

APHL 2014



Research at the Washington State PHL: Past, Current, and Future

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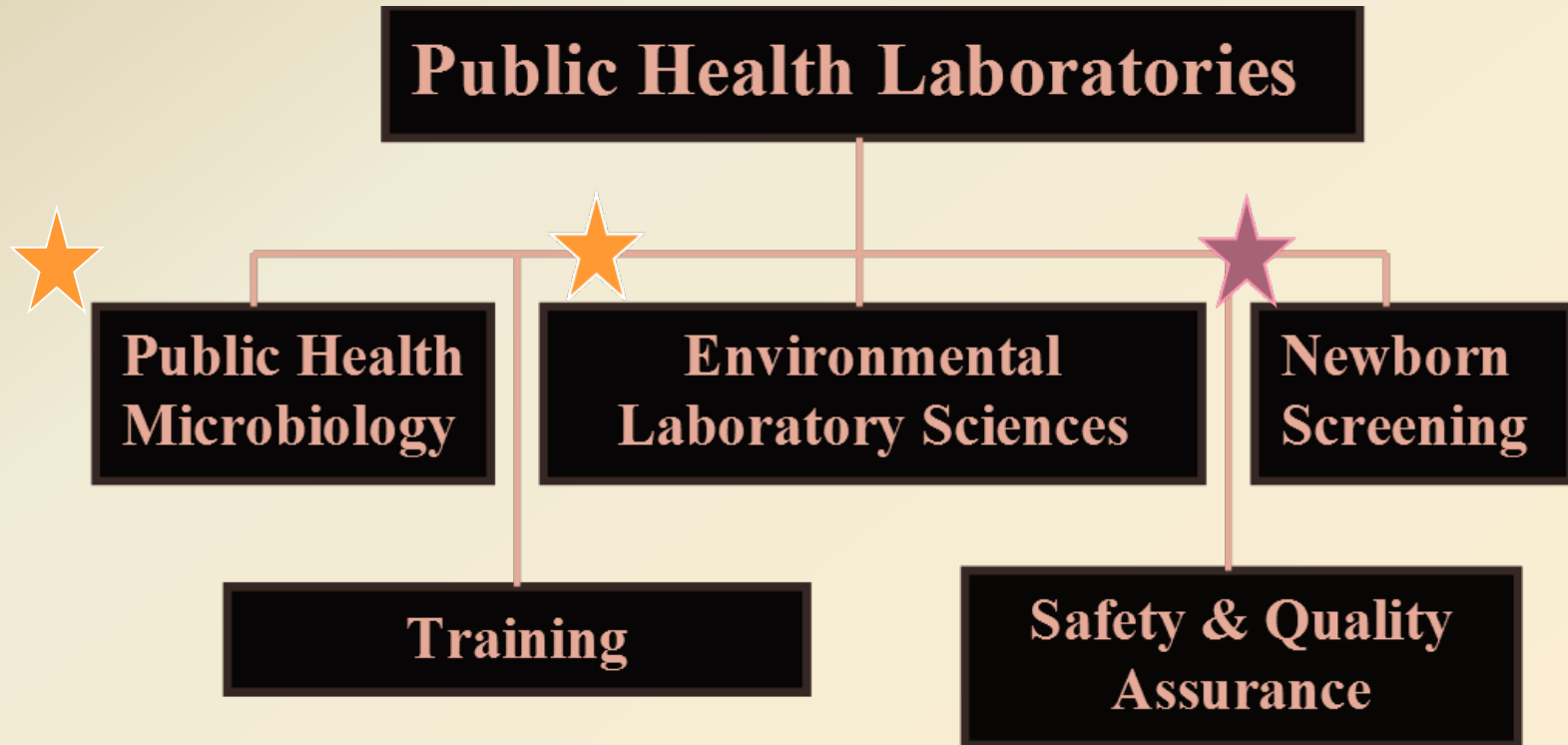
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Disclosures

- **NONE**



Organization



WA State PHL Mission

Provide a wide range of diagnostic and analytical functions for the assessment and surveillance of infectious/communicable diseases, genetic conditions, as well as environmental contamination.



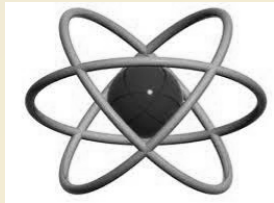
Past Research

Isotopic Uranium, Plutonium, Americium, Thorium detection in water

Diarrhetic Shellfish Poison (DSP) detection

Speciated Aresenic in urine

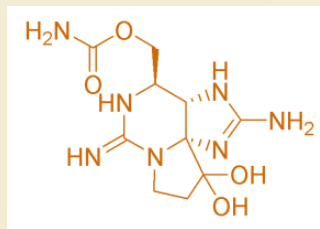
Metabolic Toxins Panel for urine



Current Research

Saxitoxins (PSP) Detection

Inorganic Arsenic in Shellfish



Future Research

Mercury and Manganese in urine

Cesium in seawater



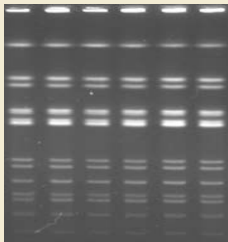
Past Research

Improved PFGE method development

Bordetella pertussis
PCR Assay

Molecular detection of
Vibrio parahaemolyticus

Drug Resistance
Screening by Sequencing
(DRSS) for
Mycobacterium tuberculosis



Current Research

Vibrio parahaemolyticus
virulence profiling

Whole Genome
Sequencing (WGS) of
foodborne pathogens

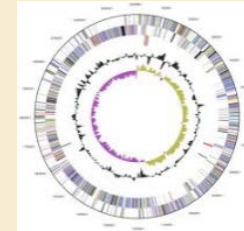
Carbapenem-resistant
enterobacteriaceae (CRE)
surveillance methods



Future Research

Whole genome
sequencing methods for
drug resistance &
bacterial typing

Sensititre microbroth AST
Mycobacterium tuberculosis



Research Challenges



Research Funding/Resources

Private Foundation Grants



Federal Grants Funding



Collaborative NIH Grants



Company Product Evaluations



APHL /CDC Contract Projects



Laboratory Budget



Development Contract Grants



Research Staffing



Committee on Postdoctoral Educational Programs (CPEP)
Fellows in Clinical and Public Health Microbiology
Directorship



Emerging Infectious Disease Fellows



Undergraduate and Graduate Students
Interns



Oak Ridge Institute For Science and Education (ORISE)
Fellows



Cultural Vistas International Fellows



WA PHL Research Scientists and Staff

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PUBLIC HEALTH
ALWAYS WORKING FOR A SAFER AND
HEALTHIER WASHINGTON