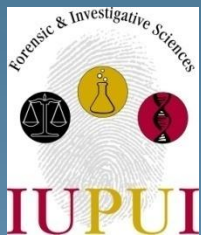


Forensic Science for the 21st Century – Tempe, AZ 3-4 April 2009

Forensic Science: Changing from within

Jay A. Siegel, Ph.D.

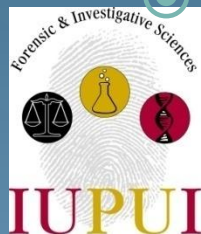
Director – Forensic and Investigative Sciences Program
Indiana University Purdue University, Indianapolis



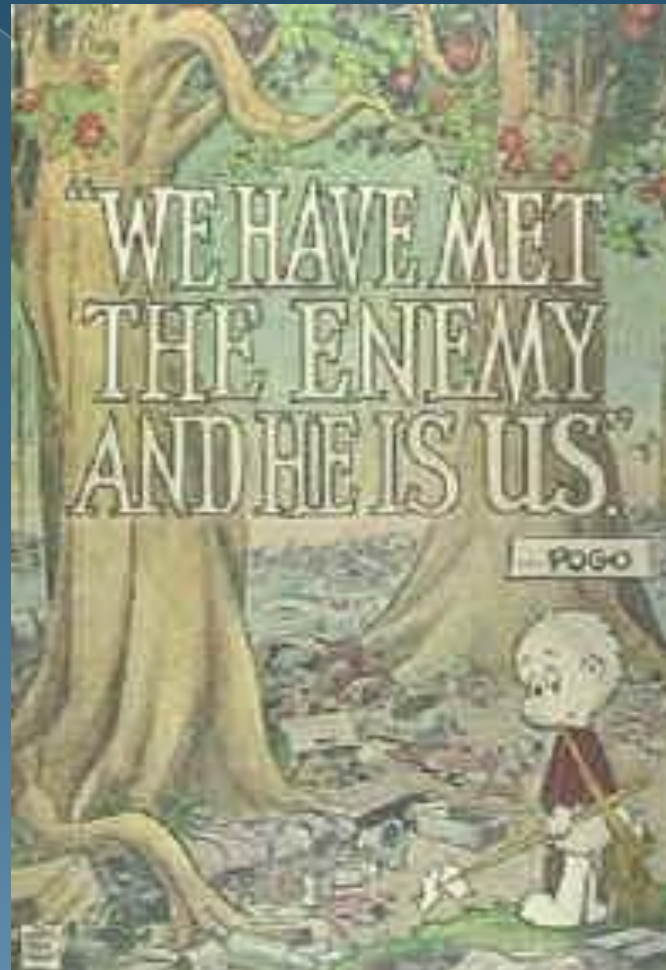


Who is to blame for the problems of forensic science?

- ◉ The Federal Government: \$\$\$\$\$\$
- ◉ The lawyers – They don't know science
- ◉ The judges – See: “The lawyers”
- ◉ The media – The CSI effect and unrealistic expectations
- ◉ The public – See: “The media”
- ◉ The police – Get the bad guys at all cost
- ◉ All of the above?

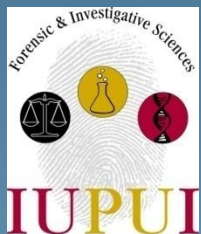


Who is to blame: forensic science itself



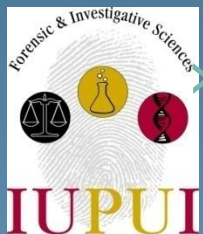
What can forensic science do?

- Make accreditation of ALL forensic science laboratories, public and private, **MANDATORY**
 - > ASCLD LAB – more than 300 public labs in U.S.
 - > ISO



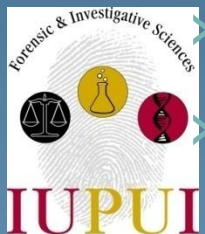
What can forensic science do?

- Make certification of ALL forensic scientists, public and private, **MANDATORY**
 - > American Board of Criminalistics
 - > National Association of Medical Examiners
 - > Society of Forensic Toxicologists
 - > American Society of Questioned Document Examiners
- Etc.



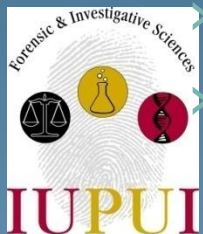
What can forensic science do?

- ◉ Develop a consensus code of ethics
- ◉ Put some teeth into it: Tie it to certification
- ◉ Present codes
 - > American Academy of Forensic Sciences
 - > California Association of Criminalists
 - > American Society of Crime Lab Directors
 - > International Association for Identification
 - > Etc.



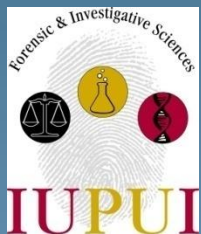
What can forensic science do?

- ◉ Develop consensus standards for evidence analysis for all types of evidence
- ◉ Methods must be validated
- ◉ Error rates must be determined
- ◉ Develop and implement rigorous QA/QC controls
- ◉ Present efforts
 - > ASTM – P30
 - > SWGs
 - > ASCLD LAB accreditation



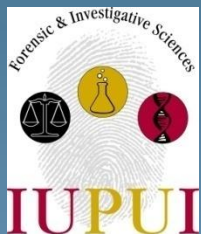
What can forensic science do?

- Develop standard, scientific, complete laboratory report formats that contain all relevant information about an examination
- Develop precise definitions for ambiguous terms or don't use them: “Match”, “Consistent with”



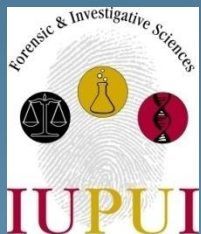
What can others do?

- Anyone affected by the NAS study:
READ THE NAS REPORT – THE WHOLE
THING – CAREFULLY
- Congress can create NIFS – AS AN
INDEPENDENT AGENCY WITH ADEQUATE
FUNDING



What can others do?

- Attorneys and Judges: Get it out of your head that this report somehow invalidates great swaths of forensic science and that we should throw open the prisons and let everyone out whose case involved fingerprints, firearms or questioned documents



The end

