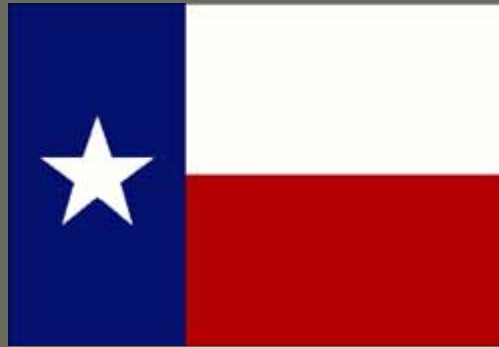


Our 4 x 2 Experience in South Texas/Mexico Border



South Texas Environmental Education and Research (STEER)
Regional Academic Health Center (RAHC)

Lorie Diaz and Melina Rincón

Rotation format



- Four weeks in Laredo
- Two weeks in Harlingen and surrounding cities collectively known as Lower Rio Grande Region
- Each day: visit to different site to explore a particular aspect of the border



South Texas Border Region



Our Experiences



Environmental Factors



Rio Grande / Rio Bravo



Problems in Rio Grande

- Arid climate
- Use of dams
- Dense population / Increased development of agriculture and industries have increased water demands that often cannot be met
- Non-native plants that have been introduced also drain tons of water each day
- Excessive usage – drilling have leached minerals into the aquifers and have made them less suitable for drinking
- There is a water shortage that will increase with increasing demand
- Blockages to outflow – create stagnant water

Colonias

- Settlements on both sides of the border
- Lands are agriculturally unusable and were sold to poor residents seeking to create a home
- Never legally platted, which means there were never plans of installing gas, electric and water lines
- Therefore, many of its residents have no access to fresh water, sewage , gas or electric power and many of its residents have built home-made latrines that can overflow in times of flooding

Problems

- Human sewage – ultimate danger to the Colonia residents
- Having no running water and having to rely on water tanks – also dangerous because of contamination
- Since they have no sewage – many of their waste ends up in the Rio Grande

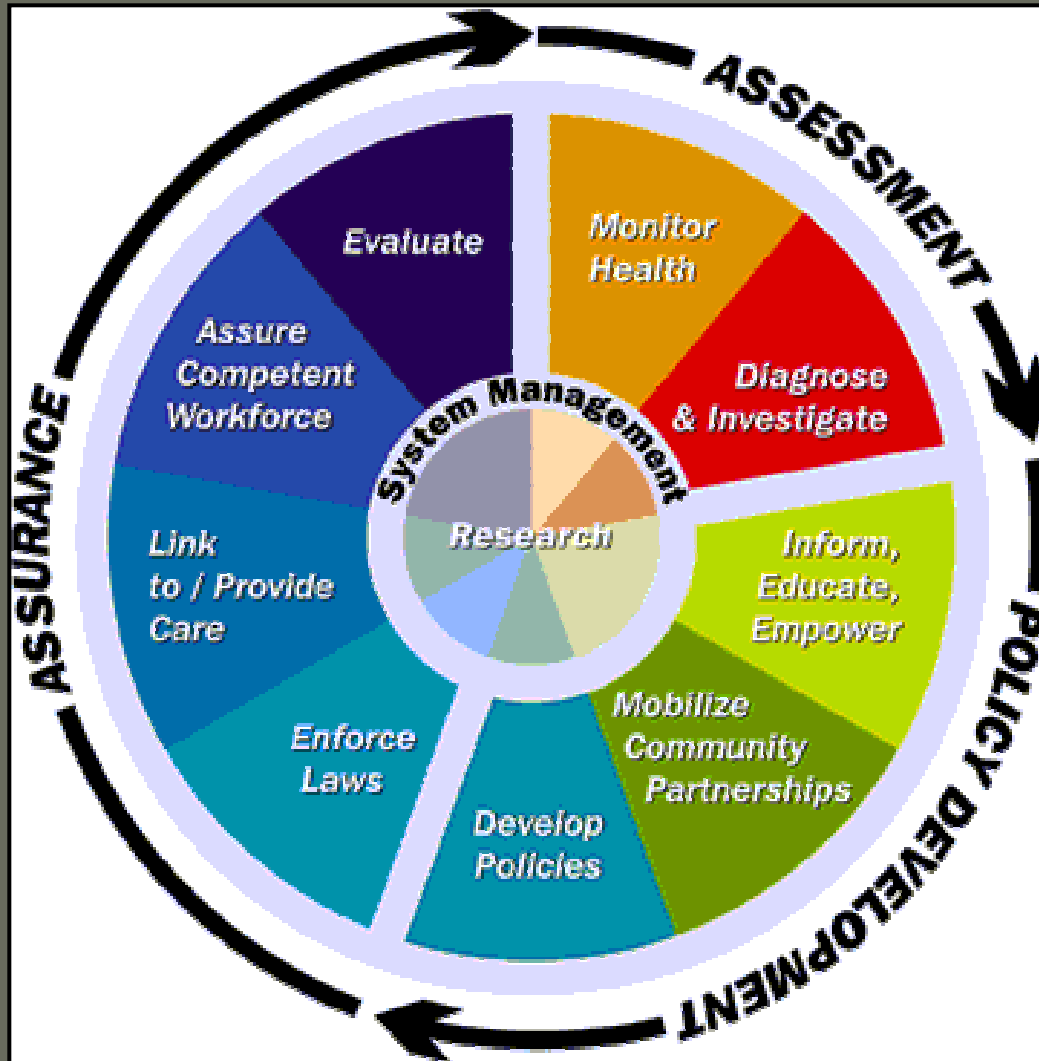
Bi-national Waste Water Treatment Plant, Nuevo Laredo, Mexico



Community Projects

- Agua para beber – ‘Water Suitable for Drinking Program’ project that is run by STEER faculty that seeks to help Colonia residents by teaching them how to treat and maintain their own water. Residents are given bleach (as a means to chlorinate water) and five-gallon water containers to treat their drinking water. STEER faculty test the water on a routine basis and help residents providing easy-to-read educational comics and pamphlets. Residents that follow the program, have noticed dramatic results, less bouts of diarrhea and gastrointestinal problems.

Public Health



Regulatory Service Food Inspection



- Regulate food products under the FDA
- Examples
 - White Cheese (queso fresco)-*Listeria monocytogenes*
 - Tamarind- lead and rat infestations
 - Vanilla-tonka bean and coumarin

Suggestions

- Educate public on the link between food and disease
 - Electronic Billboard with diseased food product and consequence of disease



Social and Cultural Influences



Demographics

- Laredo

Male	48%
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Female	52%
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Hispanic population	94%
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- Harlingen

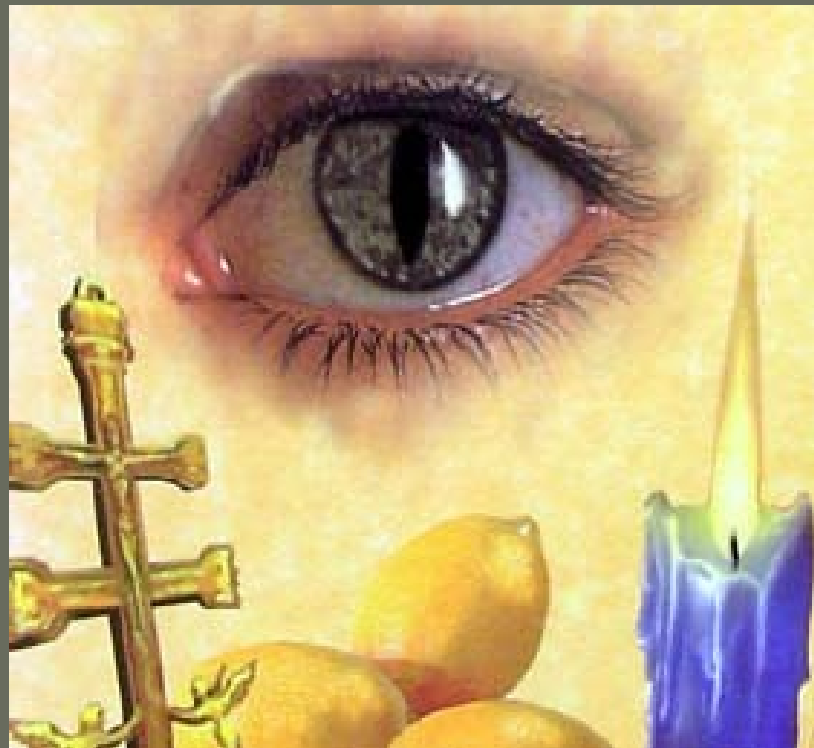
Male	48%
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Female	52%
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Hispanic population	73%
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Folk Diseases

Mal de Ojo



Mal de Ojo - Cure



Folk Diseases

Susto



Susto - Cure



Herbal Remedies

Medicinal
Plant
Exploration



Peyote



Important Points

- Important to study the medicinal properties of various herbs known to Curanderos
- Physicians should make patients feel comfortable in disclosing use of herbs:
 - Drug interactions
 - Possible side effects
 - Genetic variations in herbal metabolism



Social Perspective

Bayview Detention Facility

- What is it?
- Detainee classification
- Facility structure
- Activities
- Medical attention
 - 1 physician
 - 1 psychiatrist
 - 2 dentists
 - 1 pharmacist
 - 2 nurses
- Detention period:
2 days to 3 years



Impressions

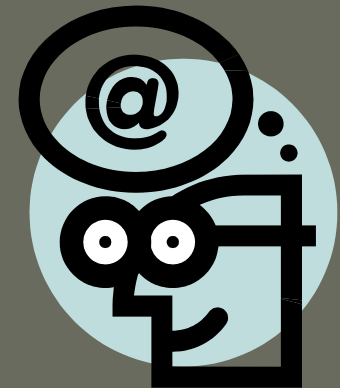
Public Health

Medical Care

Psychological Services

What did we learn?

- Saw first-hand what a detention center is
- Need for health care workers to assist in such facilities
- Never give up the opportunity to educate!!
 - Hydration Tutorial
 - First Aid Lessons
 - Knowing your legal rights-especially immigration issues
 - Chronic diseases-DM, HTN
 - ASK!!!





Maquiladora



PROS

- Goggles and earplugs
- Health insurance thru IMSS and onsite nurse
- Free lunch voucher on 8hr shift
- Guaranteed paycheck at end of week

CONS

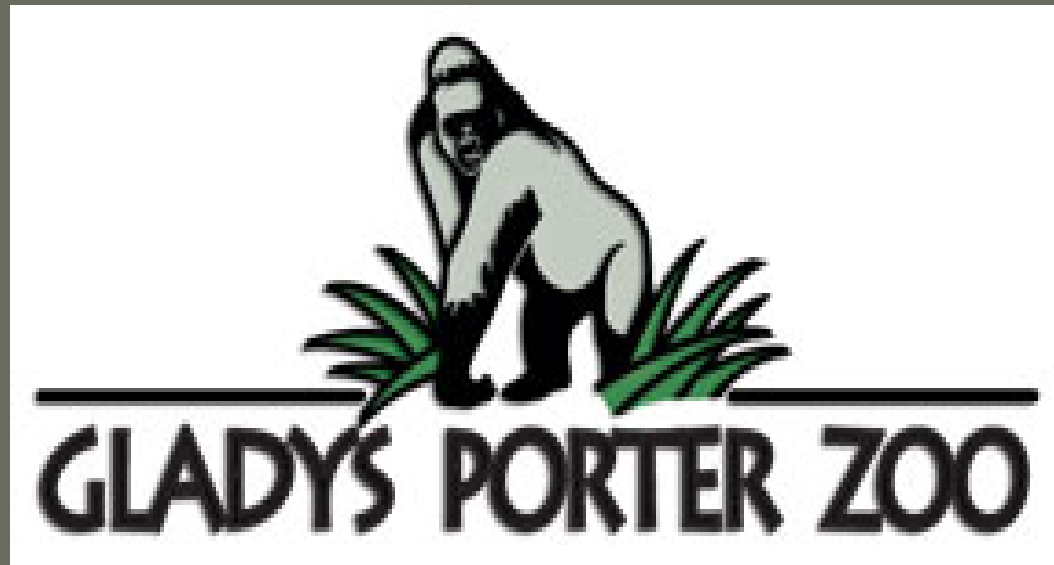
- Loud work environment
- Repetitive tasks with optional stretch breaks
- Two “long” breaks:
 - 30 minute lunch
 - 20 minute break
- Pay wage: US\$5-8/day
- Other maquiladoras

Maquiladora Suggestions

- Environmental exposure:
 - volatile gases
 - intense noises
- Salsa stretch aerobics
- Health education classes
 - Posters in cafeteria
 - Pamphlets near nurse station



Memorable Visit



Strong Relationship Exists Between Medicine, Public Health, and Zoos

- Commonality in outbreaks
- Sources of Disease Spread
 - Classroom setting
 - Trips to the zoo
 - Children's curiosity
 - Elephants and TB!!!



Poignant points

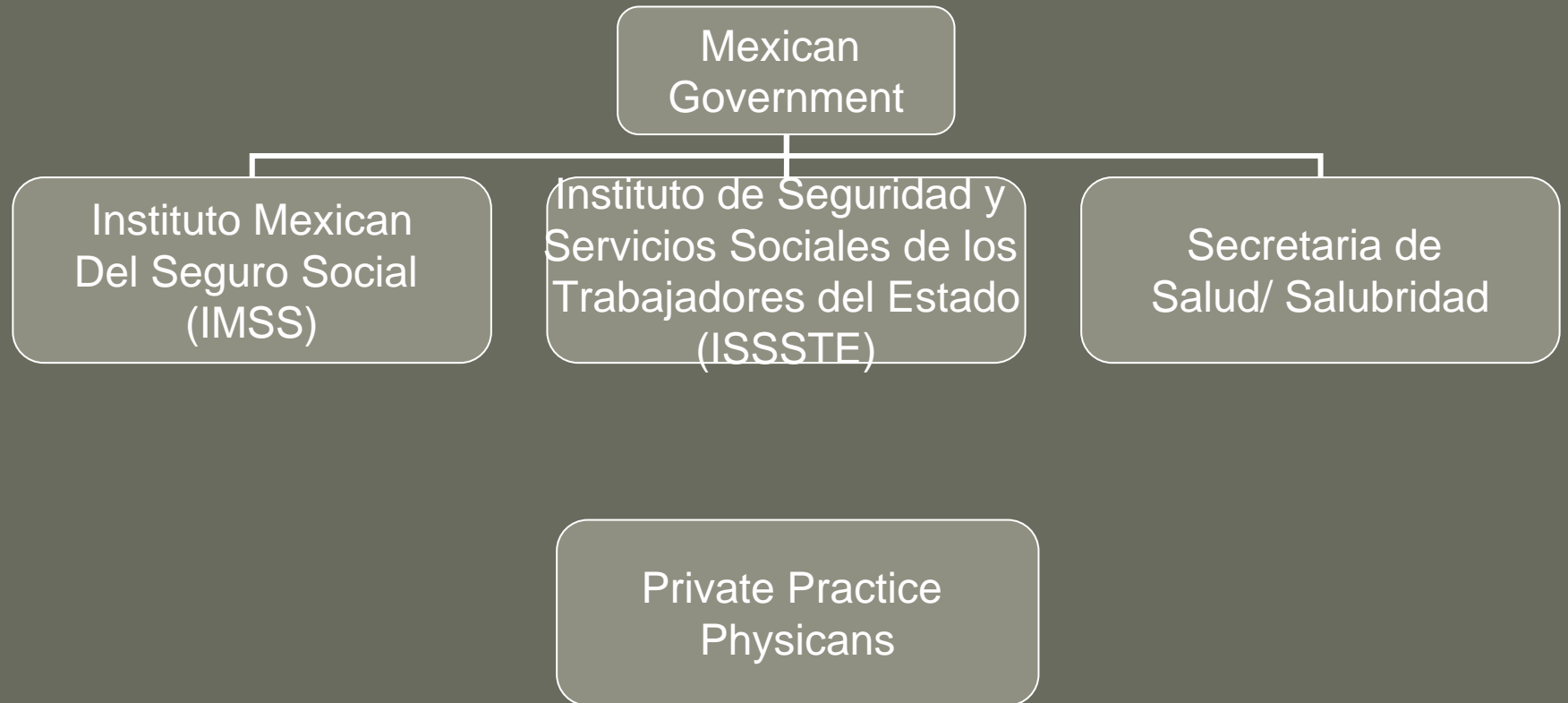
- Learn to recognize bites: reptiles, snakes, birds, spiders, etc
- Ask about exotic pets
- Your pet can get bit and carry disease to you.
- Know the venomous animals in your area
- Read journals dealing with disease and animal transmission
- Establish a relationship with your zoo



Strengths of the Mexican Healthcare System



Mexican Health Care System



Instituto Mexicano del Seguro Social (IMSS)

Mexican government mandates that non-governmental employers provide employees with health insurance through IMSS (Maquiladora employees)



ISSSTE



- Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado
- (ISSSTE) Covers state and federal employees
- Examples:
 - Teachers (70%)
 - police officers (10%)
 - postal workers
- Fee: 8% salary

Secretaria de Salud

- Everyone has the right to healthcare
- Covers those who are otherwise unable to obtain health care.
- Programs
 - Sexual Education
 - Vaccination Campaign
 - Aseguranza popular (\$60/yr covers grandparents through children under 18 yrs)



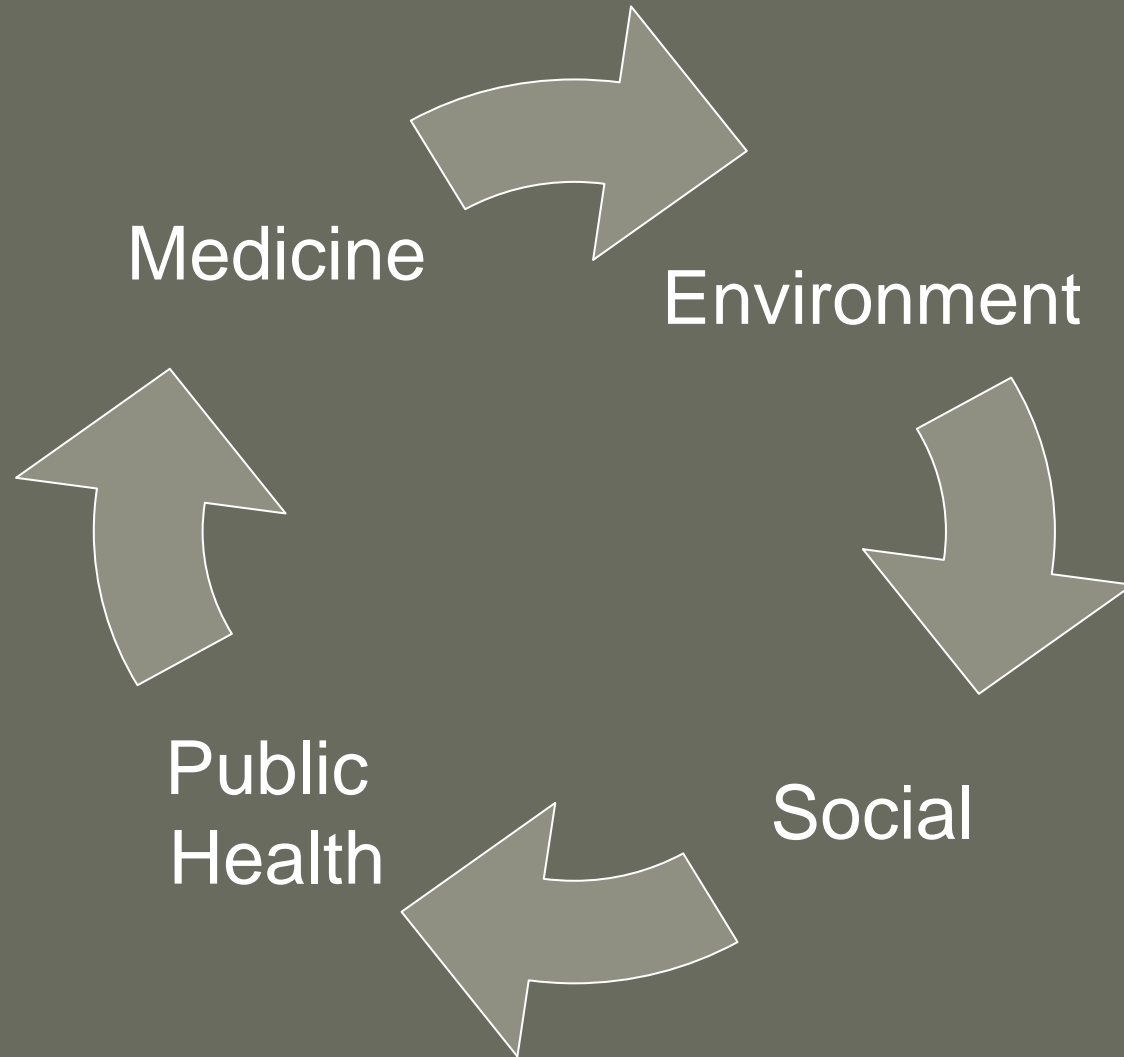
Power of Promotoras (mexico)

- What is a promotora?
- Why are they so critical?
- Promotoras in South Texas
- Future directions



What are some factors that
you remember?

Border Health Factors



What did We learn?

- Think from a global perspective
- How to formulate connections in public health, environment and medical factors
- Provide plausible suggestions to any future problems we may encounter

What will we take from this experience

- My biggest lesson was that we must incorporate this piece-meal view on every location we visit because only then can we truly understand and make a difference as a person, aspiring physician and as a public health supporter!

Importance of collaborating with different areas of expertise



Program is only as Strong as its Partnerships THANK YOU!!



A Lower Rio Grande Valley extension campus of The University of Texas Health Science Center at San Antonio