, eye protection

Other Suggested Items
- Multi-purpose plug adaptor (voltage converter): 220 V.
- Insect repellant (insects will be scarce during winter)
- Clothespins
- Plenty of cash in small bills
- Towels

Goods are quite expensive in Zimbabwe, but you can find everything you need without difficulty at various shopping centers around town (see information in the Shopping section).

ACCOMODATION

Housing is provided in the medical student dormitories (“Med Res”) on the Parirenyatwa campus. The building consists of both dormitory-style bedrooms and apartment-style “flats”. You will find out your assignment when you arrive.
in Zimbabwe. You will likely be sharing a room or a flat with another international participant (not necessarily from the United States).

**Dormitory**

The dormitory is similar to an undergraduate dorm in the US. There is a sink in the room for brushing your teeth, and bedding is provided. In winter months (summer in US), it can be cool at night and you may want to bring warmer clothes to sleep in. The bathrooms and showers are shared at the end of the hall. The water pressure for the showers is weak and hot water may be scarce. In the morning, all the hot water is used by 7:15 am. Generally, there will be hot water in the afternoon and at night. You may want to keep a washcloth and bar of soap in your room in order to bathe from the sink when needed. The dorms are powered by the hospital generators and therefore power is reliable. There are plenty of 220V outlets – Remember to bring an adapter! The main door to each bedroom has a lock. Although there is usually someone manning the dormitory entrance, it is highly recommended that you lock your room before leaving for the day.

**Flat**

The flat contains 2 bedrooms on the first floor. Each bedroom has a closet with shelves, a dresser, desk, and two twin beds. Pillows, sheets, and a blanket are all provided upon check in. The flat has a large common room and bathroom with a tub/shower. The water pressure makes showering difficult at times so a bath is generally easier. The kitchen is fully equipped with a refrigerator, a full oven, toaster, kettle, microwave, stove, and cooking utensils. Trash is collected on Friday morning. Place your garbage bag next to the flat door before you leave and it will be collected. There is no recycling. Some glass bottles are saved for deposits and are the most ecologic option. There are also trashcans/dumpsters outside the dormitories on the street.

**Meals**

During weekdays at Parirenyatwa Hospital from 1230 to 1430, students can eat lunch at the staff cafeteria (“canteen”), located on the second floor of the new medical education building (New Health Sciences building). Sadza plates cost $1 and rice plates cost $2, with your choice of beef stew, a piece of grilled chicken, coleslaw, vegetables, and greens. The public cafeteria out behind the hospital offers hamburgers and a variety of other options, but operates with “street-food” levels of sanitation. An alternative to the canteen, is to eat lunch at one of the cafes/restaurants at Avondale Shopping Center just a 15 minute walk from the hospital (see information below) or to make your own food in the flat.

**Laundry**

All laundry in the dorms is done by hand. The floor has a laundry room, which has a large sink in which to wash your clothes. There are no washing machines. You can also use the sink in your room/flat. There are clotheslines on the roof to hang your clothes out to dry. Laundry is typically crowded near the end of the week. On Sunday the clothesline is completely full, therefore it is best to do laundry during the week. Detergent is readily available in grocery stores. We suggest bringing clothespins. There are no laundry services available on the hospital campus or laundromats in town. There are dry cleaners, however, with one located at the Avondale Shopping Center nearby. It is possible to ask a resident if they know someone who will do laundry. However, the price will be high – up to $10 per load, plus you will be expected to provide your own detergent. It is far easier to do laundry yourself.

**Exercise**

The hospital and dorms are on the outskirts of the central business district of the city, but still in a fairly populated area with busy roads and lots of traffic. As such, jogging in this area is not recommended.
The student apartment is spacious, so consider bringing a yoga mat, jump rope, resistance trainer, or workout video, for at-home workouts. 

There are excellent private gyms in Harare. The gyms are well equipped and have great fitness classes too. They are also a good place for meeting local young people. You can pay for a monthly membership or for individual classes/sessions.

- **ProFitness Gym** (Sam Levy’s Village, Borrowdale, 15min ($10) by Taxi) – Best gym in town. Great location. Has everything! See [www.profitness.co.zw](http://www.profitness.co.zw) for details.
- **Olympus Health & Fitness Gym** (Sam Levy’s Village, Borrowdale, 15min by Taxi) – See facebook page for details.
- **Body Active Gym** (at Borrowdale Race Course, 10min by Taxi) – see facebook page for details.
- **Vainona Running Club** – Locals get together to run daily (3km, 5km, 7.5km, & 10km). Information can be obtained from Eve’s Fitness Studio website. Women should avoid short shorts when running outside, but otherwise standard exercise attire is worn by those in the club.
- **Innovate** (Emerald Hill) – [www.innovate.co.zw](http://www.innovate.co.zw).
- **Triton Gym** (Chisipite)

**Communication**

**Telephone**

Econet is the best local cellular provider. There is an Econet shop located in the mall part of Avondale Shopping Center, as well as one at Sam Levy’s Village. To purchase a sim card, bring your passport and phone. The sim card costs 50 cents. Once your sim card is activated, you can then purchase data, Whatsapp bundles, and Facebook bundles. All of these options require an unlocked phone.

**Wi-fi/Internet**

A good Wi-Fi connection can be hard to find unless you are at a nice hotel, restaurant, or café. If you are a customer at such a location, just ask your server for the Wi-Fi password.

There are internet cafés in the city, but it might be wise to save all your online tasks for focused sessions in the two internet-ready hallways at Parirenyatwa. You will find connections outside of the library on the ground floor, and along one of the main corridors of the 1st floor. The best times to use Wi-Fi seem to be very early in the morning, or evenings after 5pm when most students and faculty have left campus. Currently, there is no connection in the medical student residence. Download speeds are glacial, so stock up on movies and music before you leave home.

- **CHS** – CHS is the Wi-Fi network for the library. It can be accessed from any laptop, phone, or tablet from within or just outside of the library. Ask the receptionist behind the front desk for the password. The network tends to
be very slow during operating hours, but is a lot better during nights and weekends. The library is closed on Sundays, but there is a bench outside that you can sit on and access the Wi-Fi.

- **UZ MedSchool** – This Wi-Fi is setup as part of the Nectar program. At times, it is slower than CHS but is accessible throughout the Department of Medicine classrooms. This network will require a login and password, which you can setup by going to the C10 ward within the hospital.

- **Web Proxy** – In order to access all webpages you will need to setup a web proxy (http) for these Wi-Fi Internet connections. The proxy information is IP: 10.20.0.1, port 3128. No username or password is required.

- **Desktop Computers** – If the Wi-Fi connections are down, it is possible to use the computers in the library. Go through the revolving door and proceed straight through the double doors in front of you. To the left is a hallway and the third door on the left is an area with about 14 desktop computers. The internet connection on these computers seems to be faster during peak times.

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**LIVING IN HARARE**

The Standing Committee of Professional Exchange (SCOPE) under the Zimbabwe Medical Students Association (ZIMSA) assists international students with integration into ZUCHS and its surroundings. More information is available at the Electives Office of ZUCHS.

**Transportation**

Transport to and from the airport will be arranged by the program. It is relatively easy to get around Zimbabwe. In Harare, taxis are ubiquitous. Make sure to settle on a price before getting in the car!!! Use your judgment when considering taking a ride from a driver. If you get a bad feeling, just move on. Short rides (a few blocks) will cost $3-$5. A ride from Parirenyatwa to most shopping centers/restaurants/cafes around town should average about $10. Your driver may have a business card that he/she will want you to have. Past participants have found it helpful to keep the card of a driver they liked (sometimes because the car has seatbelts), so that they can have multiple rides from this driver throughout their stay. This can add convenience if you need to efficiently travel to and from the hospital sites at certain set times. You may be offered transport by private cars plying the city routes. Be aware that these drivers do not have a business license for this.

Public transport around town is in “minibuses” or “kombis.” It is crowded and usually without seatbelts. Do not travel by motorcycle. Please note that there are townships around Harare that can be dangerous if you are not accompanied locals, as is the Harare bus terminal after dark.

Getting out of the city takes a bit of planning. Buses of all shapes, levels of cleanliness, and levels of crowdedness are available. To travel between cities or towns, there are comfortable “coaches” e.g. Pathfinder, Citylink, Bravo, and Eagleliner serving Zimbabwe. Tickets can be obtained from Roadport Harare.

**Finances**

**Currency:** Inconceivable inflation rates finally rendered the Zimbabwean dollar worthless in 2009. After the collapse, Zimbabwean officials sanctioned the use of a variety of foreign currencies, and the US dollar is the major accepted form. Branches of major banks are located all around Harare, but it is difficult to withdraw cash as there is a shortage of US bills within the country. The country recently released “bond notes and coins” that can be used in place of the US currency with a 1:1 exchange rate, but only within Zimbabwe. Of note, US coins are not recognized everywhere, but South African rands in coin form will be recognized.
Prices at open markets are not set. Do not take the first price given—Have fun bartering! Make sure you have small bills to pay at markets, as vendors may have trouble finding change.

**ATMs:** There is a decent distribution of ATMs in all cities. Stanbic, Barclays, and Standard ATMs accept Visa and MasterCard cards from American banks. However, as mentioned above, due to the shortage of US bills in the country, you cannot count on finding cash in ATMs. It is better to bring it with you from the US.

**Credit Cards:** Most grocery stores, cafes and restaurants in Harare accept debit and credit cards (Visa or MasterCard). Point of Sale (POS) machines are quite widespread for “swiping.” Be prepared for credit card terminals to be “out of service” due to network errors, in which case you will need to pay cash. Also note that some of the credit card machines in Zimbabwe can only take a card that has a pin number so try to add this to your card before coming to Zimbabwe.

**Mobile Banking:** Mobile banking using cell phones is very common due to the cash shortage. This mobile banking system can be used to pay for goods or to send or receive money both locally and from abroad – e.g. Ecocash which you can setup at any Econet shop.

**Western Union or Moneygram:** You can receive money from the US via Western Union or Moneygram. This is a guaranteed, fast, and safe way to get USD cash if you run out or need emergency funds from home.

### Groceries

You may find groceries in Zimbabwe cost more than you expect—often as much or more than they would in the US, especially for imported foods. If you do not bring your own bag, you will have to pay for a plastic bag (10c) at the grocery store.

- **Pick & Pay Avondale** – part of the Riverside Walk Mall (behind the Avondale Food Court) – 15min walk from dorms, 5 minutes by Taxi.
- **Pick & Pay Borrowdale** – 15min by Taxi
- **Spar Borrowdale** – 15min by Taxi
- **Food Lover’s Market (Avondale & Borrowdale)** – The Borrowdale shop has a better selection of fresh fruit & vegetables. Additionally, the Borrowdale location has a café that serves a great, cheap breakfast all day!
- **Bon Marche** (Avondale, Belgravia & Borrowdale)

### Restaurants and Cafes

There are plenty of restaurants around Harare. Listed below are just a few. Don’t be afraid to try others not on this list as there are numerous great cafes and garden coffee shops tucked away in different neighborhoods around the city.

Most of the cafes and restaurants in Harare have a facebook page that you can check out for more details.
AVONDALE FOOD COURT (fast food)
- Nandoes – Portuguese-style wood-grilled chicken, chicken burgers, fries etc.
- Creamy Inn – Soft serve ice-cream

AVONDALE SHOPPING CENTRE
- Café Nush – Breakfast, lunch, & Dinner
- Mugg & Bean – Breakfast, lunch, & Dinner
- Newscafe – Café/Bar
- Pariah State Avondale – Restaurant/Bar (in the Riverside Walk Mall)

BELGRAVIA SHOPPING CENTER (fast food)
- Chicken Inn – Fried Chicken, fries
- Pizza Inn
- Creamy Inn
- Baker’s Inn
- KFC
- Gava’s restaurant (traditional food)

BORROWDALE
- Pomona Food Court (fast food)
  - Nandoes
  - Pizza Inn
  - Chicken Inn
  - Creamy Inn
  - Steers – Burgers
- Pariah State Borrowdale – Bar & Grill (serves breakfast, lunch, and dinner)

SAM LEVY’S VILLAGE BORROWDALE
- Mugg & Bean
- Newscafe
• Ocean Basket
• Simply Asia
• St. Elmo’s – Pizza and calzones
• The Village Greek
• Delhi Palace – Indian Food
• Antonio’s Mediterranean Deli
• Pistachio – Café & Restaurant
• The Deli – Café
• Food Lover’s Market – Breakfast, Lunch, & Dinner
• Freshly Ground Coffee Bar
• Café Nush Borrowdale (next to Pick & Pay grocery store)

OTHER NEARBY RESTAURANTS & CAFES (average 20min/$10 by Taxi)
• The Bottom Drawer (Maasdrop Ave, Belgravia) – Breakfast & Lunch
  - On Wednesday’s and Saturdays the Maasdorp Avenue Market is held adjacent to The Bottom Drawer – Good place for fresh fruit & veg, local art, etc.
• Café Veldemeer’s (Arundel Village Shopping Centre)
• Queen of Hearts (1 Hurworth Rd) – Café & Bakery
• Chang Thai (83 Churchill Ave, Gun Hill) – Thai Food
• Alo Alo (10 Forest Rd, Mount Pleasant)
• Gava’s (Belgravia Sports Club) – Local Zimbabwean Food
• Spice Lounge (23 Lezard Ave, Milton Park) – Indian Food
• Sopranos (6 Argyle Rd, Avondale)
• The Bistro (Cnr Kingsmead Rd & Borrowdale Rd)
• Classic Desserts (Cnr Churchill & Second St. Extension) – Café & Bakery
• Vali’s Bakery & Café (Kensington Shopping Center) – Greek-owned
• Casa Mia Ristorante Pizzeria – (Cnr Aberdeen Rd & King George Ave, Avondale)
• Fishmonger Restaurant (50 East Rd, Belgravia)
• Kwamambo (40 Cork Rd)
• Shangri-La (Enterprise Rd) – Sushi, Chinese, etc.
• The Great Wall (94 East Road, Avondale) – Chinese
• St. Elmos (86 East Rd, Avondale & Sam Levy’s Village) – Pizza
• Sorella’s Pizzeria and Café (1 Fisher Ave, Rolf Valley)
• The Book Café (Samora Machel Ave)

BAR/RESTAURANTS (Sometimes have live local bands)
• Parlah State Avondale & Borrowdale
• Newscafe
• Queen of Hearts
• The Jam Tree
• The Tin Roof

CLUBS
• Pablo’z Club & VIP (Sam Levy’s Village) – See facebook page for events and details
UPSCALE DINING
- Amanzi (A2 Road)
- Emmanuel’s (Bronte Hotel)
- Victoria 22

Shopping

- Sam Levy’s Village (Borrowdale)
  - This is the premier shopping center in Harare. Clothing, art etc. is very expensive here, but it is a great place to walk around and to select from a wide variety of restaurants, café’s, and bars, or to watch a movie.

- Avondale Flea Market (Behind the Avondale Shopping Center)
  - Anything & everything from clothes to gadgets. There is a good selection of local arts, crafts, & souvenirs towards the back of the market. Feel free to barter with vendors for a lower price!

- Borrowdale Flea Market (Behind Sam Levy’s Village) – ONLY ON SUNDAYS!
  - Very multi-cultural setting. Great place to take a Sunday stroll.
- Maasdorp Avenue Market (11 Maasdorp Avenue) – ONLY ON WED & SAT. See their facebook page for details.
• Newlands Craft Market (Newlands Shopping Center)
  - The best place to buy souvenirs in Harare!!!! Prices are much cheaper than touristy locations such as Victoria Falls. Feel free to barter for a lower price!

Movies

Ster-Kinekor Zimbabwe (Sam Levy’s Village, Borrowdale, 15min by Taxi)
• Weekly movie schedules can be found on their facebook page “Ster-Kinekor Zimbabwe”. The schedule you will need is “SK Sam Levy.” Ticket prices range from $8 to $12. Popcorn, snacks, and drinks are available for purchase.
Sightseeing

IN AND NEAR HARARE
Most of the game/safari parks require a vehicle to get there, as well as to go around the park. It is not recommended to take a taxi to these locations. It is best to talk to students/colleagues/friends with cars and arrange to make the trip together.

- **Domboshawa** (40 minutes by car) – Hiking. $10 entrance fee. Taking a taxi to Domboshawa is not recommended.

- **Ngoma Kurira** (1h 30m by car) – Hiking. $10 entrance fee. “Domboshava’s big brother” – Longer hike (3hrs). Better to start early.

- **Mukuvisi Woodlands** (20 mins by Taxi) – Walking Safari or Horse Safari ($15). Limited selection of wildlife, but you can get up close to the giraffes and zebras on horseback. Call to make a booking. See website/facebook page for more details.

- **National Botanical Gardens** (10min by taxi, possible to walk from Parirenyatwa) – Not as well maintained as in previous years, but still good for a stroll outside.
• **The National Gallery of Zimbabwe** – Unless there is a current exhibit, there is not much in the way of resident art pieces.

• **REPS Theatre – Harare, Zimbabwe** (Belgravia Shopping Center, 10min by Taxi) – Local amateur company. See their facebook page for details.

• **Imire Rhino & Wildlife Conservatory** (2h by car) – Safari + Lunch, 9am-3:30pm ($60) – HIGHLY RECOMMENDED place to see animals near Harare. One of the only places to see rhinos in Zimbabwe! Can sometimes feed rescued elephants. Call to make a booking! See their website/facebook page for more details. Do not use a Taxi to go to Imire!

![Image of people and elephant]

• **Bally Vaughn** (1h by car) – Bird & Game Sanctuary. Day Safari 9:30am-4:30pm, includes lunch ($75). Activities include elephant rides and canoeing. Call to make a booking! See their website/facebook page for more details.

• **Bushman Rock** (1h by car) – Different day packages available with choice of activities (Tour of the Vineyard, Wine Tasting, Game Drives, Horse safari, Walking safari, Canoeing, and Cave Paintings) + lunch. Requires booking! See their facebook page “Bushman Rock Safaris” for more details.

• **Chinhoyi Caves** (1h 45m by car) – The cave system is composed of limestone and dolomite. The main cave contains a pool of cobalt blue water, which is popularly called Sleeping Pool or Chirorodziva (“Pool of the Fallen”). No booking is required.
• **Lake Chivero or Mazowe Dam or Mazvikadei Dam or Darwendale Dam** – Picnic sites, fishing, some small animals. Do not use a taxi to go to these sites!

• **Wild Is Life (20 mins by car)** – Animal Sanctuary. 3pm-6:30pm, includes lunch and drinks ($95). Call to make a booking! See their website/facebook page for more details. Wild Is Life can probably be accessed by Taxi if you negotiate with the driver.

• **Haka Game Park (25min by car)** – Great location in Harare for a picnic. Requires a vehicle to travel within the park to picnic sites.

• **Mbizi Game Park (40min by car)** – Good for guided nature walks around the park. Includes some rock paintings. Very small selection of wildlife. Call to book. See their website/facebook page for more details.

• **Umfurudzi Game Park (2h 30min by car)** – Good, cheap camping. Small selection of wildlife, including elephants.

**OUTSIDE HARARE**

• **Victoria Falls (One of the 7 Natural Wonders of the World)**

It is best to combine a trip to Victoria Falls with a safari at Chobe National Park in Botswana. Chobe has 4 out of 5 of the Big Five (no rhino). This can be arranged through a tour company such as Shearwater, Wild Horizons, Batoka etc.

The falls are called *Mosi-oa-Tunya* in Shona, which translates to “The Smoke that Thunders.” They are located on the Zambezi River in the northwest corner of Zimbabwe bordering with both Botswana and Zambia. The falls are spectacular, with a width of 1708 meters and a height of 108 meters (twice the height of Niagara Falls).

There are several options for travel:

- PathfinderLX bus line (among others) travels three times per week to Victoria Falls. The cost is $60 one way, and the trip will take 12-14 hours.

- Air Zimbabwe (book online or go to the Air Zimbabwe office by taxi to buy tickets). $150 one way + $30 Airport tax. Tax is paid in cash at a coupon counter at the domestic airport. The receipt is needed to pass through security.

Accommodation in Victoria Falls ranges from 5 star hotels (Elephant Hills, Victoria Falls Hotel, and The Kingdom), river-side hotels (A Zambezi), lodges such as Wildtrekkers, hostels such as Victoria Falls Backpackers Hostel, to camping sites in National Parks. All of these are good options depending on your taste and budget. Many places include a shuttle service to and from the airport – this will make your stay a lot easier! You can choose to eat at your hotel, visit local restaurants (Dinner at *The Boma* is highly recommended – requires booking), or prepare your own food if you are staying at a lodge/hostel/camping site.
Victoria Falls has every activity imaginable. When first arriving at the hotel/lodge/hostel, sit down and book your activities for the weekend. This is done through local tour companies. Your hotel/hostel will have all the necessary information available at reception. The main tour companies will also have an office in town that you can visit during working hours (generally 8am-5pm).

Visa renewal can be done at the border with Zambia or at the border with Botswana. Below are itinerary options that have worked for students in the past:

- **Option 1**: Friday – Arrive, see Victoria Falls and Visa renewal at Zambia border; Saturday – Morning Adventure and Evening Adventure; Sunday – Morning Adventure and fly out.
- **Option 2**: Friday – Arrive, see Victoria Falls; Saturday – Chobe National Park, Botswana for Full day Game Drive and Boat Cruise; Sunday – Morning Adventure and fly out.

A taxi from the airport is about $30, no negotiating. Around town, it is easy to find a taxi to take you wherever you need to go and will average about $10. After sunset, you must take a taxi because you are not permitted to walk around the bush where you might encounter wild life such as elephants and buffaloes.

- **Great Zimbabwe Ruins (Masvingo)** – This is a UNESCO World Heritage Site! Built between the 9th and 15th centuries, the Great Zimbabwe ruins are the largest collection of ruins in Africa south of the Sahara. There is a $15 entrance fee. The best accommodation in the area is nearby at “Lodge at the Ancient City.” See their website for details.

- **Eastern Highlands** – The Eastern Highlands include Nyanga, Chimanimani & Vumba. Nyanga is the most visited by tourists for its mountains, great scenery, camping, trout fishing, and hiking trails (e.g. Susurumba and Mount Nyangani). The Nyanga National Park has several waterfalls (e.g. Nyangombe, Mtarazi, Pungwe) and dams, and
is home to “World’s View,” the highest point in Zimbabwe. Horse riding is available at Troutbeck Resort. Activities in the region can be booked via “Far and Wide Zimbabwe” or you can explore the area on your own if you have a vehicle. The cheapest accommodation is at the National Park Lodges but the dust roads to these locations are difficult to navigate without a 4wd vehicle. Private lodges (e.g. Punch Rock) and hotels (Troutbeck Resort) are very good but more expensive.

- **Hwange National Park** – similar to Chobe but can’t access without your own car.
- **Mana Pools** – Mana Pools National Park is a UNESCO World Heritage Site based on its pure wilderness and beauty! It is home to a wide range of mammals, over 350 bird species, and abundant aquatic wildlife. Mana Pools is a great location for canoeing and camping. It is best to book an all-inclusive package via a tour company as this area cannot be accessed without 4wd vehicles. Mana pools luxury camps can be pricy! Lodges & campsites run by the National Parks services are cheaper, but not easily accessible.
- **Kariba Dam** – Fishing, camping, houseboats.

**Visa Renewal**

- **Zimbabwe** – A single entry visa will cost $30 for American citizens and will last for 30 days. A multiple entry visa is $55, but is not a good idea for most students as you will need to renew your visa anyway after 30 days.
- **Zambia** – The entry fee into Zambia is $20, but it may be easier to get the Uni Visa discussed below.
- **Botswana** – Entry into Botswana is free.
- **Uni Visa** – A Uni Visa is available at the Victoria Falls border between Zambia and Zimbabwe. This Visa is good for multiple entries between the two countries. It costs $50.

**PREPARATIONS FOR VISITING PROFESSORS IN ZIMBABWE**

**Applying for Short Term Philanthropic License**
Required documents (A complete list is available on the form that should be completed by visiting clinicians):

- “Certificate of Good Standing”
- Curriculum Vitae
- Signed and dated “Policy on the Practice of Short Term Philanthropic”
- Schedule of activities compiled by ZUCHS coordinator
- Confirmation of permission from Clinical Director
- 2 passport photos – certified by a notary (may use Brandi Dolan in Division of Infectious Disease)
- Application fee of $150
Majid Sadigh: Project Manager
Mitra Sadigh: Writer and Editor
Anton Gryaznov: Technical Designer

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