

Human Factors Resource Committee

William Thompson, Chair

A red circle with a dark red border. Inside the circle, the words "Human Factors Committee" are written in a bold, black, sans-serif font, stacked in three lines: "Human", "Factors", and "Committee".

**Human
Factors
Committee**

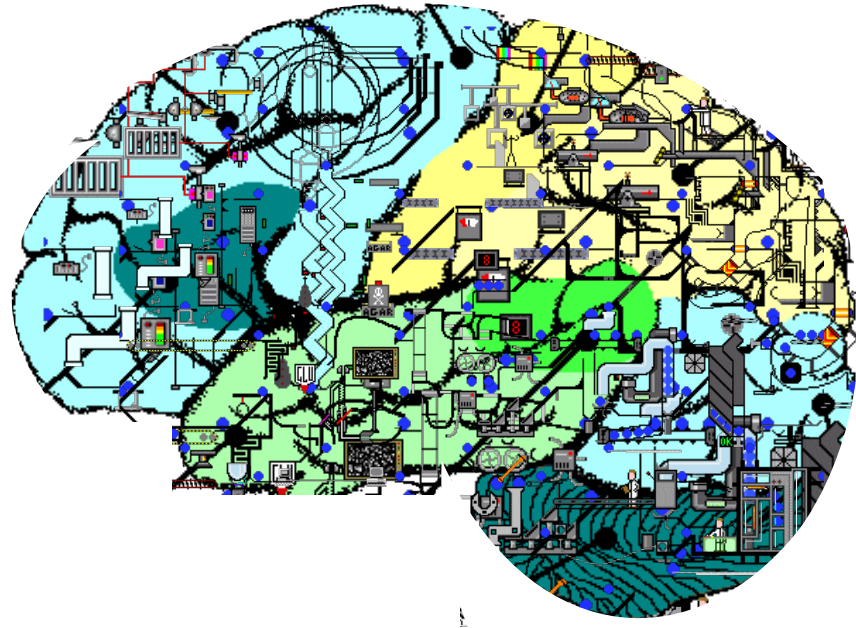
HFC 'Mission'

To serve as a resource to OSAC Members on issues related to human factors.



Most important instrument in Forensic Science

- The human mind!





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 Committee Members

William C. Thompson, Ph.D., J.D., Professor emeritus of Criminology, Psychological Science, and Law, University of California Irvine, Committee Chair

Thomas David Albright, Ph.D., Professor, The Salk Institute for Biological Studies

Hal R. Arkes, Ph.D., Professor of Psychology, emeritus, Ohio State University

Deborah Davis, Ph.D., Professor, University of Nevada, Reno

John F. Holloway, Associate Dean and Exec. Dir., Quattrone Center for the Fair Administration of Justice, University of Pennsylvania

Human Factors Committee Members

Richard Lempert, Ph.D., J.D., Distinguished University Professor of Law, and Sociology, emeritus, University of Michigan

Erin Morris, Ph.D., Behavioral Sciences Research Analyst, Los Angeles County Public Defender

D. Michael Risinger, J.D., Professor of Law, emeritus, Seton Hall University School of Law

Dan Simon, J.D. Professor of Law and Psychology, University of Southern California, Gould School of Law, and Department of Psychology

Affiliates



HFC Activities

- Review and comment on proposed standards
- Work with Subcommittees on standards development
- Provide background; briefing on issues
 - Presentations; discussions
 - Bibliographies
 - Academic Publications
 - Possible OSAC Technical Publication

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Bias

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



Publications by HFC Members and Affiliates on Management of Bias

- Thompson, W.C. & Scurich, N. How cross-examination on subjectivity and bias affects jurors' evaluations of forensic science evidence. *Journal of Forensic Sciences*, 2019.
- Simon, Dan (2019) "Minimizing Error and Bias in Death Investigations," *Seton Hall Law Review*: Vol. 49 : Iss. 2 , Article 1.
- Gardner, Kelley, Murrie & Blaisdell, Do evidence submission forms expose latent print examiners to task-irrelevant information? *Forensic Science International* (April 2019).
- Dror, I.E., Thompson, W.C., et al. (2015). Context management toolbox: A linear sequential unmasking (LSU) approach for minimizing cognitive bias in forensic decision making. *Journal of Forensic Sciences*, 60(4): 1111-1112.



Assessing Examiner Performance

- Why do it?
 - Validation, quality assurance, training
- HFC Activities
 - Standards development; background briefings
 - Engaging with labs on research

Rairden, Garrentt, Kelley, Murrie & Castillo, Resolving latent conflict: What happens when latent print examiners enter the cage. *Forensic Science International*, August 2018.

Proposed Technical Publication: Validation and Performance Testing in Forensic Science



- **Don't Panic (NOT A STANDARD!!!!!!)**
- Merely tips and suggestions
 - Design, methods, analysis and reporting of research;
 - Data gathering within labs
- Why do it?
 - Validation; quality assurance; training
- Engagement: OSAC-wide
- What if we don't want to do it?

Developing Standards for Reporting: HFC Activities

- Sharing Information
- Promoting Research & Publication
 - Interactions with CSAFE, labs, research community
 - Academic publications
- Developing Principles for Reporting
 - Justifiability
 - Transparency
 - Understandability



Thompson, W.C. (2018). How should forensic scientists present source conclusions? *Seton Hall Law Review*, 48(3): 774-813.

Thompson, W.C., Grady, R.H., Lai, E. & Stern, H. (2018). Perceived strength of forensic scientists' reporting statements about source conclusions. *Law, Probability & Risk*, 17(2): 133-155.

Other Issues for HFC?



- Vicarious trauma
- Negative evidence
- Informed consent
- Personnel selection
- Stress, fatigue and performance
- Forensic ergonomics
- You tell us...

HFC, Annotated Bibliography on Secondary Trauma (HFC OSAC Website)

Thompson, W.C. & Scurich, N. (2018). When does absence of evidence constitute evidence of absence? *Forensic Science International*, 291 e18-e19.

We're here to help...



Thank you

<https://www.nist.gov/topics/organization-scientific-area-committees-forensic-science>