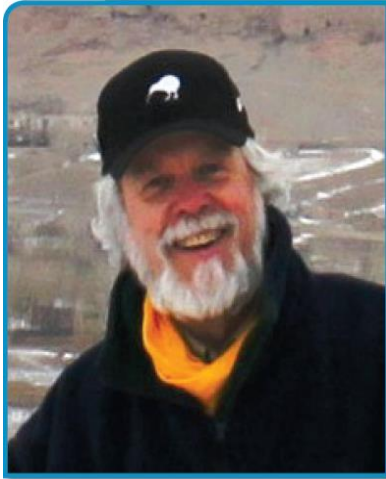




Prof Marc Shaw

Medical Director

Worldwise Travellers Health Centre

Immersion Travel- Macchu Picchu, Amazonas, Galapagos - Concurrent Workshop

Saturday, 17 August 2013

Start 4:30pm

Duration: 60mins

Kandinsky



South GP CME 2013

General Practice Conference & Medical Exhibition

15-18 August | Edgar Centre | Dunedin

SOUTH AMERICAN IMMERSION

MACCHU PICCHU, AMAZONAS, GALAPAGOS, BRAZIL

“WHAT AN ABSURDITY TO GO AND BURY ONESELF IN SOUTH AMERICA,
WHERE THEY ARE ALWAYS HAVING REVOLUTIONS.”

— AGATHA CHRISTIE



Marc Shaw *DrPH, FRGS, FFTM (ACTM), FFTM RCPS (Glas)*

Professor, Public Health and Tropical Medicine, James Cook University, Australia

Medical Director, WORLDWISE Travellers Health Centres - NZ

WORLDWISE OnLINE (worldwise.co.nz)

'Academic Travel Health Information for Professionals'

SOUTH AMERICA

WHO IS TRAVELLING TO THE REGION

- Seniors
- Luxury tours
- School Groups
- Back-packers: aged
 - 18-30
 - 45 plus



GENERALISED HEALTH INFORMATION

VACCINATIONS

MALARIAL MEDICATION

TROPICAL DISEASES and ANIMAL-BORNE DISEASES

ARTHROPOD – BORNE DISEASES

ENVIRONMENTAL DIS-EASES

SAFETY AND SECURITY ISSUES



GENERALISED HEALTH INFORMATION

VACCINATIONS



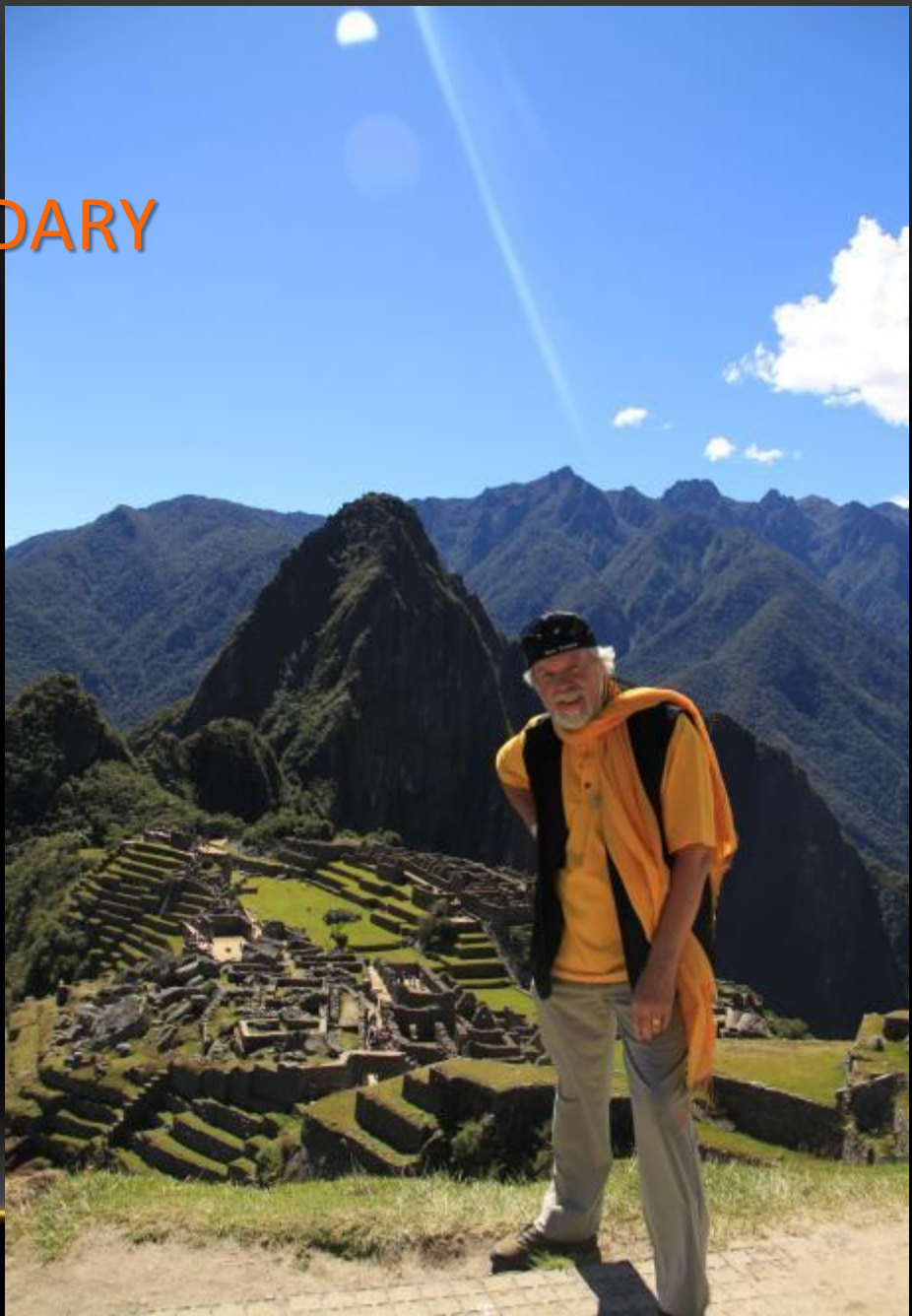
VACCINATIONS - PRIMARY

- Hepatitis A
- Typhoid
- ADT
- Yellow Fever



VACCINATIONS - SECONDARY

- ADT +/- Pertussis
- Dukoral
- Rabies
- Influenza



YELLOW FEVER

- Risk of Disease
- Risk of Vaccine
- Risk of border security – public health
 - P Maldonado
 - Iquitos
 - Iguassu
 - Manaus and the Amazon



GENERALISED HEALTH INFORMATION

VACCINATIONS

MALARIAL MEDICATION



MALARIA

- Does the traveller need prophylaxis?
- What sort of malaria?
- Which antimalarial?
 - Doxy
 - Plaquenil
 - Malarone
- Interactions- Warfarin, Retinoids, Antidepressants
- Cost of medication
- Mosquito avoidance



GENERALISED HEALTH INFORMATION

VACCINATIONS

MALARIAL MEDICATION

TROPICAL DISEASES and ANIMAL-BORNE DISEASES



GENERALISED HEALTH INFORMATION

VACCINATIONS

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GENERALISED HEALTH INFORMATION

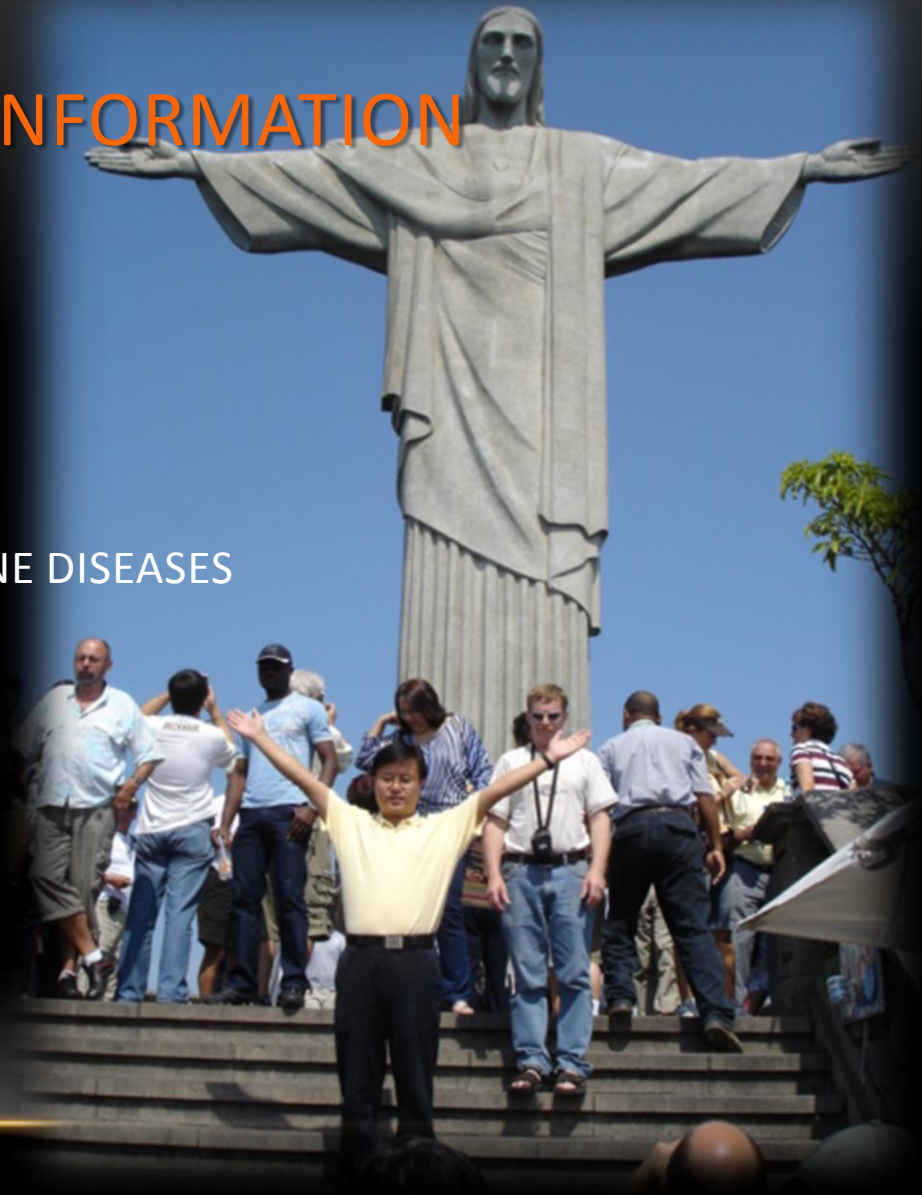
VACCINATIONS

MALARIAL MEDICATION

TROPICAL DISEASES and ANIMAL-BORNE DISEASES

ARTHROPOD – BORNE DISEASES

ENVIRONMENTAL DIS-EASES



ALTITUDE

- Itinerary – High, then low, then high again
- Acute Mountain Sickness
- Cerebral and Pulmonary Oedema
- Medications:
 - Diamox (acetazolamide)
 - Ibuprofen
 - Dexamethasone
 - ? Coco leaves



ENVIRONMENTAL DIS-EASES

- Altitude
- Contraception and DVT
- New friendships - ? Need for HIV, Preg prevention
- Safety and security
- Food and water
- Clothing



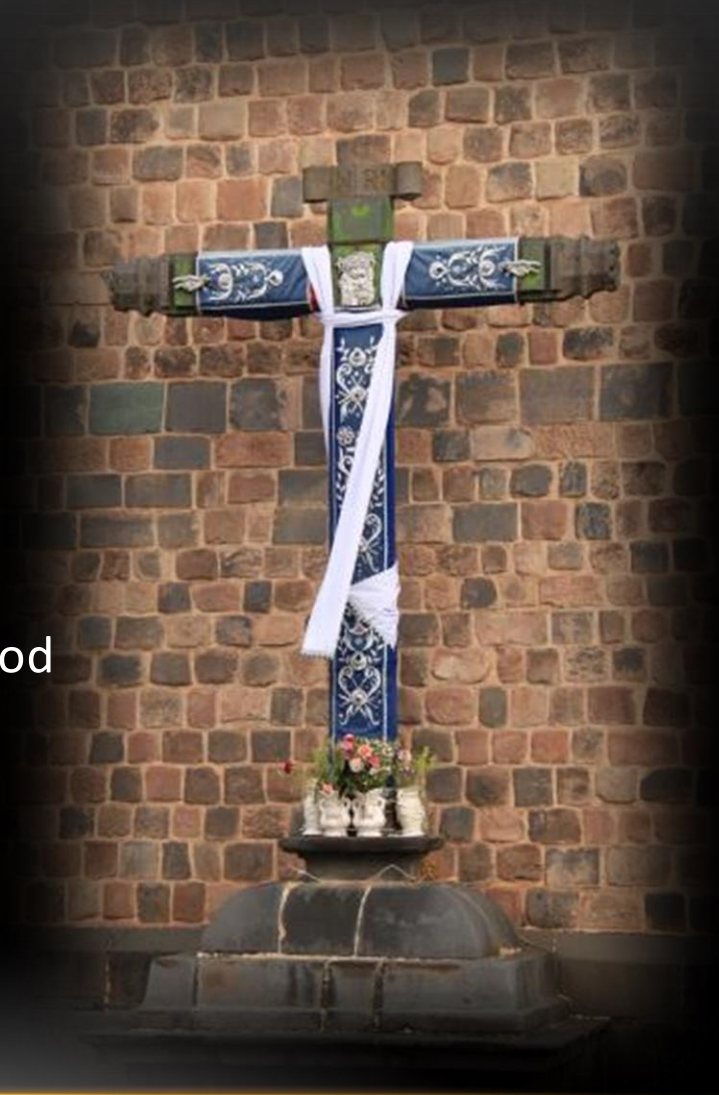
ENVIRONMENT

- Food and water
- Clothing – coping with:
 - Altitude
 - Amazon



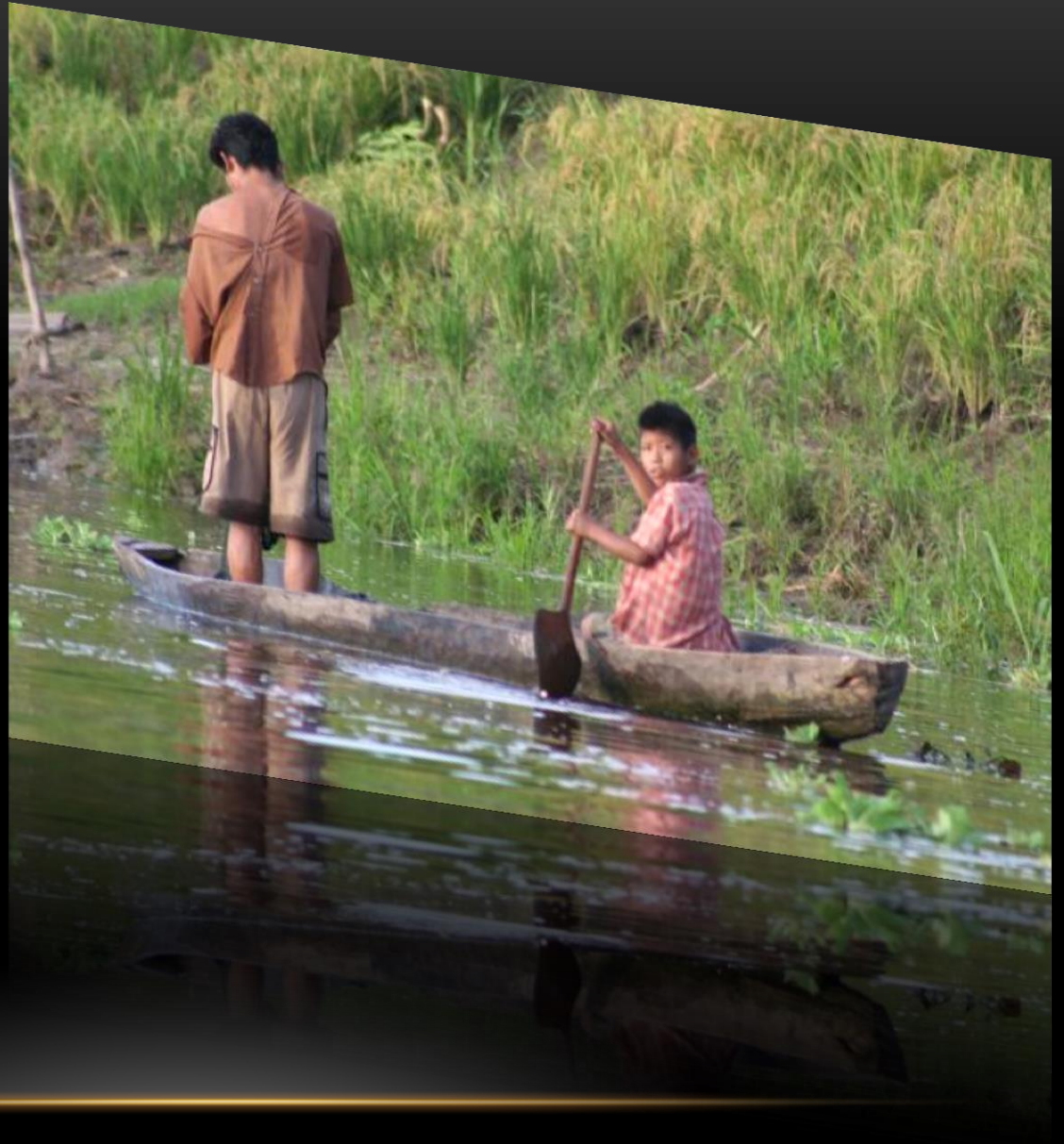
FOOD AND WATER

- “Cook it, Peel it, Boil it or Avoid it”
- Peru one of the worse countries for oral-faecal infection
- Fruit
- Street Food vs Restaurant / Hotel Food



WATER

- Bottled Water
- Chemical Treatment
- Filters
- Steripen



GENERALISED HEALTH INFORMATION

VACCINATIONS

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TROPICAL DISEASES and ANIMAL-BORNE DISEASES

ARTHROPOD – BORNE DISEASES

ENVIRONMENTAL DIS-EASES

SAFETY AND SECURITY ISSUES



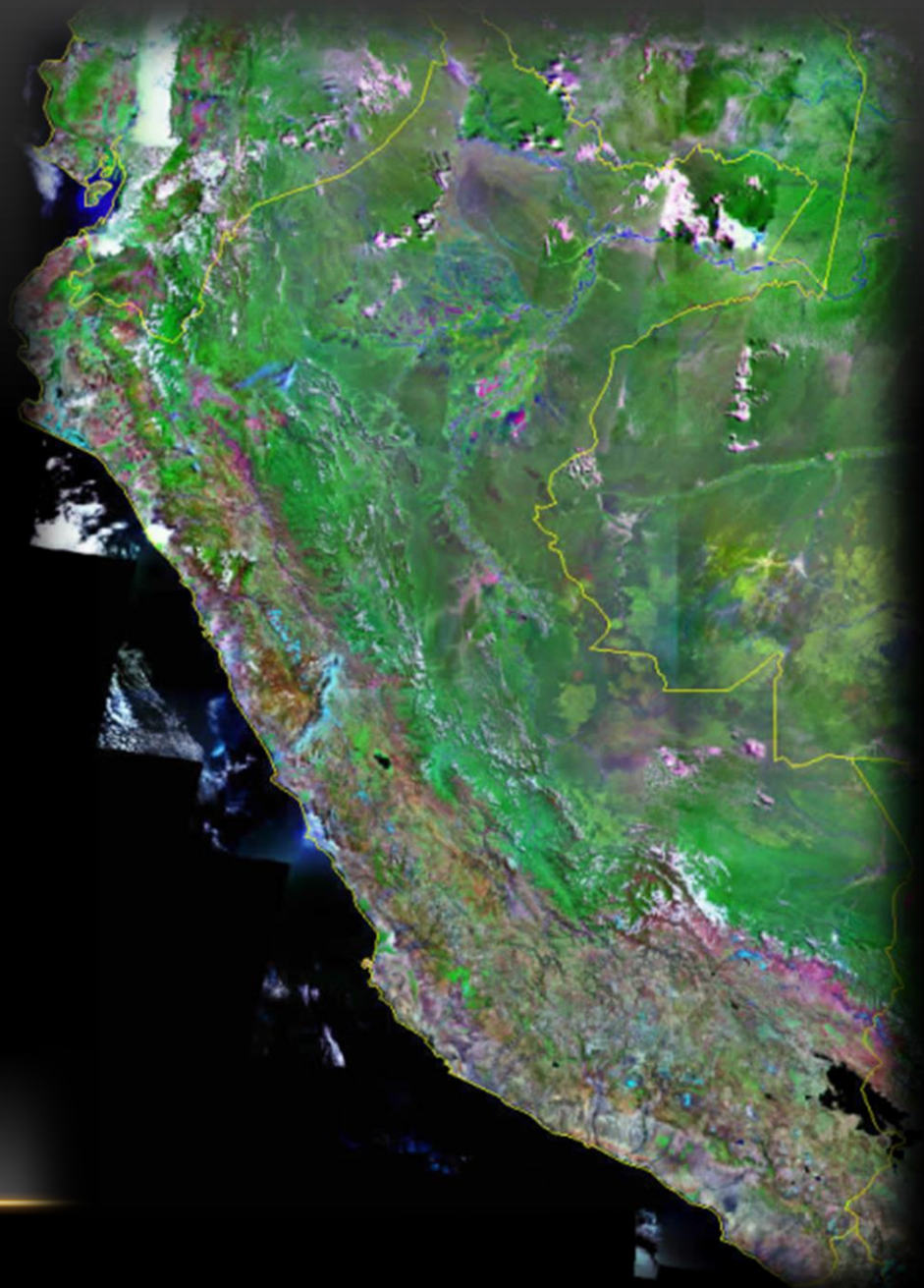
SAFETY AND SECURITY

- Money
- Kidnapping
- Mugging
- Sexual Assault
 - Postinor
 - COC
 - Condoms



ITINERARY – 1, WEST

- NZ – Santiago - Lima
- Then direct flight to Cuzco
- 2/7 acclimatisation in Cuzco
- Walking Inca Trail for 4/7, then
- Macchu Picchu, then
- Puerto Maldonado 3 days, then
- Flight to Cusco and overland to Lake Titicaca and La Paz, Bolivia
- Flying to Quito, Ecuador, then
- Galapagos Islands
- Guayaquil to Santiago
- Back to Auckland





Marc Shaw ■ JAMES COOK University ■ Australia ■ WORLDWISE Travellers Health ■ New Zealand

PERU

- Peru is a representative democratic republic divided into 25 regions.
- Its geography varies from the arid plains of the Pacific coast to the peaks of the Andes Mountains and the tropical forests of Amazon Basin [60% Peru]
- Population: 30 million
- Poverty level around 31% [2010]
- **Economy:** tourism, agriculture, fishing, mining, and manufacturing of textiles.
- The Peruvian population is multiethnic including Amerindians Europeans, Africans, and Asians.
- The main spoken language is Spanish, although a significant number of Peruvians speak Quechua or other native languages.







PERU

- Problems that relate to travellers:
 - Malaria – Maldonado and Iquitos
 - Food and water – one of worst countries for oral-faecal disease
 - Travellers diarrhoea
 - Rabies vaccine in short supply
 - Environment
 - Humidity of Iquitos
 - Altitude sickness an important issue in Cusco
 - Safety and security
 - Overnight buses
 - Cusco – many travellers



GALAPAGOS

- An archipelago [Island Group] of volcanic islands @ Equator 926 km west of continental Ecuador, of which they are a part
- The principal language is Spanish
- Population of slightly over 25,000
- The group consists of 18 main islands, 3 smaller islands, and 107 rocks and islets
- Vast number of endemic species and were studied by Charles Darwin during the voyage of the *Beagle*
- The first recorded visit to the islands happened by chance in 1535, when the Dominican friar Fray Tomas de Berlanga went to Peru to arbitrate in a dispute between Francisco Pizarro and his subordinates. de Berlanga was blown off course, though he eventually returned to the Spanish Empire and described the conditions of the islands and the animals that inhabited them.
- The archipelago is located on the Nazca Plate (a tectonic plate), which is moving east/southeast, diving under the South American Plate at a rate of about 2.5 inches (6.4 cm) per year



GALAPAGOS

- Problems that relate to travellers:
 - Arthropod-borne disease: dengue fever
 - Only way to see the islands is by boat
 - Sea-sickness
 - Norovirus
 - Environment
 - Weather pleasant – winds, sun
 - Good walking shoes
 - Steep climbs for the ‘seniors’
 - Safety and security
 - Must travel in selected areas
 - Eco-conscious











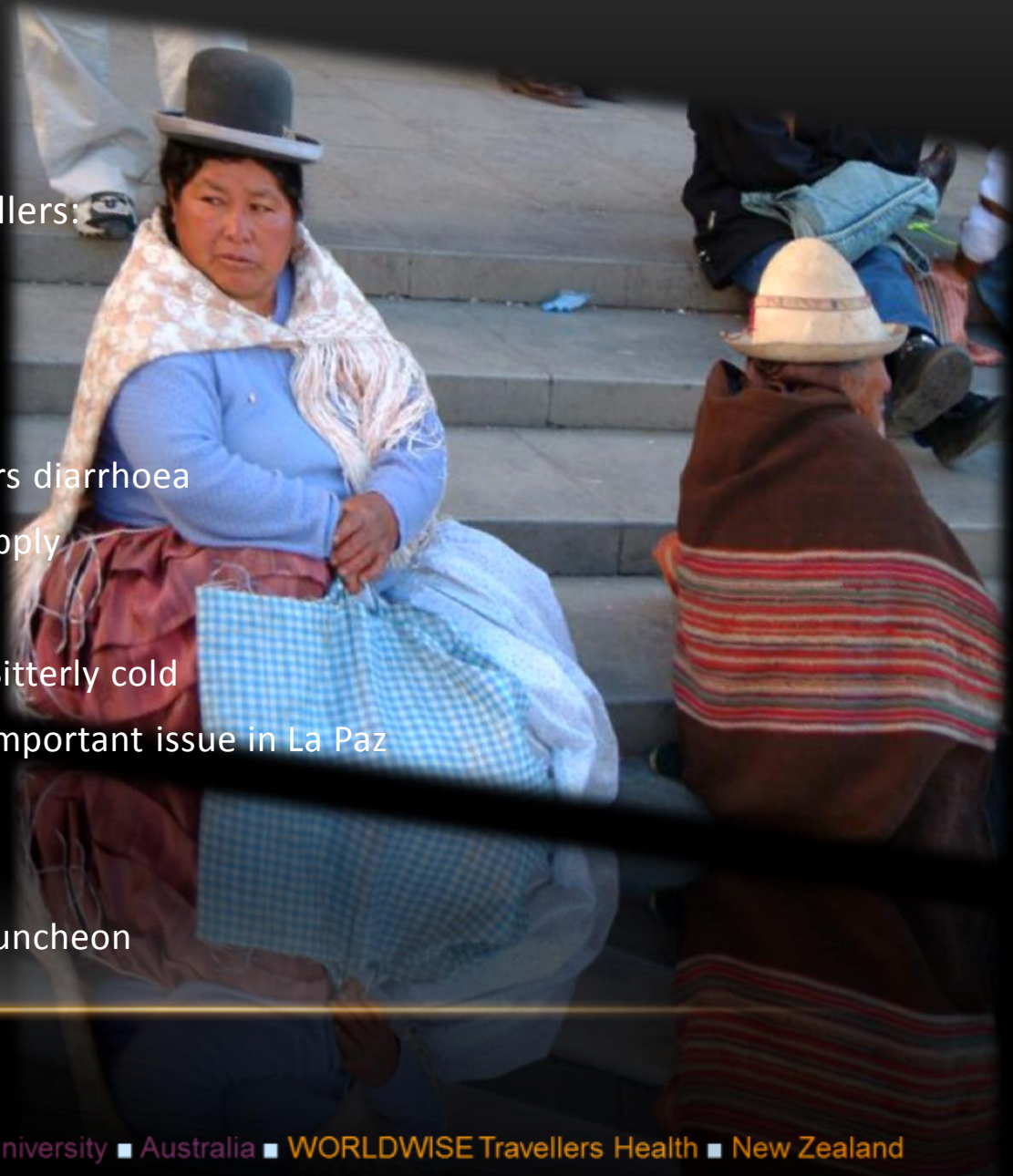
BOLIVIA

- The conquistadors took control of the region in the 16th century
- During most of the Spanish colonial period, this territory was known as *Upper Peru* and was under the administration of the Viceroyalty of Peru,
- After its first call for freedom in 1809, 16 years of war followed before the establishment of the Republic, named for Simón Bolívar, on 6 August 1825.
- Bolivia is a democratic republic that is divided into 9 departments. Its geography is varied from the peaks of the Andes in the West, to the Eastern Lowlands, situated within the Amazon Basin.
- Poverty level of 53%
- The Bolivian population, estimated at 10 million, is multi-ethnic, including Amerindians, Mestizos, Europeans, Asians and Africans.
- Official language – Spanish. Others: Guarani, Aymara and Quechua languages are also common and all four, as well as 34 other indigenous languages, are official.



BOLIVIA

- Problems that relate to travellers:
 - Arthropod-borne disease
 - Malaria – Amazonas
 - Dengue Fever
 - Food and water – Travellers diarrhoea
 - Rabies vaccine in short supply
 - Environment
 - Salt Lakes – Uyuni – Bitterly cold
 - Altitude sickness an important issue in La Paz
 - Safety and security
 - Overnight buses
 - Lock packs to bus stauncheon



BRAZIL

- It is the world's 5th largest country, both by geographical area and by population
- It borders all other South American countries except Ecuador and Chile and occupies 47% of the continent of South America
- Brazil was a colony of Portugal beginning from the landing of Pedro Álvares Cabral in 1500, up until 1815
- 26 States, and the 5,564 Municipalities
- The Brazilian economy is the world's 7th largest as of 2012 A member of the BRIC group
- Brazil is a founding member of the United Nations
- Brazil is one of 17 megadiverse countries, home to a variety of wildlife, natural environments, and extensive natural resources in a variety of protected habitats
- "Brazil" comes from brazilwood, a tree that once grew plentifully along the Brazilian coast
- The earliest pottery ever found in the Western Hemisphere, radiocarbon-dated 8,000 years old, has been excavated in the Amazon basin of Brazil



BRAZIL

- Problems that relate to travellers:
 - Arthropd-borne disease
 - Malaria, Yellow Fever and Dengue Fever
 - Food and water – Travellers diarrhoea
 - Regional issues:
 - Amazonas, Pantanel, East Coast
 - Environment
 - Carneval
 - Safety and security
 - Huge issue
 - Lock everything, always!



ARGENTINA

- Area of 2,780,400 km² Argentina is the 8th largest country in the world. Argentina claims sovereignty over part of Antarctica, the Falkland Islands, South Georgia and the South Sandwich Islands
- It is also a founding member of the United Nations
- The earliest recorded human presence in the area now known as Argentina is dated from the Paleolithic period.
- Argentina is derived from the Latin *argentum* ("silver"). La Plata Basin does not have any sources of silver, but the first Spanish conquerors arrived in the area following rumors of the existence of silver mountains, hence the name.
- The area now known as Argentina was relatively sparsely populated until the period of European colonization, though earliest traces of human life are dated from the Paleolithic period, and there are further traces in the Mesolithic and Neolithic. However, large areas of the interior were apparently depopulated during an extensive dry period between 4000 and 2000 BC.
- Europeans first arrived in the region with the 1502 voyage of Amerigo Vespucci. The Spanish navigator Juan Díaz de Solís visited the territory which is now Argentina in 1516. In 1536 Pedro de Mendoza established a small settlement at the modern location of BA



ARGENTINA

- Problems that relate to travellers:
 - Arthropod-borne disease
 - Malaria – NW
 - Dengue
 - Yellow Fever
 - Food and water – developed country in most regions
 - Attention – exposure to animal bites - rabies vaccine hard to get
 - Environment
 - Pleasant and exciting country and capital
 - Safety and security
 - Overnight buses



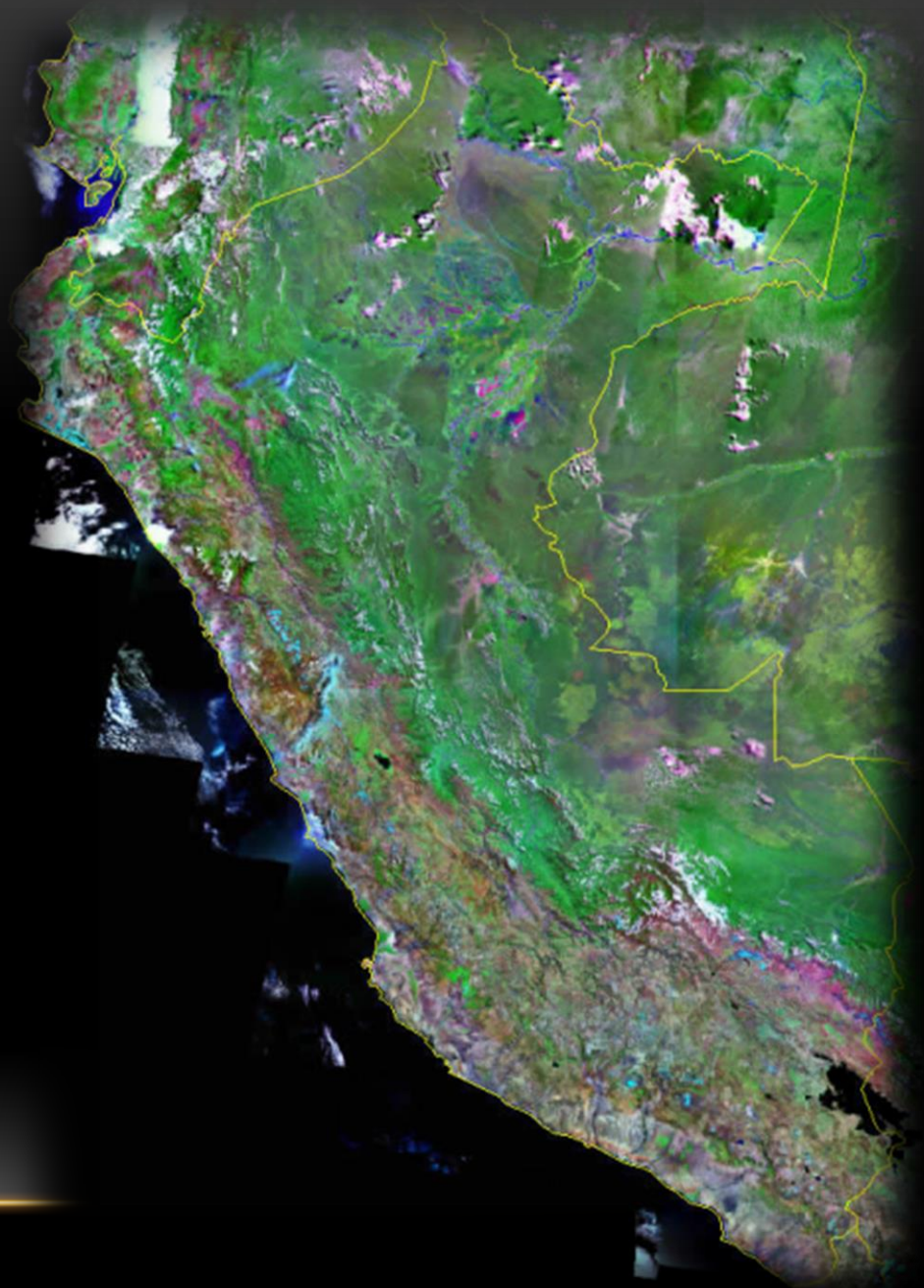
MEDICAL CONDITIONS TO MANAGE

- Travellers Diarrhoea
 - Noroxin and imodium
- Altitude sickness
 - Oxygen and acetazolamide
- Respiratory tract infection
 - Lozenges and panadol
- Soft tissues injuries
 - Bandages and Betadine



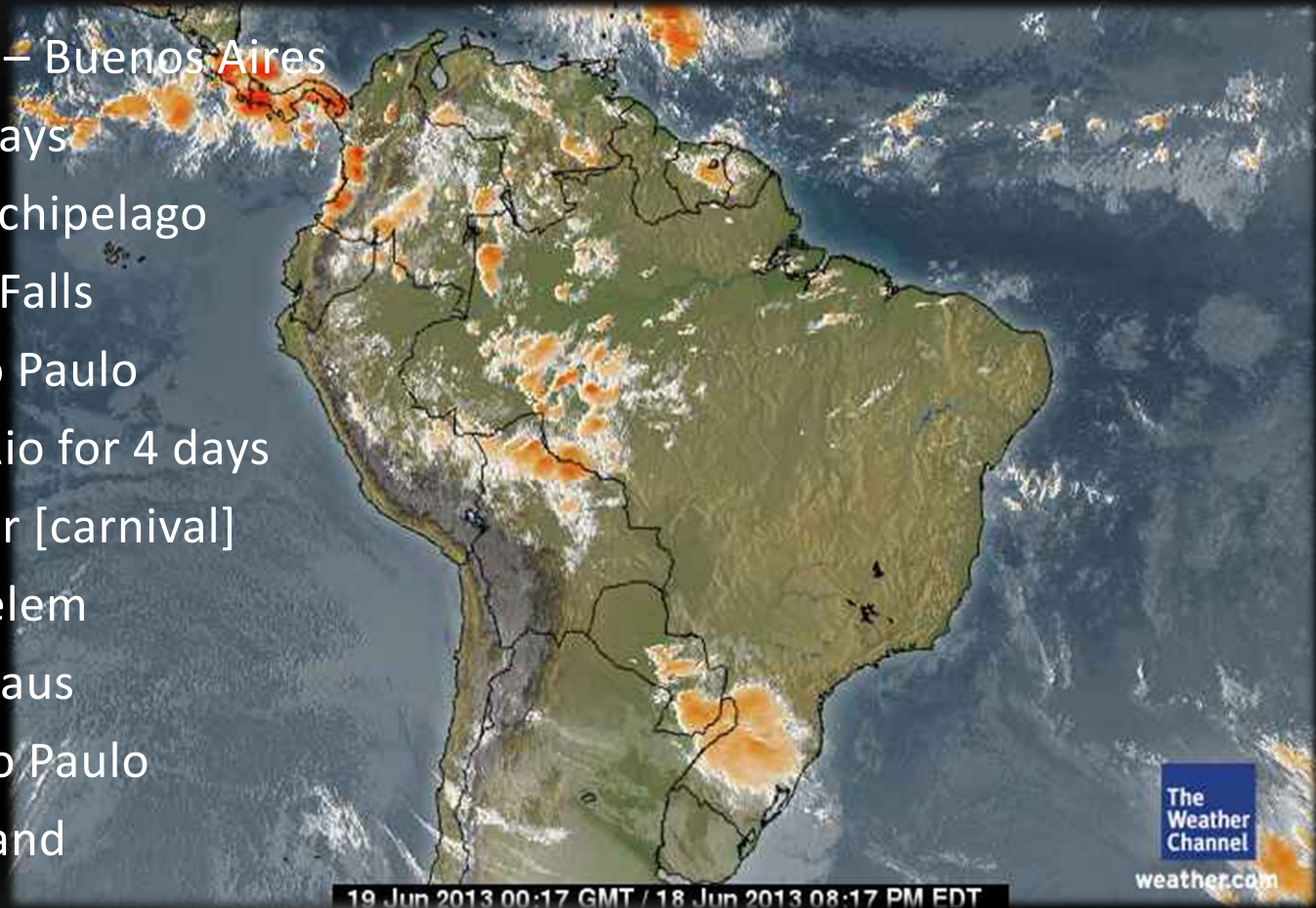
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- Puerto Maldonado 3 days, then
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- Flying to Quito, Ecuador, then
- Galapagos Islands
- Guayaquil to Santiago
- Back to Auckland



ITINERARY – 2, EAST – BRAZIL AND ARGENTINA

- NZ – Santiago – Buenos Aires
- BA for three days
- Explore the archipelago
- BA to Iguassu Falls
- Iguassu to Sao Paulo
- Sao Paulo to Rio for 4 days
- Rio to Salvador [carnival]
- Salvador to Belem
- Belem to Manaus
- Manaus to Sao Paulo
- Back to Auckland



- “Twenty years from now you will be more disappointed by the things you didn’t do than by the ones you did do. So throw off the bowlines, sail away from the safe harbour. Catch the trade winds in your sails.

Explore.
Dream.
Discover.”

- **Mark Twain**



