

## **Santa Clotilde, Peru**

### **Resident & Student Orientation Package**

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*Updates and edits by students, residents, and physicians who volunteer and learn and St. Clotilde are encouraged.*

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## 0. INTRODUCTION

Bienvenido a Santa Clotilde Centro de Salud! You are about to embark on a tremendous adventure. Santa Clotilde is a fascinating place: you will meet amazing people, be exposed to new cultures and customs, learn more about tropical medicine than you could ever imagine, and be inspired by a remarkable sense of community spirit. Along the way you will experience some physical hardships, face the challenges of geographic isolation and limited resources, and struggle to adapt to a new language and a new culture. This is the Santa Clotilde experience!

This orientation package is divided into four sections.

The first section describes the site in some detail – location, history, and day to day activities. No written description can adequately capture an experience as diverse and dynamic as an overseas elective, but hopefully this will provide a starting point as you try to imagine what to expect.

The second section deals with advance preparation. In other words: you should read this, and begin taking action on the items described, well before you depart. Some of these topics – such as the issue of language – might take several months of advance preparation, but will have an immeasurable impact on the quality of your overall experience. You can't start too early!

Section three includes some suggestions for making the most of your time in Santa Clotilde. Read it once before you depart, and then review it again when you are in the field. Only after you have arrived and fully immersed yourself in Santa Clotilde will some of these recommendations begin to make sense.

The final section is the easiest to forget, but arguably the most important: things to do in follow-up upon your return. The people of Santa Clotilde have afforded you a tremendous privilege and opportunity: in more ways than you may realize at first, you are now a part of the Santa Clotilde community. Should you choose to accept that challenge and responsibility, you have an important role to play in the future of Santa Clotilde as a sustainable health care development project.

## 1. SITE DESCRIPTION

### *1a. Location*

Santa Clotilde Centro de Salud is located in north-eastern Peru, on the Rio Napo (Figure 1). It is accessible only by boat or, less commonly, by float plane.

The nearest major city is Iquitos, which itself is accessible only by boat or by plane. Two domestic airlines offer several flights a day from Lima to Iquitos, at a flying time of approximately 90 minutes and a cost of \$130 USD round trip. Iquitos hosts the regional referral hospital (Loreto Regional Hospital) and is the seat of the regional government (Loreto Region). It offers all major goods and services as well as modern hotels and restaurants targeted to the numerous tourists who use Iquitos as a starting point for guided trips into the Amazon.

Routine travel from Iquitos to Santa Clotilde begins with a high-speed public boat (“rapido”) down the Rio Amazonas to the town of Mazan (duration 1 hours, 13 Soles + baggage fees ranging from 15-40 soles, several boats/day). Mazan represents an isthmus where the Rio Napo and the Rio Amazonas come into close approximation (Figure 1). Crossing the isthmus by motorcycle-taxi (~5 soles) to the Rio Napo side of Mazan takes approximately 20 minutes. From there it is a 4-6 hour trip on a second rapido to Santa Clotilde, the duration varying according to strength of current, number of stops, and whether one is traveling upstream (towards Santa Clotilde) or downstream. There is one public rapido from Mazan to Santa Clotilde everyday, timed to depart shortly after the arrival of the early morning rapidos from Iquitos (cost: 80 Soles).

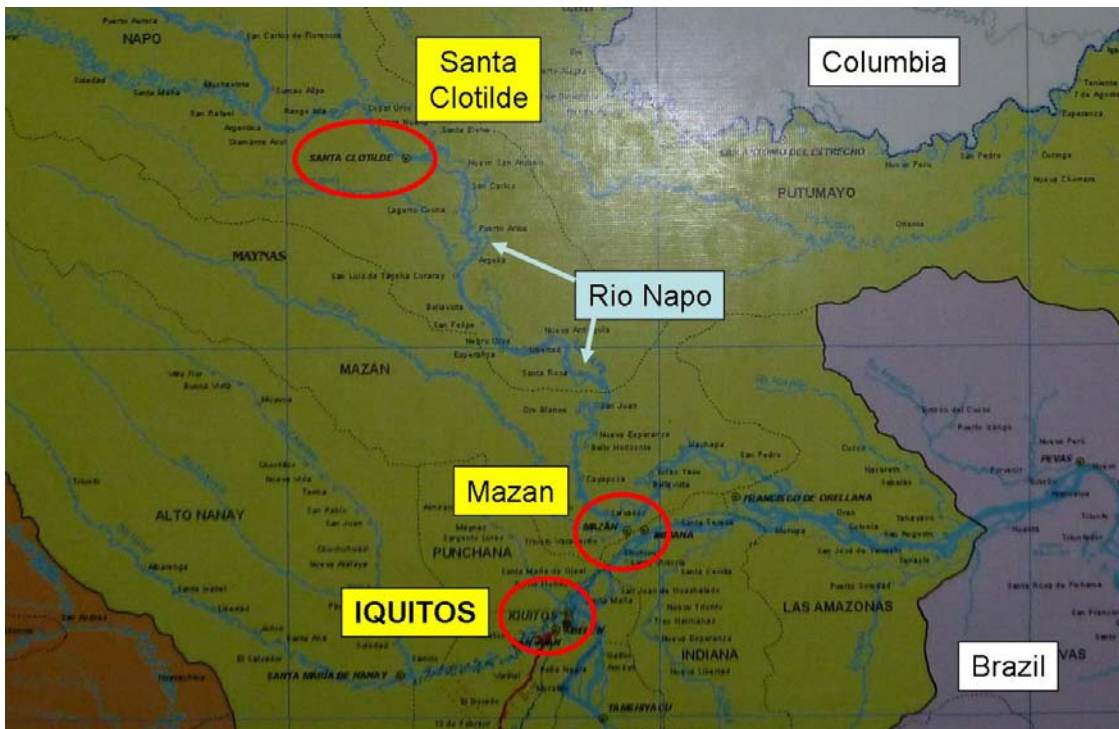


Figure 1: Map of Loreto Region, northeastern Peru.

Public rapidos are generally reliable, but there are days when the rapido does not travel due to malfunction or an insufficient number of passengers. Some days the rapido fills

up quickly and latecomers are turned away. There is a formal system to make reservations, the clinic will have your name on the list in preparation for your arrival.

Santa Clotilde owns two high-speed boats which can be used in the event of emergency (ie. patient transfer) or when the number of health-center-related travelers leaving from Santa Clotilde makes the investment of time and gasoline worthwhile. Typically the hospital boat will go as far as Mazan, and then patients and staff transfer to the public rapido for the onward journey to Iquitos. It is possible however for the hospital boat to drive all the way to Iquitos directly, as the two rivers do eventually come together approximately 20-30 kilometers beyond Mazan. This adds several hours to the trip and requires much more gas, and is done only in exceptional circumstances.

Santa Clotilde itself is the referral center for what is known as the “Micro Red Napo”. The Micro Red Napo is a chain of rural health outposts linked by the Napo River. Heading upriver, the Micro Red Napo territory extends as far as the border with Ecuador, downriver as far as Mazan, and includes a major tributary of the Napo, the *Tacsha Curaray*, as far as the village of Buena Vista. Some of these outposts are staffed by a full-time nurse who lives on site. Most outposts are vacant. Currently a house is being built upriver in Angoterros (about 8h upriver), with plans to staff physicians there as well. There is a communication tower in each of the outposts allowing for direct telecommunication to Santa Clotilde. Santa Clotilde serves as the primary center for supplies, patient referrals, and logistical support.



**Figure 2:** patient transfer to Iquitos – awaiting the next rapido in Mazan.

## *1b. History*

Padre Jack came to Santa Clotilde in the mid 1980's. He is a Catholic priest of the Norbertine order, and completed medical school at Loyola University in Chicago. Padre Maurice (Moe) joined Jack shortly thereafter. He is a Catholic priest of the Order of the Missionary Oblates of Mary Immaculate, and completed medical school in Ottawa. Over the course of 20 years Jack and Moe worked together to establish and develop the Santa Clotilde "Centro de Salud". In 2007 Moe moved to Lima, although he remains intimately involved in overseeing the logistical operation of Santa Clotilde from a distance.

Although Santa Clotilde functions as a full-service hospital, it is officially recognized by the regional ministry of health (DIRESA) as a "centro de salud". This has significant implications for ministry funding. A centro de salud is not expected to provide inpatient care, nor surgical, dental, or complex laboratory services. Accordingly it is staffed and funded at a level that falls well short of the services actually provided. Historically this gap in funding is made up by direct donations from the Oblates and the Norbertines, as well as various private donations.

Santa Clotilde operates as part of the Ministry of Health "Micro Red Napo" through a formal contract between the Ministry of Health Regional Director in Iquitos, and the Catholic bishop. The land is owned by the church, and decisions regarding the local management of the hospital (ie. choice of medical director, chief administrator) fall under the jurisdiction of the bishop. The centro de salud reports regularly to the Ministry of Health as per standard regional protocols, and it assists regional initiatives – such as vaccination campaigns – in direct cooperation with the Ministry. Recently a civil association (a local form of an NGO, that is NOT an NGO) was established to formalize a secular relationship between Santa Clotilde, the Ministry of Health, and external partners including Cayetano Heredia Medical School in Lima as well as UBC. You may hear this civil association referred to as PANGO. Currently, everyday control of Santa Clotilde is slowly being handed over from the church to PANGO.

Some of the staff have contracts and receive their salary from the Ministry of Health, and others are paid by PANGO with this funding provided by the Oblates and Norbertines. The hope is that PANGO will eventually start to generate more funding as the religious funding is not indefinite. Santa Clotilde also accepts Ministry appointed nursing, midwifery and laboratory technician students on a rotating basis, as an official Ministry of Health teaching site. They also recruit Ministry appointed doctors and nurses from the Servicio Rural y Urbano Marginal ("SERUM") – a national program that sends interns and nurses to rural or impoverished communities for up to one year of mandatory service.

In 2006 the Oblates received a one time donation of \$100 000 from a couple who currently reside in Victoria, BC, explicitly for Santa Clotilde. That money was used to



build the impressive inpatient department that exists today. The telecommunications system in Santa Clotilde – and all throughout the Micro Red Napo – was built through funding from the now defunct PAMAFRO.

### *1c. Services Offered*

Santa Clotilde has approximately 20 inpatient beds, divided between one large ward and four private rooms used for isolation. It is staffed 24/7 by at least two nurses and one doctor on call. Meals are provided as part of the care.

Outpatient consults are offered everyday except Sundays, from 0800 – 1400. Emergencies are seen anytime, 24/7, by the doctor on call.

The maternity department provides routine prenatal and postnatal care, a nutritional supplement for pregnant and nursing mothers (as part of a national program), and family planning services. Deliveries and c-sections are performed on site, although most women choose to deliver vaginally in their homes and only present if complications arise.

The new operating room and delivery room are now open and functioning. The building was funded by and oil company and their fundacion “Fundacion Aurora” the PR arm of the oil company. The operating room is used for c-sections, “simple” emergency surgeries (appendectomies, gallbladders, hernias), and life-saving elective procedures (amputations, wound debridement etc.).





There is a nurse run drop-in centre for well child visits and routine vaccination.

There is a fully equipped dental room which is often – but not always – staffed by a dentist (as part of the SERUM program).

The laboratory can do manual blood counts, hematocrits, platelets, thick and thin films, creatinine, stool exams, urine microscopy, pregnancy tests, ALT, AST, ESR, HIV (rapid tests only), VDRL, sputums for AFB, and agglutination test for typhoid / paratyphoid. They cannot do electrolytes, cultures, screening for Hep B or C, or HIV confirmatory testing. If needs dictate they collect blood locally and send samples to Iquitos for additional special tests, such as serology for dengue or leptospirosis. HIV confirmatory testing is done in Iquitos.

The pharmacy has, in general, a very impressive selection of medications. However this variety is in large part driven by individual donation, and the type and quantity available is wildly inconsistent. Some of the medications in the pharmacy are beyond their official expiry date.

As the local referral center for the “Micro Red Napo” region, the hospital regularly sends medical teams on site visits to the surrounding outposts up and down the river. These trips are completed by boat, and may last anywhere from 3 days to 3 weeks. They are usually coordinated with Ministry run vaccination campaigns.

The cost for individual treatment is set by the Ministry of Health. All Peruvians are eligible for coverage through the free national insurance program, “SIS”. SIS then reimburses the hospital at predetermined (and arguably inadequate) rates. A physician



consult, for example, pays 6 Soles (US \$2.30). Lab tests and medications are not covered by SIS, and for these services payment is collected at the hospital pharmacy. Due to this repayment system, it is important to learn how and ensure that you properly document the work you do, so the hospital is reimbursed (they'll explain this to you).

Patients are never denied treatment, irrespective of SIS coverage or ability to pay. However, the mechanism by which special exceptions are made appears both informal and elusive. I did not attempt to dig very deep, but on superficial questioning it was not clear to me who makes these decisions or how special non-monetary arrangements (ie. gifts of food for the hospital kitchen) are agreed upon. Nevertheless, I was not aware of any patient seen in consultation who was refused a lab test or treatment because of inability to pay. Nor was I ever aware of a patient seeming distressed or being harassed about the cost of treatment provided.

### *1d. Daily Routine*

Each day begins at 08:00 with a general staff meeting at the hospital nursing station. This is the time for general announcements, introductions, staff discussion, and clinical updates on referrals sent to Iquitos or Lima. The meeting lasts approximately 30 minutes.

After the general meeting the medical staff embark on formal inpatient rounds. It is a very large group – sometimes numbering as many as 20 doctors, nurses, students and lab technicians – and every patient is visited. At the bedside the physician on-call the night before presents the patient, and the overnight nurse reports vital signs and provides a brief clinical update. Management is agreed upon through group discussion. Often rounds are interrupted for formal bedside teaching. Depending on the number of patients and the amount of teaching, rounds can last 1 to 3 hours.



After rounds the outpatient consultations begin. Patients are registered and triaged by a dedicated team of nurse-assistants. When numbers permit, one doctor or nurse will be assigned exclusively to maternity care and family planning. The physician on call the night before will often stay a little longer on the ward to finish the day's charting and tend to any inpatient procedures. One nurse is assigned specifically to the "topico" to provide scheduled dressing changes for inpatients and assist with outpatient procedures. The dentist and the immunization program operate independently. Emergencies, of course, take precedence over routine activity whenever they present.

The nursing staff changes at 2pm. Often the on-call physician will join the nurses at shift change for a quick review of the inpatients. By 3pm, usually all the outpatients have been seen and there is a collective pause for lunch and a mid-afternoon break.

Between 4 and 6 pm, break out the volleyball or soccer ball (or take a siesta!).

In the absence of a planned event (ie. surgery, or a medical procedure that couldn't be completed earlier in the day) things tend to be quiet in the afternoons and evenings. The on-call physician remains at the hospital to see emergencies. As most of the clinical staff live in or very near to the hospital, extra help is never far away. At 6pm the lab reopens for as long as needed (usually 1-2 hours) for new consultations or follow-up inpatient tests. At 8pm there is another nursing change, and inpatient rounds are repeated with the on-call physician.

Sundays are quite different. Morning rounds still take place at 8am, although the group tends to be much smaller and the discussion limited. The on-call physician remains at or very near to the hospital for the duration of the day. Although there are no official hours for outpatient consultations, a few non-emergency patients do present on Sundays requesting physician assessment.

## 2. PREPARING IN ADVANCE

### 2a. Language

English is not spoken in Santa Clotilde other than Padre Jack, Drs. Brian and Toni, nor is it understood. The Peruvian medical staff in general do not speak English, and depending on staffing there may not be a single English speaker during your time there. **Needles to say Spanish is essential.** In the absence of Spanish, one must be exceptional at charades. Some of the patients from the outlying areas speak Kichwa, the unifying language of the Inca Empire. At its peak the Inca Empire extended in size and scope as widely as the Roman Empire, and included the Andean highlands of Peru. It is a testament to its lasting impact that the language is still spoken today, even in areas – such as the jungle lowlands around Santa Clotilde – that were not part of the original empire. If your grasp of ancient Inca language is shaky however, rest assured that most Kichwa speakers will understand a fair bit of Spanish.

The ONLY advantage to English is in using the medical resources. The majority of text books available on site are in English. It is unfortunate that most of the Peruvian staff cannot benefit from these resources – something that you should keep in mind if you are planning to bring any books for donations.

**If you are already fluent in Spanish, great, buen viaje. Proceed to 2b.**

If you are not fluent in Spanish, **LEARNING AS MUCH OF THE LANGUAGE IN ADVANCE SHOULD BE YOUR NUMBER ONE PRIORITY.** There are many ways to accomplish this depending on where you live and how much time and money you are willing to devote.

One suggestion that you may wish to consider is Rosetta Stone – an interactive, online language immersion program. It's expensive, but here's a tip for the Canadian residents/students: you may be able to access it for free through your local school district's online distance learning program. Yes, free (**for permanent BC residents**). Check with your local school district and, if they don't offer online learning, then find a district that does (this is distance learning after all!). School districts receive per capita funding based on the number of students enrolled in their district, so don't be shy – they want you to enrol in their free program. If your local school district can't help you, try School District 83 in Salmon Arm: email Dan Heinrich at [dheinric@sd83.bc.ca](mailto:dheinric@sd83.bc.ca). He has previously volunteered to assist interested students from anywhere in the province.

For those with the luxury of additional time to travel, there are many opportunities to immerse yourself in advance at quality Spanish language schools throughout Peru (most notably Lima and Cuzco).

## 2b. Tropical Medicine

The breadth and variety of tropical medicine on display at Santa Clotilde is impressive (see Appendix A for a list of cases). Keeping in mind the seasonal nature of many infectious diseases, a few of the tropical diseases one can expect to encounter include: malaria, dengue, leptospirosis, buruli ulcers, cutaneous leishmaniasis, ascariasis (photo below), schistosomiasis, leprosy, HIV, TB, yellow fever, viral hepatitis, snake bites, myiasis, and a wide range of routine but impressively advanced bacterial and fungal skin infections.

Do you need to know all of the above diseases inside and out? No, of course not... this is a learning experience. However, as with any learning opportunity you will get more out of it if you have done some pre-reading in advance. Make it a priority to read about a few of these diseases over the next couple of months. Not in detail, just the basics. At a minimum, try to familiarize yourself with the diagnosis and management of malaria, ascariasis, and cutaneous leishmaniasis.



See **Appendix B** for tips on clinical work while in Santa Clotilde.

It is also a good idea to find a few tropical medicine resources to take along with you. One that you might find useful is The Oxford Handbook of Tropical Medicine (Oxford University Press). You can also look up free guidelines for specific diseases on the WHO website, and bring along electronic copies. Lastly, my favourite clinical reference is the Medecins Sans Frontieres (MSF) “Clinical Guidelines: Diagnosis and Treatment Manual”. It is tailored specifically to the developing world, and has very practical management advice for a resource limited setting. You can download a pdf version for free by searching the MSF website, or buy paper copies by following the links to distributors. There is an accompanying “Essential Drugs” reference which is a useful pharmacopeia listing drugs common to the developing world, as well as an Obstetrics manual. (You can download these in both Spanish and English, here: [http://www.refbooks.msf.org/MSF\\_Docs/En/MSFdocMenu\\_en.htm](http://www.refbooks.msf.org/MSF_Docs/En/MSFdocMenu_en.htm))

When you do find a medical reference book that you like, see if it is available in Spanish as well. Almost all major medical textbooks are translated into Spanish, including both of the MSF books described above. Keeping the English and Spanish versions side by side is a great way to improve your medical Spanish. If you choose, leave the Spanish version behind as a useful gift.

## *2c. CME Presentation*

Santa Clotilde is, of course, more than just a fascinating teaching site for visiting UBC/Loyola residents and students. It is first and foremost a clinical learning site for Peruvian learners – and you will have many Peruvian medical and nursing colleagues learning alongside of you during your stay.

UBC wishes to contribute positively to this teaching environment, and one very simple way to do so is by encouraging visiting students and residents to be teachers, not just learners. Obviously one must be careful to avoid the unfortunate fallacy that a Canadian or American medical education is a natural gift to the world: you likely have far more to learn from your Peruvian colleagues than you do to teach, and it is important to remain clinically curious, open minded and respectful. That being said, your education and experiences are a unique asset, and any sincere effort on your part to assist with clinical teaching will be greatly appreciated.

To that end, the staff at Centro de Salud asks that all visiting medical students and residents prepare a short, formal presentation to be prepared in advance and given in Spanish during your time in the field. Feel free to choose whatever topic interests you – pick something that you wish to learn more about (ie. a relevant tropical disease), or something for which you feel you have something special to contribute (ie. a personal clinical interest). Do keep in mind the setting: some clinical topics are universal (ie. emergency management of burns) whereas others, while interesting, are not going to be relevant to Santa Clotilde (ie. new developments in the Canadian anti-hypertension guidelines). UBC maintains a list of suggested topics, although it is not included here as it is continuously updated. If you still aren't inspired, ask Brian or Antoinette (Toni) in advance for suggestions. You can reach them via e-mail at [bmedernach@gmail.com](mailto:bmedernach@gmail.com) and [doclullo@gmail.com](mailto:doclullo@gmail.com). It is a good idea to email regardless, so that they can give you feedback on whether your topic is relevant, and if it has been presented previously. The presentation should be about 30-40 minutes, followed by a discussion period. The audience includes: physicians, lab techs, nurses, and midwives. Dr. Kapoor(UBC)/ Dr. Blair (Loyola) will provide you with a list of topics suggested. The staff also likes hearing about clinical cases we see day to day, so you could always pick a topic based on a patient in the clinic or hospital your first week in Santa Clotilde and prepare the presentation in the afternoons and evenings.

Wi-fi access is widely available in Santa Clotilde and there is a computer to use, but if you have a laptop it would be a good idea to bring it down, and they even have a data projector for powerpoint presentations. Do consider who you are speaking to – the presentation should be in Spanish! Don't sweat too much about that last point – everyone there is keen to help you and Brian and or Toni will be able to review prior to you presenting, and your efforts to speak Spanish (no matter how poorly!) will not go unappreciated.

## *2d. Personal Health / Vaccination*

The first and most important step is to book an appointment at a licensed travel medicine clinic in Canada (or at Loyola's outpatient travel clinic). If the advice provided here and that of the Travel Clinic differs, listen to the Travel Clinic! They are experts in what they do. Keep in mind that some vaccines must be given weeks (or even months) in advance – leave yourself lots of time and visit the clinic well before your scheduled departure.

Malaria is prevalent in Santa Clotilde and should not be taken lightly. At the risk of sounding like a television pharmaceutical ad: “talk to your travel medicine doctor about which malaria prophylaxis is right for you”. Falciparum malaria exists in Peru, and thus chloroquine is not a safe option. Dengue fever is also prevalent at certain times of the year, and so irrespective of your malaria prophylaxis you will need to take rigorous precautions to avoid mosquito bites (ie. long sleeves, mosquito repellent, reduced outdoor exposure at night). Bring the insect repellent with you, this is a MUST – it will be difficult to purchase locally.

Yellow fever exists in the region (you will see the odd case), and accordingly immunization is recommended, however you can enter Peru and the region without proving your vaccination.

There is also a higher prevalence of TB here than here in Canada, with limited opportunity for isolation, and thus a baseline TB skin test (ppd) is advisable.

Most essential medications (antibiotics, antiparasitics) are available on-site in the Santa Clotilde pharmacy. If you are sick here we can do stool samples and treat appropriately....you ask yourpatients to get samples so if you feel ill, just talk to Padre, Brian or Toni and they will take care of you. You may wish to pack a small supply of personal medications, however for periods of personal travel outside the community. Obviously you should also pack a sufficient supply of any regular prescription meds that you require.

Safe (boiled) drinking water is readily available in the hospital and the residence. Should you wish to travel upriver on an outreach campaign however you will be left to your own devices. Consider bringing water purification tablets, or a portable filter. There are stores that sell large 3L bottles of clean water for 5 soles each, which is another option.

Poisonous snakes are rare but do exist in the area – this is after all a jungle! Don't poke, kick, touch, pet, scare, taunt, shake, charm, pick-up, handle, nudge or cuddle any of the snakes. Also at night after 11pm when the power is out, always walk with a flashlight!

## *2e. What to Bring*



If this is your first time traveling in the developing world, universal “essential packing checklists” are widely available on the internet and serve as a good foundation for packing. I will refer here only to considerations unique to Santa Clotilde.

The climate is warm, wet and humid, although naturally it will vary throughout the year. A light rainshell is a great idea. A portable umbrella might also be handy. You won't often wish for a long sleeve shirt, but it can cool off when it rains at night and protecting yourself from mosquito bites is a priority. If you go on a vaccine campaign for part of your time here, you will need a light long sleeve shirt to protect against the mosquitos, so plan on packing at least one.

In the mud and humidity, things get dirty quickly. You are responsible for your own laundry, and a hand-washing laundry station is available for your use. Things do NOT dry quickly in this environment, and clothes left unattended for any length of time will inevitably get rained on. Do yourself a huge favour and pack “quick-dry” materials whenever you can.

Dress code at the hospital is quite relaxed. Scrubs are perfectly acceptable, and have the added bonus of being quick and easy to hand-wash and they dry quicker than most other clothing items! You should bring your own scrubs – the hospital does not provide them. You may wish to have at least one set of “nicer” clothing (think business casual) for meetings, church events, visits to the government hospital in Iquitos etc. It's also a good idea to bring clothing for sports/exercise – there will be ample opportunity to play soccer and volleyball should you wish. A bathing suit is also useful if the idea of piranhas doesn't bother you too much.

Bedsheets and towels are provided.

A few cheap stethoscopes are usually lying around the hospital, but best to bring your own. Your own otoscope is a good idea as well, there is one extra in the clinic, so you don't have to go buy one just for this trip. If you do bring yours pay extra attention to where you charge it. In clinic there are 220V and 110V outlets, Welch allen otoscopes **ONLY CHARGE IN 110V OUTLETS!!!!** If you plug into the 220V for a few seconds your charger will burnout and not be functional in the future. All other necessary medical equipment is available on site.

With respect to electronics, keep in mind that it is best to bring an adaptor for the outlets. Although most of Peru uses the same type of outlet as North America (2 flat prongs), the voltage is 220 and – in Santa Clotilde specifically – you will encounter European style outlets as well. The 220V will work on a range of north American electronics if you look at the fine print on the outlet, if it doesn't say then assume it needs an adaptor. Electricity is available from 530a-630a during the school year, 830a- around 130p and again from 6p until 11pm at night. Wireless internet is available should you wish to bring your own laptop. If you don't have your own computer, email access is available on shared computers, but can be crowded. Obviously a headlamp (or flashlight) is essential.

Having said all of the above – **PACK LIGHTLY!!** It is not easy traveling to and from Santa Clotilde, and having a small, manageable pack will make your journey much safer and less distressing. A lot of “essentials” are available for purchase right in Santa Clotilde, so best to leave your stockpile at home and buy extra when you get there. Shopping provides a wonderful excuse to get out and explore the town, and has the added bonus of contributing to the Santa Clotilde Economic Stimulus Plan! Things which you can purchase locally include: soap, shampoo, laundry soap, toilet paper, skin lotion, brushes/combs, plastic flip-flops, poor-quality batteries, cheap flashlights, toothpaste, pens, paper, drinks (including beer), plastic cups and bowls, packaged snack foods and food staples. If you’ve donated any used clothing to the developing world in the past 5-10 years, this is also your opportunity to buy it back.

## *2e. Medical Donations*

You may feel compelled to bring gifts of medical supplies or pharmaceuticals with you to the field. While rather straightforward on the surface, these kinds of donations are a controversial and ethically complicated area of international development. Rest assured that whatever you bring with you to Santa Clotilde will be greatly appreciated by the local staff. At the same time, make no mistake: careless donations do have the potential to cause harm. Consider the following article as a starting point for reflection on the pros/cons of small-scale medical donation:

<http://virtualmentor.ama-assn.org/2006/12/ccas1-0612.html>

If you are inclined to bring a small donation of drugs or supplies with you, again, it won’t go unappreciated. Probably best to start by emailing Father Jack, Brian or Toni to notify him of your helpful intention. They always has a small wish-list of specific items that the clinic needs at any given time, and if you stick to this list you can be sure that your donation will be both appropriate and useful. If somebody offers you random medical supplies as a potential gift (ie. a bag of expired intravenous catheters from your hospital etc.), check with the staff at CSSC first before you accept, to confirm that they will be welcome and useful.

A few general items – such as disposable gloves or sterile gloves – are always in demand. Consider packing any empty space in your bag with disposable gloves for use in the field.

Above all, it is important to consider the sustainability of donating supplies. UBC encourages the purchase of supplies within the host country and to that end, consider fundraising for a monetary donation towards the purchase of supplies in Peru.

## 2f. *The Journey To Santa Clotilde*

Santa Clotilde is somewhat difficult to reach – this is part of the overall adventure! If you are a worldly traveler with lots of past exposure to travel in the developing world, the trip in will be nothing new and just another fun and memorable cultural experience. On the contrary if you are completely new to traveling in the developing world, and have bad luck along the way, you could easily find yourself stranded in the half-way village of Mazan – penniless, bagless, and doomed to spend the next 20 years selling bananas in the streets trying to save enough money to return home. If you are lucky, within one or two months another UBC/Loyola resident will pass through Mazan, and will recognize you when they stop to buy bananas.

The point here is to plan head, be well prepared, and exercise extreme caution as you navigate your way through the busy public transportation hubs. The other point here is to stay cool, keep your wits, and don't panic!! If you have trouble maintaining a happy medium between the two, then feel free to cycle between those two states rapidly.

Father Moe in Lima will be a tremendous help to you at all stages of the trip, and will probably go so far as to arrange accompaniment for the entire duration of your journey. That being said, let's make it as easy as possible on our Peruvian hosts: take primary responsibility for your own personal travel arrangements, as much as your past experience and appropriate sense of personal safety allows.

Step One: Get to Lima. Once you have purchased your flights to and from Lima, notify Father Moe and provide him with all of the details. On arrival he will likely meet you at the airport personally. If not, he will send a driver. You can (and should?) offer to take a cab, but I doubt that he will accept. The airport in Lima handles millions of international tourists a year, and is a very easy airport to navigate. There are bank machines in the arrivals hall, and this is one opportunity to acquire some Peruvian Soles. Assuming that your connecting flight arrangements require you to spend the night in Lima, you will stay with Father Moe at a guesthouse run by the Oblates in a suburb of the city (Comas, approximately 30 minutes from the airport) or the patient guesthouse in Lima on Avenida Canada. Further details are in the contacts section.

Step Two: Get to Iquitos. Domestic flights are apparently cheaper to buy in Peru than from abroad, so Father Moe will purchase your onward ticket to Iquitos once he has your international flight information. Do pay him back for this... don't take no for an answer! The cost will be (approximately!) \$140 USD round trip. Keep in mind that you will be flying on a domestic carrier (one of two airline choices) and baggage allowances will be smaller than what you were permitted on your international flight (usually one bag, 25 kg max). Be prepared for this! If you do exceed the limit, know that it is customary to make an exception to the baggage restrictions for international travelers "in transit" from an international carrier (defined as less than 24 hours in Lima). You should remind the check-in attendant of this policy if they try to charge you extra. You may also need to prove your case by showing your boarding pass (NOT ticket) from your preceding international flight, so keep that handy. Lastly, depending on the carrier and the type of

ticket purchased, you may be asked to pay a local departure tax before you are allowed to clear security. For some tickets it is already included in the ticket price – confirm when you check-in or ask Padre Moe.

Step Three: *Welcome to Iquitos!* Father Moe will have confirmed with you whether or not someone will be meeting you at the Iquitos airport. It is a small airport, and be aware that you will need to leave the building (and navigate a gauntlet of very “helpful” moto-taxi drivers) before you will come to the meeting area... which is essentially the parking lot. Unless you have arrived very early in the morning, you have already missed the opportunity to continue your onward travel by boat and will need to overnight in Iquitos. The preferred accommodation is a large guesthouse in Punchana just on the outskirts of town, which serves as an operational base for the different Catholic orders that run missions deeper in the jungle. Father Moe will confirm the plan for you. The price is quite reasonable (10-15 USD), and lunch and dinner are included in your stay. Iquitos is something of a tourist destination and offers plenty of shopping and restaurants – any reasonably detailed guidebook will include a city map.

Step Four: *Onwards to Mazan (Now Things Get Tricky).* Iquitos has 2 or 3 major ports that serve as transportation hubs and informal markets. The boats (“rapidos”) for Mazan leave from the northern port based at the **Mercado de Producteros**. These ports are extremely chaotic and there will be lots of not-so-helpful informal porters to not-so-helpfully carry your bags and imperfectly-help you to find the right boat. Unless you have tremendous packing skills or are very sure on your feet, take advantage of 1 (one, uno) porter as you will have to cross a few planks or walk across other boats to get to your vessel. Try not to get separated from your porter... if all goes well, ideally you and your bag will be on the exact same boat! The boat will leave when it’s full, which is usually quite early in the morning. The cost is 14 Soles, plus a baggage fee depending on the size of your bag(s).

Step Five: *Crossing Mazan.* The journey to Mazan takes about an hour. Fortunately it is the only stop the rapido will make, with the possible exception (and I’m not making this up) of stopping by a floating cheese shop on logs so the passengers can purchase especially suspicious dairy products. This “express” nature of the trip reduces the possibility for any confusion about where to get off. If you end up on a giant floating raft littered with cheese, you’ve taken the wrong stop. As soon as you and all the other passengers disembark the rapido in Mazan you will encounter a battalion of motorcycles waiting to escort you across the isthmus to the Rio Napo on the other side of town. If I recall correctly the cost of the journey is about 5 Soles.

Step Six: *This Would Be An Awkward Place To Spend The Night.* When you reach the other side of Mazan you will need to wait for your next rapido upriver to Santa Clotilde. Hopefully it hasn’t left yet! Father Moe will clarify whether you will be taking the public rapido (cost 80 Soles), or whether the hospital boat will meet you in Mazan. While you wait, there is an informal market to visit, and a number of food stalls. Keeping in mind that the next leg of your journey will take 4-6 hours (without any opportunity to get out of your cramped seat) this is a good place to have a bite. There are also free toilet facilities

at this end of Mazan, although I use the word “facility” in the most generous, inaccurate sense of the term. What you are looking for is a small dirty field with a lovely view of the river. The more discerning customer may wish to search for the pay toilet in the market. When I used the toilet at the market I did not have to pay despite the sign and asking several other people around the facilities (signs say cost is 0.50 sole)

Step Seven: *Welcome to Santa Clotilde!!* The public rapido does make several stops along the route, so be sure to ask the driver (or a neighbour) to help you find the right stop. All of central Santa Clotilde is within an easy walk from the dock, and there will be a large and enthusiastic crowd of hospital staff to welcome you. Congratulations!! Now the real adventure begins...

### 3. IN THE FIELD

#### 3a. *The Learning Environment*

Santa Clotilde has an excellent reputation as a teaching site, and this reputation is well earned. All of the staff are accustomed to working with students, and a multidisciplinary learning approach is encouraged. It is understood that teaching takes regular precedence over clinical efficiency, and everyone happily accepts this trade-off. Interruptions for questions are not only tolerated, but actively encouraged. All members of the medical team routinely contribute to teaching by presenting short bedside lectures on predetermined topics, or by leading a clinical discussion. During quiet times and off-hours, it is not uncommon to see doctors, nurses and students studying together from the variety of textbooks that are always within easy reach.



The staff of the Santa Clotilde CSSC take great pride in the clinical care provided – and you should as well! It is the nature of medicine in the jungle that the most urgent medical needs (and the best learning opportunities) do not always occur during convenient daytime hours. Please be flexible with your hours. Recognize that some days might be long (and involve long periods without food or break), but other days you will be completely finished at 3pm. After work is “finished” I would encourage you to feel free to drop by the hospital anytime to visit with patients and staff. The staff are always warmly welcoming of visitors and make great company, and you will stumble across some of your most memorable learning experiences in the relative quiet of after-hours.

There is always one physician assigned to take call at night to see urgent outpatient visits, cover the inpatients, and manage labour and delivery. You will be expected to join the call rota during your time in Santa Clotilde. In deference to your level of training and comfort level you might be paired overnight with one of the regular staff, and in any event extra help is always just a short distance away. You will find that the call duty is usually very light. You can sleep in your regular bed at the residence (which is immediately beside the hospital) and the guard will come get you in person if you are needed.



### *3b. The Home Environment*

Attached to the hospital is a 6 bedroom residence with kitchen, 2 shared toilets, and 2 showers (see picture). This is the residence for visitors on the SERUM program (Peruvian nurses and doctors who stay in Santa Clotilde for periods ranging from a few weeks to a full year). This is also where visiting students and volunteers stay. Each room has two beds. Some of the rooms have a sink. Depending on seasonal capacity and the number of other visitors, you may be asked to share your room for part or all of your stay.

You will find the residence is basic, but comfortable. Sheets and towels are provided. There is a communal sink for clothes washing, and clotheslines for drying. There is a communal refrigerator and a simple kitchen. There is even a sitting room with 2 sofas and a television for the novellas in the evening (although reception is in and out).

Guests of the residence are responsible for keeping it clean. There will be a rotating roster for cleaning dishes at night. Tidy the toilet and shower facilities after each use. A broom is available for sweeping your room.

Lunch (served around 2pm) is the largest meal of the day. One of the hospital cooks will prepare lunch for the visitors in the residence and leave it in the residence kitchen. There are no formal provisions for dinner, although there are usually some leftovers from lunch. For breakfast you can either take bread from the kitchen and supplement it with your own fruits from the market, or you can drop by the hospital kitchen after the patients have been served and look as hungry as possible. The ladies in the kitchen are very generous and will often whip up something simple for you, or at least offer you a hot drink (coffee, thin porridge, warm cocoa) and some fresh bread. The post call person is allowed a breakfast without having to beg or show them your puppy face.

On Sundays no lunch is served in the residence. This is a great opportunity to cook with your Peruvian friends and colleagues, or to arrange a trip to town for a meal at a restaurant. Note that the roadside stalls only sell prepared food at certain hours (basically



until they run out), and the formal restaurants require at least a couple of hours of advance notice before you arrive (not for the purpose of reserving a table obviously, but to allow them to go out and get the chickens or fish or whatever else they choose to prepare for your group). The residence kitchen has a small propane gas stove for cooking at home.

### *3c. Costs for boarding and lodging*

There is no formal cost for boarding and lodging, but it has been a UBC Global Health policy for our teams to provide some funding for our presence, even in the form of a donation. On discussion with Padres Jack and Moe, an appropriate amount would be **\$5 per day (15 Soles) for food**. Please pay this amount upon departure to the CSSC administrator **Oscar Manihuari**.



### *3d. Exploring the Community*

Santa Clotilde is a small but vibrant community. Going for walks along the river or wandering through the markets is a very pleasant way to explore your new home.

You will find that the people of Santa Clotilde are extremely friendly. As would be true anywhere in the world, as a foreigner you are less intimidating and a good deal more “approachable” if you are walking by yourself. Think of your own reaction at home to seeing a lone foreigner looking confused and holding a map on a street corner, versus a group of foreigners immersed in their own conversation in a language you don’t understand. Who are you most likely to approach? If you are shy about wandering through the community on your own, consider setting a few modest goals: ie. find toilet paper to buy, purchase a papaya, figure out where to get a haircut etc. Having a “purpose” will give you an excuse to explore and interact with the local community.

You need to pay attention to your personal security, but no more or less than you would anywhere else in the world. Foreigners are extremely rare in Santa Clotilde. It is therefore assumed, when walking through the town, that you are in some way connected to the church or to the hospital. This is obviously of great advantage in terms of personal safety. All that is required is universal common sense and routine discretion: don’t carry or display expensive jewellery or equipment; do tell someone where you are going and when you expect to be home; avoid wandering on your own after dark.

I would strongly encourage everyone to participate in the daily hospital volleyball or soccer games, which usually start around 4 or 4:30 in front of the school next to the hospital. The games are friendly, co-ed, and all talent levels are encouraged. If you don't wish to play, spectators are always welcome. They usually collect one sole from all participants and the winning team collects an additional sole, losers are out a sole.



There may be opportunities for volunteer work in the community, depending on your personal interest and the time of year. For example, some of the Peruvian physicians volunteer to teach math or sciences at the local high school. The primary schools are also very welcoming of an extra set of hands. The church runs social and community events throughout the week, and everyone – regardless of personal belief or denomination – is welcome to attend mass every evening from Mon-Sat at 7pm and Sunday mornings at 8am. As Catholic churches go the ceremony in Santa Clotilde is decidedly relaxed and informal. If you are unfamiliar with Catholic custom/tradition, simply follow the actions of your neighbour and you will fit in fine. Do keep in mind however that unless you have been “confirmed” in the Catholic church, you shouldn't participate in communion. The polite plan of action is to remain in your seat and refrain from walking up to the altar during this part of Mass.

As for nightlife, Santa Clotilde does have a few bars and even a disco downtown. They are fun places to visit if you're up for the adventure, but I would not recommend visiting them on your own (both for reasons of personal security, and public perception). There will almost certainly be opportunities to go dancing with your colleagues from the hospital on Saturday nights, and attending with friends will make the experience a good deal safer and more enjoyable than going alone.

### *3e. I Highly Recommend the Smoked Armadillo*



If the opportunity presents itself to join a mobile vaccination or primary health care campaign and travel by boat “upriver”, I strongly encourage you to take advantage. Depending on the purpose and the ultimate destination, these trips can last anywhere from a few days to a few weeks. During that time you will get to visit parts of the jungle that you could never get to on your own, and participate in an eye-opening cultural experience you will never forget. Even compared to the relatively modest living standards of

Santa Clotilde itself, you will see that life changes quickly as you head deeper into the jungle. The trip will serve as a powerful reminder of why you are working in Santa Clotilde, who you are attempting to serve, and what the project is hoping to accomplish. When you return to Santa Clotilde it will seem like the big city with all the amenities.

Before you accept an offer to go upriver, do understand what you are volunteering for. There are surprisingly few Holiday Inns on the Rio Napo, and a shameful lack of Denny’s. You will need to be completely self-sufficient in terms of clothing, personal supplies, and ability to manufacture potable drinking water (you can buy a few bottles before you leave town). Pack very lightly, with only a few changes of clothes, and be prepared to take advantage of opportunities to bathe and wash clothes in the river, or at drinking wells, or during rainstorms along the way. The hospital can lend you a piece of foam to serve as a mattress, a sheet, pillow and a bednet. You will overnight in home-stays in rural villages along the way, where conditions will be decidedly rugged. Your traveling companions from the hospital will arrange for local foods to be prepared and served for breakfast and dinner, as availability and circumstances permit.

As you sit in the jungle in dirty clothes, covered in mosquitos, and picking at a semi-rotten armadillo carcass, you might at times think to yourself, “I regret everything”. I assure you however that despite a few hardships along the way, you will soon realize what a rare privilege it is to visit and work in such an incredibly unique and memorable setting. If you are up for the adventure, gather your courage and take the plunge!



#### 4. AFTER YOU RETURN

#### *4a. Community Awareness*

After you return you may feel inspired by your experience to continue helping Santa Clotilde. You will also feel tired, a little disoriented, and frustrated with how “out of touch” some of your friends and family might be with the reality that you just experienced. All of these feelings can contribute to a sense of being overwhelmed. Given the very busy professional and social life that awaits your return to Canada/US, it may be tempting at this point to simply set Santa Clotilde aside in the short term, focus on your life and... eventually... forget about it altogether.

However, sharing your experiences from Santa Clotilde and raising awareness within your community can be a very rewarding -- and even therapeutic -- part of your overall experience. For that reason I strongly encourage you to take advantage of your initial passion and enthusiasm upon return to immediately set a few modest objectives for yourself. You won't have time to accomplish much in your first weeks back, but you can agree to a few small commitments. Perhaps you could volunteer to give a talk to a community interest group to raise awareness, or present an educational rounds at your hospital. Perhaps you might commit to organize a small fundraiser for Santa Clotilde, or follow-up to fix a small need that you identified while in the field. Whatever the case may be, rest assured that you can receive plenty of encouragement and support in your endeavour by reaching out to the small but growing UBC-Loyola-Santa Clotilde-PANGO community back home.

#### *4b. Research Opportunities*

Perhaps during your time in the field you encountered a clinical dilemma that you couldn't solve. Maybe you had questions about something “unusual” you observed in the community, or had an inspired idea for how to assist Santa Clotilde in further development. Whatever your unanswered question might be, now is the time to tackle it! Take advantage of the many resources at your disposal in Canada/US to look for answers. Your search may lead to further ideas or additional questions and, if you are inspired, it could develop into an excellent research project.

Santa Clotilde offers tremendous potential for research opportunities in the fields of tropical medicine and international development. With a dedicated and competent Peruvian team in the field, frequent visits from UBC staff and students, and institutional partnerships with Cayetano Heredia Medical School in Lima, anything is possible.

If you have an idea for a research project specific to Santa Clotilde, please let us know! Who knows where your inspired idea might lead!

#### *4c. Update This Orientation Package*

No doubt this orientation package will have steered you wrong, at least once. Everyone's experience in Santa Clotilde will be different depending on the time of year, the personnel in the hospital at the time of your visit, and rapidly developing circumstances on the ground. For that reason, please consider this a living document. If you have something to add, edit, delete or append... please do! The students and residents who follow in your footsteps will greatly appreciate your effort.

#### *4d. A Career in International Health*

Hopefully your time in Santa Clotilde was a positive experience. I further hope that it inspires you to learn more about international health and development, and plants the seed for future experiences overseas. With time your ability to contribute meaningfully to international development, and to influence positive change, will grow.

As you consider further options for overseas experiences, keep in mind that the field of international health and development is growing, and the cumulative research knowledge has expanded rapidly in recent years. Arguably it is no longer appropriate to simply "learn by experience", as has been the custom for far too long. It is now a recognized branch of medicine that – like neurosurgery or cardiology – is best not left to a trial and error style of learning!

If you are inspired to learn more there are several opportunities available. The UBC Department of Family Medicine now offers an R3 "enhanced skills" residency training in Global Health:

<http://globalhealth.med.ubc.ca/education/medicine-program/postgraduate/r3/>

Similar programs exist at a few other universities across the country. Professional courses in tropical medicine are increasing in number and variety, and include both short and long-term programs at Cayetano Heredia, the University of Arizona, and John Hopkins to name but a few. Finally, there are now university-level courses specifically designed for those with an interest in working overseas, and many are available now for online learning. UBC offers an online certificate program in International Development through the Department of Intercultural Studies. Opportunities for further study abound!

#### *4e. Please Stay in Touch*

To repeat what was stated in the introduction: the people of Santa Clotilde have afforded you a tremendous privilege and opportunity. In more ways than you may realize at first, you are now a part of the Santa Clotilde community. Should you choose to accept that challenge and responsibility, you have an important role to play in the future of Santa Clotilde as a sustainable health care development project. Already there are a number of people at UBC with an interest and/or on-the-ground experience in Santa Clotilde, all

with varying backgrounds and interests, and our community grows in size with the return of every traveler. Please refer to the contacts section to share your experiences, and make new suggestions or offer ideas for how, together, we can assist Santa Clotilde in their future development in a sustainable, responsible manner. There is no substitute for in-the-field experience, and you now have plenty to share!

Thanks for your time and interest in this project, and please keep in touch!

## 5. CONTACTS

**Father Maurice Shroeder, MD:** [msomimd@yahoo.ca](mailto:msomimd@yahoo.ca)  
(based in Lima) cell: 997-300-400

**Father Jack MacCarthy, MD:** [jpmopraem@gmail.com](mailto:jpmopraem@gmail.com)  
(St. Clotilde physician supervisor) cell: 965 929255

Dr. Brian Medernach, MD [bmedernach@gmail.com](mailto:bmedernach@gmail.com)  
(Sta Clotilde volunteer physician  
Internal Medicine-Pediatrics)

Antoinette (Toni) Lullo, DO [doclullo@gmail.com](mailto:doclullo@gmail.com)  
(Sta Clotilde physician Family  
Practice/ MCH fellowship)

**Lima Guesthouse (home of Father Moe):** Av Republica del Peru 830  
Comas, Lima 07  
Tel (Lima): 536-3596

**Iquitos Guesthouse:** Mision Franciscana Canadiense  
Av. Marina 1487  
Iquitos

**UBC Peru Pango team (emails on request)**

**Dr. Videsh Kapoor, Site Director, UBC Global Health:** [videsh.kapoor@gmail.com](mailto:videsh.kapoor@gmail.com)

**Kelly Jacobs, program assistant, UBC**

**Dr. Richard Currie (site visit January 2011)**

**Residents and Student visits:**  
Michael Slatnik (Jan 2012)



Kim Cottick (Jan 2012)  
Allison Henderson (Feb 2012)  
Laura Ambrose (Feb 2012)  
Laura Swaney (March 2012)  
Suzana Mitrovic Gilmour (March 2012)

**Lovola Peru team**

Dr. Amy Blair, Stritch Global Health Dept  
Virginia (Ginny) McCarthy, Stritch Global Health Dept

**Student Visits:**

Mark Stoltenberg (Oct 2011 and Mar 2012)  
Erin Strata (Dec-Jan 2011-12)  
Jason Howell (Apr-May 2012)  
Nate Kittle (July 2012)

**Appendix A:** Interesting tropical diseases and cases seen in a month at CSSC (Jan 2012)

- Ascariasis
- Giardiasis
- Hookworm (*H. necator*)
- Amoebic dysentery (*Enteramoeba histolytica*)
- Strongyloidiasis
- Trichuriasis (Whipworm)
- Hymenolepiasis (*H.nana* tapeworm)
- Malaria (Falciparum, Vivax, in kids, in pregnancy)
- Dengue fever
- Typhoid fever (clinical Dx)
- Respiratory Tuberculosis (peds, adults)
- Tropical ulcer on leg of 18 year old boy
- Suppurative Otitis Media
- Bacterial conjunctivitis
- Mastitis, Breast abscess
- Pyomyositis (19 day old girl with left upper arm pyomyositis)
- Submandibular sialolithiasis
- Gangrene
- HIV/AIDS
- Snake bites (+/- coagulopathy, local necrosis)
- Scorpion bite (+/- coagulopathy, local necrosis)
- 5 year old boy with finger amputation by machete
- Vaginal birth in canoe, at night, on the way to the hospital, arrived holding baby with placenta still connected (past obstetric history gravida 5 including 2 c/s... what a VBAC!)
- Power outage as bradycardic baby's head is crowning, vaginal birth with neonatal resuscitation using flashlight
- Chemical pneumonitis in a 34 year old man after paint inhalation

- Maissonneuve fracture in a 55 year old female who was kicked in the leg by her drunk husband. Unable to travel to Iquitos for imaging / surgery. Reduction under sedation and long leg cast based on clinical exam.
- 16 year old boy syncopal and brought in unresponsive to ER, after seeing a “tunche” (mythical jungle ghost / soul-sucker) in the bathroom. The last thing he remembers is seeing a ghost with a burnt face which lunged out at him.
- 45 year old man charged by buffalo, deep knee laceration
- Telephone management of 51-year old with bleeding UGI varices, at a nurse-run health post 10 hours upriver in a community with endemic Hepatitis B
- 16 year old with severe leg trauma caused by falling tree (which he was chopping down)

#### **Appendix B:** Top five clinical tips for work at CSSC

1) **Gota gruesa:** everyone with a fever gets a gota gruesa (malaria smear).

2) **Dengue:** With fever and a negative gota gruesa, suspect Dengue. Dengue peaks around days 4-5 and is very non-specific in terms of its symptoms. Suspect dengue with high hematocrit and low platelets. On day 4-5 of the illness they send a blood sample to Iquitos to serologically confirm Dengue. They can draw a hematocrit and platelets off a finger poke, just ask for Hct and plaquetas. If you want a differential as well, you need a “hemograma completa” which gives you hematocrit, diff, (plaquetas are not included in a hemograma completa-ask for those too) drawn from a venous sample. Treatment is supportive with oral / IV rehydration, acetaminophen. Avoid NSAIDs (Dengue Fever can progress to Dengue Hemorrhagic Fever, especially with second episode, and you don’t want to aggravate bleeding).

3) **Parasites:** intestinal parasites are a very common cause of abdominal pain and GI upset, and are diagnosed with “heces” (a stool microscopy). The most common are Ascariasis and Giardiasis. If you suspect parasites but they’re unable to produce heces, empiric treatment for the most common parasites is with Mebendazole and Metronidazole. You can consider checking your stool sample before you leave to see if you should take these as well when you leave St Clotilde.

4) **Snake bites:** in general, the people of the region know which snakes are poisonous and which aren’t. The venomous snakes in the region cause complications of coagulopathy and local necrosis. More or less, if someone comes in with an acute snake bite, they get anti-venom, pain control (again avoid NSAIDS) and penicillin. If they have signs of bleeding, you give another anti-venom. A common site of bleeding is the gingiva, so make sure to look. Admit with IV fluids and antibiotic coverage for skin infection. Monitor for coagulopathy (clinically as well as with lab analysis, “tiempo de sangria,

tiempo de coagulación”), wound necrosis, renal failure. Scorpion bites are treated in a similar way, however without anti-venom available.

**5) Location, location, location:** Get to know the big map of the Napo region in the “casita azul”. It’s good to ask patients where they’re from, because some come from 10 hours away for a consult, and sometimes you have to be very conservative with your treatment for this reason, because you won’t see them again. You tend to use more antibiotics than usual, and sometimes hospitalize for minor illnesses. Many of your patients and families are poor, have challenges in following through on recommendations and treatment, and live in unhygienic and humid environments and over-treating is rather the rule. Be sure to explain medication regimens well.

## **How to apply through Loyola SSOM's 4<sup>th</sup> Year International Elective – CSGH 406**

### **Who May Apply**

Fourth year students in good standing and who are fluent in conversational Spanish are eligible to enroll. Successful completion of a subinternship experience prior to going to Peru is required. The ability to speak Spanish is needed because often there are no translators at the Clinic or in the village settings.

### **Funding**

A limited number of positions and funding are available and will be considered on an “as available” basis. Loyola will offset up to \$700 to cover airfare expense to Peru for the students selected to participate.

### **How to Apply**

- 1) Applicants should complete all required Center for Community and Global Health International Elective forms including:
  - Application for International Electives (online)
  - Emergency Information
  - Conditions of Participation in International Clinical Electives
  - Acknowledgement of Risks and Release of Responsibility
  - International Evacuation Repatriation Insurance

The completed application and supporting forms should be submitted to Lucia Garcia in the Center for Community and Global Health.

- 2) Applicants should complete the on-line application form associated with the elective registration. This will require you to select dates. Upon receiving comments and approval from the course director, you will be considered approved. Include any comments or questions about your dates or participation that you wish us to be aware of when reviewing your application.

## **Deadlines**

We ask that you submit the online elective application as soon as possible, preferably before **July 1, 2013**. After that, applications will be considered based on remaining space and available funding. All additional documentation must be submitted by **December 2, 2013** for spring 2013 rotations.

## Questions?

If you wish to discuss this option further before applying, do not hesitate to make an appointment to see Dr. Amy Blair. We hope that you will consider adding this unique elective opportunity to the end of your program this year!

## 2013-2014 Loyola International/U.S. Service Elective

### PERU – CSGH 406

Students applying for the Peru elective must complete the following paperwork to receive academic credit and partial financial underwriting for the rotation.

Center for Community and Global Health (CCGH) Application for International Elective found in elective registration (application must be reviewed and approved by Dr. Amy Blair in CCGH)

Emergency Information Form

Conditions of Participation in International Clinical Electives Form

Acknowledgement of Risks and Release of Responsibility Form

Submit proof of health/hospitalization insurance coverage (copy of insurance card)

Submit proof of medical evacuation and repatriation insurance coverage (copy of insurance card)

Proof of immunizations that are required for all externships

Evaluation: If selected to participate in the elective the student will be responsible for picking up grade form from Lucia Garcia in the CCGH before leaving for the rotation. The Student will hand deliver the grade form to site director for grading.

A limited number of positions and funding are available and will be considered on an “as available” basis. Loyola University Stritch School of Medicine will offset up to \$700 to cover airfare expense for the students selected to participate.

*Feel free to contact Dr. Amy Blair ([ablair1@lumc.edu](mailto:ablair1@lumc.edu)) if you have any questions or need additional information.*

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