



Wonders of the Andes: Ecuador, Peru, and Medicine



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Welcome to Ecuador!

Size: 283,561 km²
 Capital: Quito
 Population: 15,223,680
 72% Mestizos, 20% Amerindian,
 6% European, 2% other
 Languages: Spanish,
 Quichua, Shuar, 11+ others

Epidemiology:
 GDP Per Capita: \$8,492
 Childhood Mortality: 24 deaths
 per 1000 live births
 21.9% of households lack access
 to clean drinking water
 Life Expectancy: 73 years

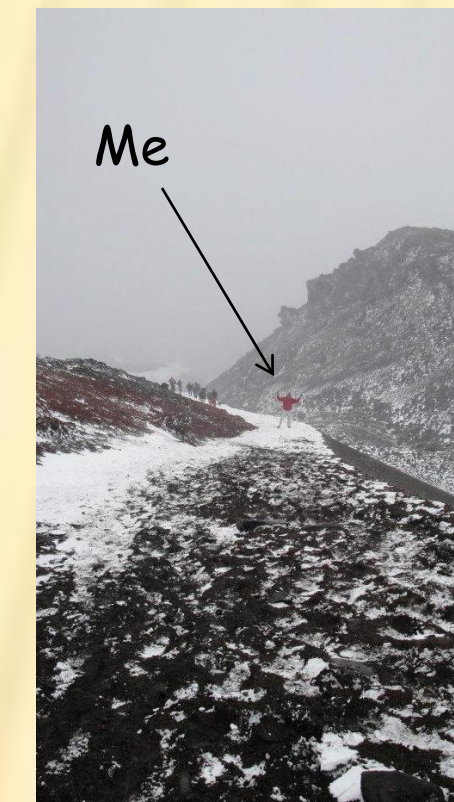
Notable Features:
 Home to the Galapagos Islands and
 Cotopaxi, arguably the world's highest active volcano

Interesting Facts:
 Uses the American Dollar for Currency
 Formally part of the Republic of Gran Colombia with
 modern Day Columbia and Venezuela
 Government: Representative Democratic Republic

Culture Shock: Quito

With the summer after my first year of medical school quickly approaching it was time to decide on what to do with my time off. I had never gone abroad as an undergraduate, and I knew once residency began it would become difficult to find time. This was my last summer break, and I wanted to make it count! Time to see the world!

- Why Go Abroad?
 - Experience the practice of medicine in a foreign country
 - Cultural Immersion
 - Improve patient relations and understanding
 - Learn a language
 - Improve patient communication
 - Last chance to spend significant time out of the country



Pictures from left to top right: Market outside Quito, foot of Cotopaxi, La Basílica, Cotopaxi, La Iglesia de la Compañía de Jesús

The Andean Global Studies Experience

Once I decided to go abroad I needed to choose a program. The Andean Global Studies program in Quito, Ecuador offered dedicated, one on one medical Spanish tutoring, clinical rotations, a homestay, organized immersion trips, and the opportunity to explore a rich and diverse city with a dozen of my classmates. How could I say no to that?

- School Events
 - Salsa lessons
 - Cooking lessons
 - Spanish movies
 - Soccer
- Day Trips
 - Historic Quito
 - President's House
 - Museums (art retouching pictured top right)
 - Churches
 - La Basílica
 - La Iglesia de la Compañía de Jesús
 - La Carolina, park and botanical garden
 - Ecuador vs. Columbia international fútbol game (2nd from top)
 - TeleferiQo above the city
 - Hot springs
- Weekend Excursions
 - La Mitad de Mundo (2nd from bottom)
 - Baños: biking, hiking, repeling, Chiba rides (bottom right)
 - Cotopaxi: hiking, sightseeing

- Highlights:
- Three weeks of dedicated Spanish tutoring
 - 4 hours a day, 5 times a week
 - One on one sessions with a professor
 - Vocabulary, grammar, and Medical Spanish focus
 - Homestay
 - Practice conversational Spanish outside school
 - Forge unforgettable relationships
 - Arnaldo, the wise grandfather
 - Santiago, the troublemaker
 - Diego, the cool uncle



Down to Business: El Hospital Militar

The AGS program also included a two week clinical component. My classmates and I spent four hours a day, five days a week for two weeks at the military hospital in Quito (right). This was my first time being involved in healthcare in a foreign country, a critical step toward a better understanding of our own healthcare system.

- The largest military hospital in Ecuador
- For soldiers and immediate family members only



El Departamento de Radiología

For the clinical component of the AGS program I observed in the Radiology Department at the military hospital of Quito with my classmate Erika Page. We spent the majority of our time observing under Dr. Figuera (pictured 2nd from bottom) and Diego, one of the residents. Together we would exchange stories to hone our Spanish skills and do our best to learn from the differences in healthcare practice between Ecuador and the United States.

- Procedures observed
 - Ultrasound
 - The most frequently used diagnostic device
 - Tendons, joints, pregnancy, bladder, prostate, kidney, breast, chest, liver, thyroid, etc.
 - X-ray
 - Brain, fractures, bone morphology, bladder (contrast), etc.
 - CT Imaging
 - Metastasis, liver abscess, kidney stones, uterine growths, etc.
 - MRI
 - Hydrocephalus, brain, blood vessels, etc.
 - Interventional
 - Spinal mass biopsy and removal
- Notes
 - Good equipment, but few of them
 - Mostly U.S. or Japanese manufacturers (General Electric, etc.)
 - Little emphasis on infectious protocol
 - Minimal use of gloves
 - No change of exam bench cover between patients
 - Urine and other bodily fluids remained between patients
 - Negligible if any hand washing
 - Poor patient considerations or respect for privacy
 - Residents would talk about romantic dates and say obscene things about women in front of patients, female included
 - Discussions of previous patient while next already entered
 - Marginal respect for patient's bodies (nudity)
 - Plaster barriers for changing
 - Machismo
 - Paper and film based records, limited computer use
 - Huge volume of patients, long waits



Table 1: Radiological procedure cost comparison between Ecuadorian military hospital, Ecuadorian private hospital, and U.S. hospital

	Ultrasound	X-Ray	Doppler Study	Mammogram	CT Scan	MRI	Biopsy	Interventional
Ecuador Military	\$11.48	\$20	\$50	\$30	\$80	\$132	\$300	\$10,000+
Ecuador Private	\$30	\$30	\$80	\$50	\$150	\$300	\$500	\$10,000+
U.S. Private	\$158	\$44	\$111	\$105	\$329-\$818	\$552-\$815	\$800+	\$10,000+

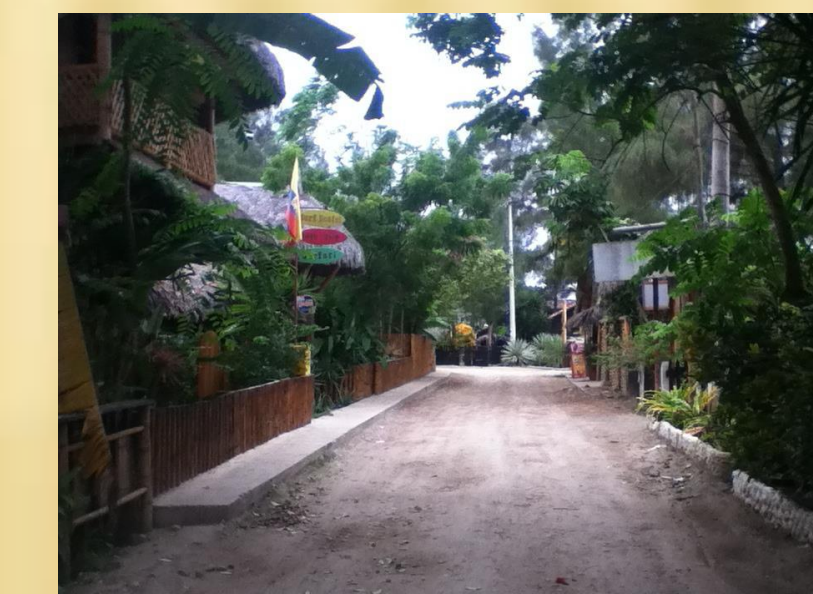
*Ecuadorian cost data from Dr. Figuera

**United States cost data from www.healthcarebluebook.com

Hitting the Road: The Coast

After the program ended five of us from RWJMS decided to further hone our language skills by backpacking along the coast of Ecuador for a week. We would start north in Montañita and head south toward Guayaquil for our flights out of the country, while enjoying the coastal sights and culture as we went.

- Highlights:
- Puerto Lopez (bottom left)
 - Isla de la Plata – the “Poor Man’s Galapagos (bottom middle)
 - Whale watching
 - Coastal cuisine – Ceviche, mariscos, y mas
 - Mantíñita (bottom right, middle right)
 - International community, lasting friendships
 - Guayaquil (top left)
 - Largest city in Ecuador, 3,500,000 people
 - Malecon Simón Bolívar



Detour: Lima, Peru

On to Lima, the capital of Peru! I had met up with my friend and classmate, Neil Newman in Guayaquil, and together with Erika Page we headed to Peru in search of the fabled Machu Picchu. However, our first stop would be Lima, a diverse and beautiful coastal metropolis and arguably the food capital of South America.

- Highlights:
- Miraflores (left)
 - LOKI hostel
 - Parks and street art (2nd from left)



- Central Lima
 - Plaza Mayor (2nd from right)
 - Museo de la Nación
 - Convento de San Francisco
 - Museo de Armas
 - Lima Wall Museum
- Barranco
 - Local culture
 - Nightlife
- Peruvian Cuisine
 - Ceviche, mariscos, etc.
 - Lunch at Astrid & Gastón, ranked the 35th restaurant in the world (right)

Cusco, Machu Picchu, and The Sacred Valley

Finally, the last leg of our journey. After three days in Lima, Neil, Erika and I flew to the sacred city of Cusco high in the Andes mountains. While acclimating over the next four days we explored Cusco before embarking on a four day, sixty kilometer hike through the mountains and villages of the Sacred Valley on our way to one of the wonders of the world, Machu Picchu.

- Highlights:
- Cusco
 - Former capital of the Inca Empire
 - Plaza de Armas
 - Cathedral of Santo Domingo (top)
 - Iglesia de la Compañía de Jesús
 - Monumento Pachacutec
 - Plaza de San Francisco
 - Convent of La Merced
 - Market (2nd from top)
 - Ate cuy – guinea pig
 - Coricancha
 - Israeli restaurant
 - Hidden markets
 - The Sacred Valley
 - Hiking (2nd from bottom)
 - Lares Hot springs
 - Ruins at Sacsayhuaman (middle)
 - Cristo Blanco – White Jesus statue
 - Ollantaytambo
 - Incan terraces
 - Grain storage
 - Marketplace
 - Aguas Calientes (Machupicchu town)
 - Rest and refresh
 - Bus to Machu Picchu
 - Machu Picchu (bottom)
 - Lost city to the outside world until 1911
 - Sacred religious city of the Incas
 - Beautiful architecture highlighted by the sunrise
 - Sun Gate



Summary

Never have I spent so much time outside of the United States, nor have I returned from a trip abroad with so many memories and stories. I will always remember my excursion to South America, from my first medical Spanish lessons in the AGS program to watching the sunrise over Machu Picchu, this trip was once in a lifetime!

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