

# Microbiological Sciences Branch Update

Elizabeth W. Delamater, Ph.D., HCLD (ABB)  
Public Health Laboratory Directors  
of Texas Conference  
November 12, 2012

# Group Managers

- Medical Virology Group
  - Martha Thompson
- Consumer Microbiology Group
  - Monica Kingsley
- Bacteriology/Parasitology Diagnostics Group
  - Chun Wang
- Mycobacteriology / Mycology Group
  - Denise Dunbar
- Serological Analysis Group
  - Pushker Raj

# Medical Virology Group

## ~ Viral Isolation Team

- o Real Time RT-PCR for Dengue.
- o Attended training in October sponsored by the CDC

## ~ Influenza

Virus		% of Total
2009 H1N1 Influenza	1	1%
Influenza B Positive	23	26%
Influenza Not Detected	64	71%
Seasonal Influenza A/H3	2	2%
Total Tested	90	



# Medical Virology Group

## ~ Rabies ID Team

- Since 1/1/2012, 7333 specimens tested for rabies. 43% rabies Positive skunks, 17.1% rabies positive bats
- Number of unusual specimens

## ~ Arbovirus ID Team

- Continued surveillance for mosquitoes and horses
- Major outbreak this year



# Mycobacteriology/Mycology Group

- ▣ Changes in drug susceptibility testing
  - BACTEC 460 TB Testing system will be discontinued
    - Reagents depleted by end of 2012
  - Move to the BACTEC MGIT 960
  - Validation studies are underway
- ▣ Establishment study for the Cepheid GeneXpert molecular detection method is completed and will be used in the laboratory routinely

# Serological Analysis Group

- ▮ Fourth generation HIV testing using Bio-Rad Ag/Ab assay
- ▮ HIV Multi-spot assay study
- ▮ Reporting OD values in the QFT assay, following CDC recommendations
- ▮ InBios Dengue testing training in October, plan to include Dengue Serology
- ▮ BioPlex Instrumentation – Rubella testing

# Consumer Microbiology Group

- ▣ Validated testing for non-O157 *E.coli* serotypes in meat products
  - target non-O157 STEC serogroups are O26, O45, O103, O111, O121, and O145
  - Some statistics indicate that 5% of the beef for consumption is contaminated
- ▣ Texas DSHS awarded funding from the ISO 17025 accreditation grant
  - 5 year process, involving food testing for microbiological contamination and chemical adulterants



# Bacteriology/Parasitology Diagnostics Group

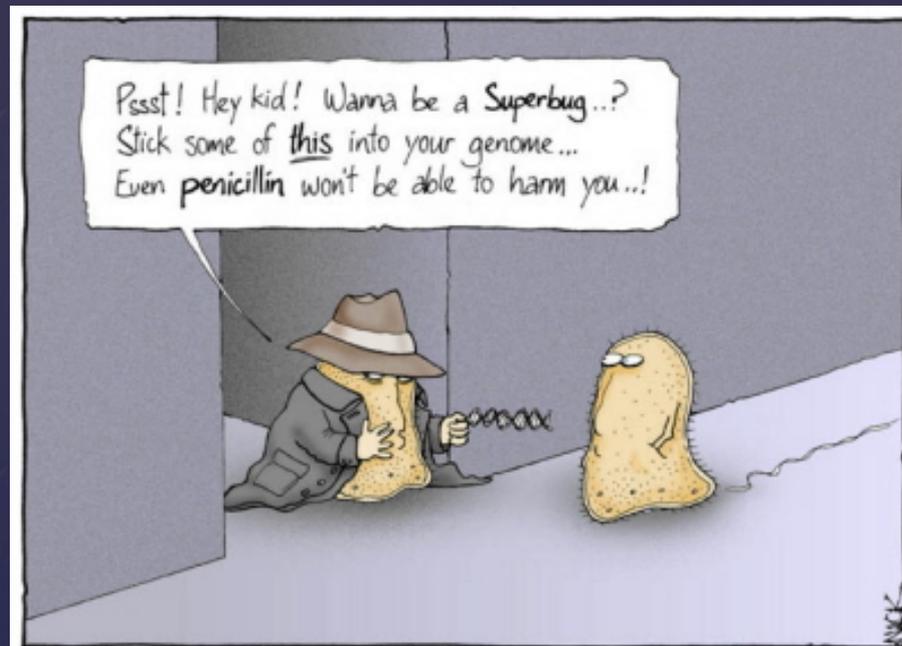
## ▮ GISP

- Continuing to work on EGGs Project

## ▮ Outbreaks

- S. Bredeney
  - Peanut Butter
- S. Newport
- S. Typhimurium
  - Canteloupe

# Questions or Comments?



It was on a short-cut through the hospital kitchens that Albert was first approached by a member of the Antibiotic Resistance.

# Federal Funding

- ~ Epidemiology and Laboratory Capacity Grant
- ~ ELC Supplemental (ACA)
- ~ FDA Rapid Response Team
- ~ FERN CAP
- ~ GISP
- ~ TB Cooperative Agreement
- ~ Emerging Infections Program
- ~ Border Infectious Disease (EWIDS)