



# Changes in Forensic Science

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# DNA EXONERATIONS

- **Litigation and Policy Reform**
- **350 exonerees**
- **Leading contributors**
  - **eyewitness misID**
  - **false confessions**
  - **misapplied forensic science**
  - **informant testimony**
  - **government misconduct**



**Misapplied Forensic Science  
(46%)**



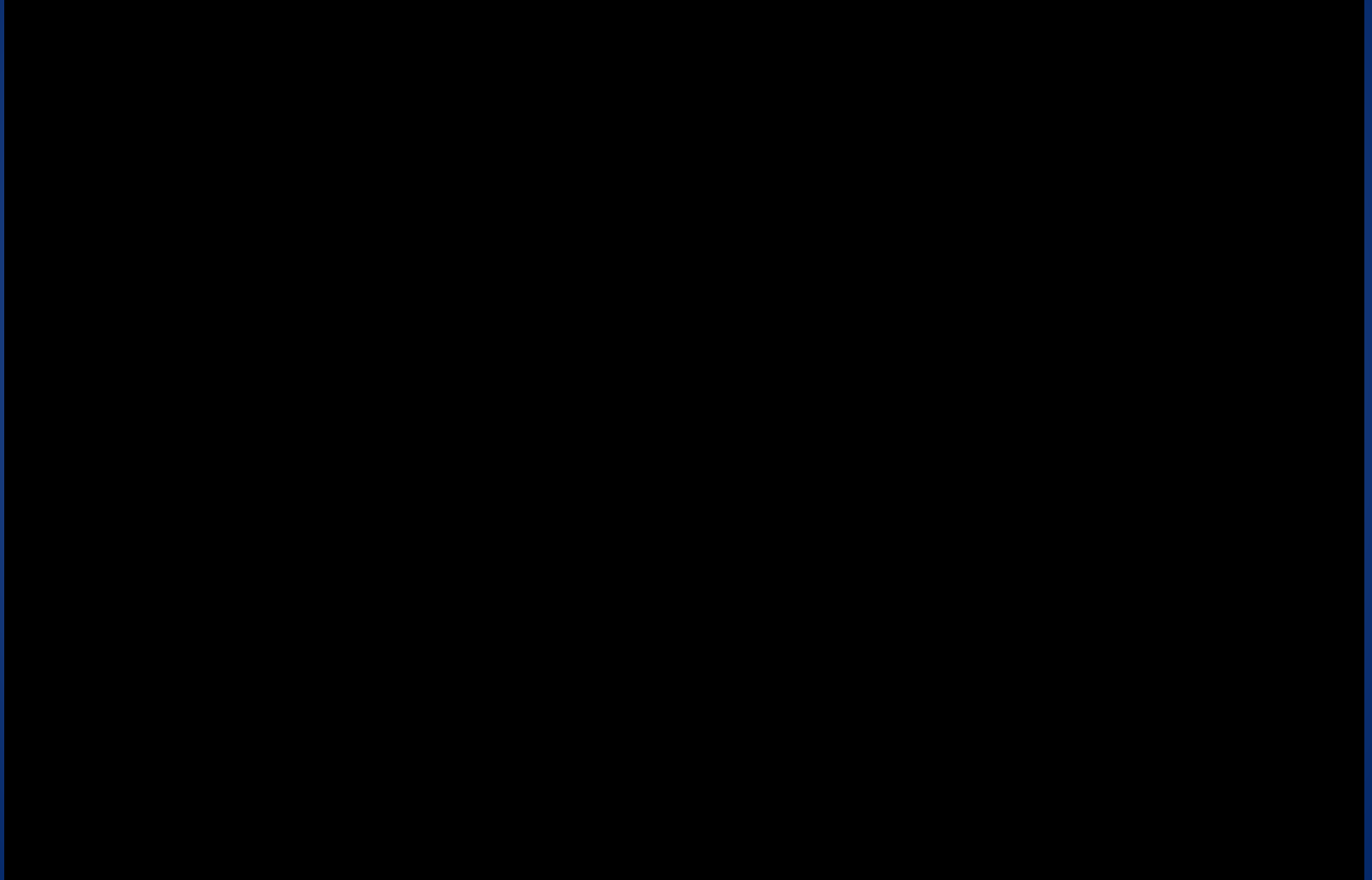
What does that mean?

Misleading Testimony

Mistakes

Misconduct

# Keith Harward's Story



# From a Trickle to a Flood...

- **National Fire Protection Agency Report (1992)**
- **FBI ceases use of CBLA or “bullet analysis” (2005)**
- **National Academy of Sciences report (2009)**
  - **Forensic Odontology or “bitemarks” found to have no scientific basis**
  - **Hair microscopy could not be used to identify individuals**
- **FBI Hair Review (2015)**
  - **Examined 268 cases in which microscopic hair analysis was used to convict**
- **PCAST Report (2016)**



# FBI HAIR REVIEW

In 2015, the FBI conducted a massive audit of cases involving the use of microscopic hair analysis, or “hair matching.”

3000 cases were identified involving such evidence. Of those that have been reviewed, the FBI found:

*Twenty six* out of 28 FBI examiners/analysts either provided testimony containing errors or submitted lab reports with errors

In 96% of cases (n=268) where examiners testified at trial on hair evidence which was used to link a defendant to a crime, there were serious errors in their testimony

In at least 35 of those 268 cases, defendants received the death penalty. Of these defendants

- Nine have been executed
- 5 died on death row of other causes



The FBI has trained *hundreds* of state hair examiners in the same flawed methodology.





# Support for Review



AMERICAN ACADEMY OF  
FORENSIC SCIENCES



# Statutory Reform

## Texas (2015)

- Creates mechanism for relief based on scientific evidence that was either unavailable at time of trial or contradicts scientific evidence presented by the state at trial
- Minimal fiscal note

## California (2014)

- Expands definition of false evidence to include expert repudiation or impeachment on the basis of later scientific research or technology

# Solutions?

In the absence of a remedy through caselaw, the legislature can step in to create a clear pathway for application for relief based on new scientific research and technology.

- **Creates efficiencies for the court**
- **Demonstrates a robust and adaptive system of justice**
- **Pathway for the innocent to regain lost liberty**
- **Increase public confidence in the system**

