Lessons Learned from the Investigation of the of the HPD Crime Lab

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## Overview

- Background of the HPD Investigation
- The Investigation
- Management Failures
- Conclusions

## Background of the Investigation The Lab Begins to Unravel

- November 2002 TV news expose re DNA
- December 12 and 13, 2002 First ever outside audit of the DNA Section
- December 18, 2002 DNA Section closed
- January 31, 2003 Outside lab questions DNA work in Josiah Sutton case (re-test later exonerates Sutton)
- February 21, 2003 HPD Lab Director resigns

### Background of the Investigation Problems Grow

- Chief toxicologist fails proficiency test toxicology discontinued
- Firearms examinations questioned in various cases
- 280 boxes of misplaced biological evidence discovered
- Dozens of Houston Chronicle and other media reports critical of HPD's Crime Lab

## The Investigation The Decision to Hire Outsiders

- Media kept story alive from late 2002 through fall 2004
- Two separate grand juries empanelled
- New police chief and Mayor decide in late 2004 to hire outsider
- Stakeholder Committee appointed to select investigator and oversee investigation

#### The Investigation Historical Review

- Reviewed Crime Lab's historical work
  - Serology, DNA, Firearms, Trace, Controlled Substances, Toxicology, Questioned Documents
  - Reviewed more than 3,500 cases
  - Reviewed 135 DNA cases from 1993-2002
  - Reviewed 1,020 serology cases from 1980-1992, including 850 incarceration cases

The Investigation Review of Current Operations and Recommendations for Improvement

- Reviewed Crime Lab's Current Operations
  - Crime Lab has new managers and revised SOPs
  - ASCLD-LAB accreditation for all current operations
  - Reviewed casework performed by all Sections
  - Reviewed Lab management practices and QA/QC
  - Reviewed evidence handling and storage
- Formulated Detailed Recommendations
  - HPD's stated goal is to develop one of the premier forensic science laboratories in the nation

#### The Investigation Major Findings

- Serious and pervasive problems in historical serology and DNA work
- Major issues in 180 (21%) of serology incarceration cases
- Major issues in 43 (32%) of DNA cases
- Poor or non-existent SOPs, poorly trained analysts, ineffective supervision and technical review, lack of QA/QC

# Management Failures

- Inadequate resources
- Passive managers
- Lack of quality control
- Isolation of the Lab
- Lack of training, mentoring, and professional development
- Failure to instill a scientific culture

## Management Failures Inadequate Resources

- Facility roof leak
- Staffing failed to keep pace with workload
- Below-market salaries and turnover
- Calcified organization and lack of advancement opportunities
- Inadequate funds for training

### Management Failures Passive Managers

- Failed to address problem employees and resolve workplace conflicts
- When disciplinary action taken in specific misconduct cases (drylabbing), managers overruled by chain of command
- Lack of inquisitiveness about substantive analysis and work product of all sections
- Failure to participate in forensic science community

## Management Failures Lack of Quality Control

- No formal, Lab-wide QA/QC function or audits
- QA/QC became resting place for incompetent employee
- Lack of line supervisors in DNA Section
- No meaningful technical reviews
- Poor SOPs

#### Management Failures Isolation of the Lab

- Lab managers gave up on accreditation
- No outside audits of the Lab until 2002, which resulted in closure of DNA Section
- Defensive attitude about outside reviews
- Failure to communicate with and participate in forensic science community
- Result no perspective on how bad practices were

#### Management Failures Professional Development

- Training budgets among first to be cut
- Analysts not trained in basic concepts, including calculation of frequency estimates
- Ineffective performance evaluation system
- Failure to encourage individual analysts to join and participate in professional organizations

#### Management Failures Culture

- Failure to instill a scientific culture premised on the following principles
  - Documentation of work
  - Understanding of scientific principles
  - Critical thought applied to resolve issues with testing (re-test when necessary) and to answer forensically relevant questions
  - Scientific method conclusions flow from test results
  - Report all relevant results and state the significance of findings
  - Criminalists as scientists, not merely technicians

## Conclusions

- Rigorous, competent, and hands-on management is critical to success of any crime lab
- Support from local government and police agency is crucial
- Scientific culture and professionalism must be central in the training and development of analysts