What's Up with Human Factors

How Should Standards Minimize the 'B-Word' (Bias) in Forensic Science?

Human Factors Committee

AAFS Meeting,
Seattle,
February 20, 2018

Members

- Tom Albright, Salk Institute
- Hal Arkes, Ohio State University
- Deborah Davis, University of Nevada, Reno
- John Hollway, University of Pennsylvania
- Rick Lempert, University of Michigan; NSF
- Erin Morris, LA County Public Defender
- Michael Risinger, Seton Hall Law School
- Dan Simon, University of Southern California
- William Thompson, Chair, University of California, Irvine

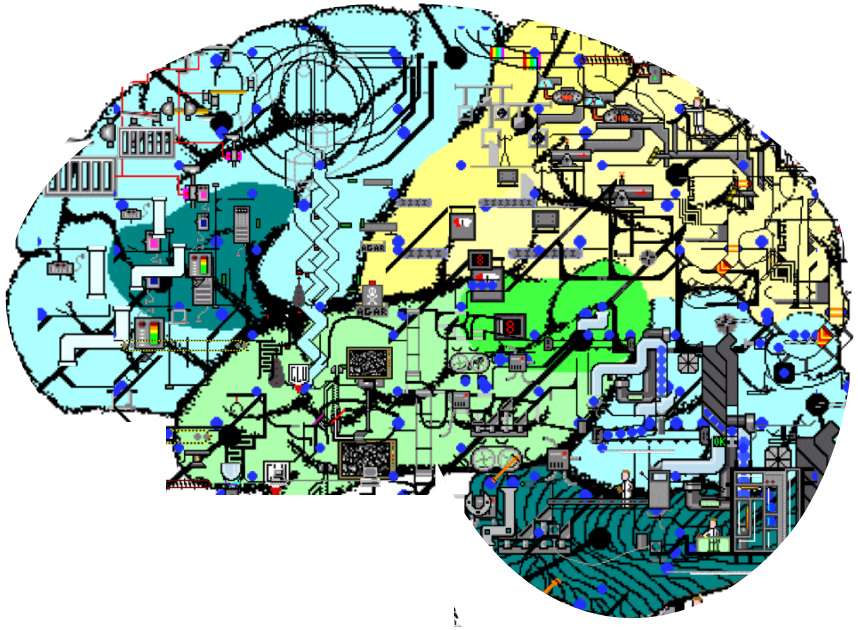
The Rise of "Cognitive Forensics"

…cognitive research is … making important contributions to [forensic science] The challenge for our profession is to encourage cognitive scientists to assist us…

--Bryan Found, *Australian J. Forensic Sciences* (2014)

Human Factors in Forensic Science

- What is the most important instrument in forensic science?
  - The human mind!

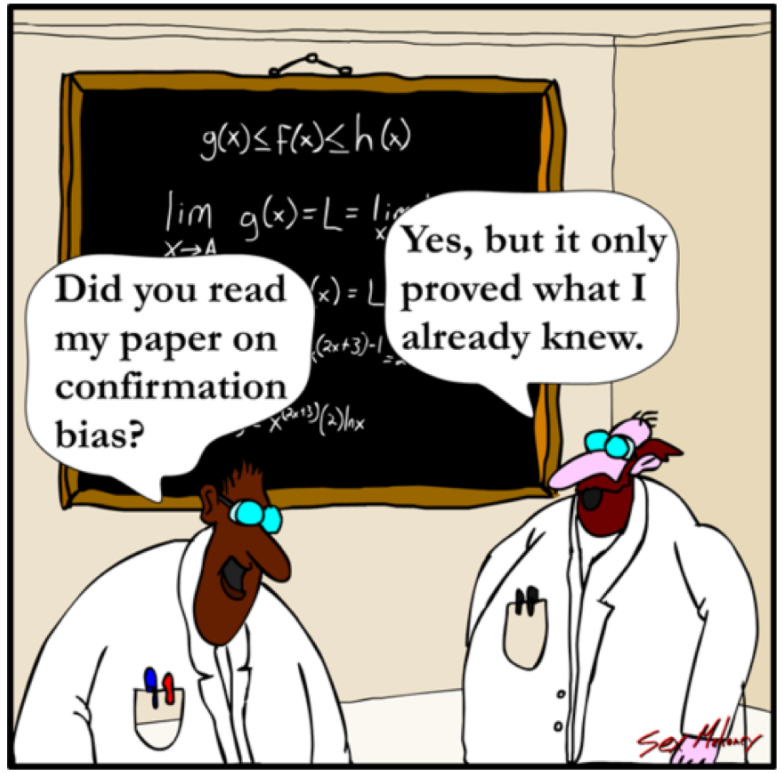


Special Concerns

- Reducing the potential for bias
- Improving assessment of examiner performance
- Improving communication of findings to lay audiences

Bias

- Identifying risks
- Proposing mitigation procedures
- Sharing examples of good practices
- Analyzing “task-relevance”
- Engaging with labs on research



Guidance on Testing Examiner Performance

- Purpose: validation; quality assurance; training
- Tips on: design, methods, analysis and reporting
- Engagement: OSAC-wide

Developing Standards for Reporting

- Criteria for Standards:
  - Justified logically and empirically
  - Understood by intended audience
- HFC Contributions
  - Identify strengths and weaknesses of reporting methods
  - Promote research
    - Interactions with CSAFE, labs, research community

Other Issues for HFC?

- Personnel selection
- Stress, fatigue and performance
- Forensic ergonomics
- Vicarious trauma
- You tell us…

We’re here to help…

Human Factors Committee