

Max M. Houck

1600 University Avenue, 208 Oglebay Hall, Morgantown, WV 26506 max.houck@mail.wvu.edu, 304-293-7538

Career

2001-present West Virginia University, Morgantown, WV, *Director, Forensic Science Initiative*

- ▶ Direct multi-million dollar research, resource, and training initiative in forensic science
- ▶ Develop management and business resources in forensic science to define the industry
- ▶ Professor in Forensic and Investigative Sciences Program; adjunct Professor in Division of Sociology and Anthropology; Senior Instructor/Researcher, Department of Applied and Forensic Chemistry, Curtin University of Technology, Perth, Australia
- ▶ Private consultations

1994-2001 Federal Bureau of Investigation, Washington, D.C., *Physical Scientist, Trace Evidence Unit, Laboratory Division*

- ▶ Worked over 800 cases in trace evidence and anthropology; Testified in local, state, and federal courts for prosecution and defense
- ▶ Chairman of the Scientific Working Group for Materials Analysis
- ▶ Technical Liaison Manager with outside agencies (Secret Service; Bureau of Alcohol, Tobacco and Firearms; Smithsonian Institution, and others)
- ▶ Assisted DoD with identification of 9/11/01 Pentagon victims

1992-1994 Tarrant County Medical Examiner, Fort Worth, TX, *Criminalist II*

- ▶ Worked trace evidence cases for local municipalities
- ▶ Initiated and developed automated gunshot residue analysis by scanning electron microscopy/energy dispersive analysis
- ▶ Instituted forensic anthropology department in laboratory, including recovery of remains
- ▶ Coordinating anthropologist for the Branch Davidian Investigation, Waco, TX

1988-1992 Oxford Instruments, Inc., Madison, WI, *Applications Specialist*

1987-1988 Michigan State University, East Lansing, MI *Electron Microscopy Technician*

1982-1986 Michigan State University, East Lansing, MI *Archeologist, Research and Teaching Assistant*

Education

Current PhD candidate, Applied and Forensic Chemistry, Curtin University of Technology, Perth, Australia: *An Investigation into the Foundational Principles of Forensic Science Using Supply Chain Mechanics*

1988 M.A., Anthropology, Michigan State University, *Individualization of Toolmarks in Bone*

1984 B.S., Anthropology, Michigan State University, Outstanding Senior in Anthropology

Professional memberships

- Fellow, American Academy of Forensic Science
- Senior Member, American Association of Textile Chemists and Colorists
- International Association for Identification, Associate Member
- American Statistical Association
- American Association for the Advancement of Science
- American Society of Crime Laboratory Directors, Academic Member

000063

ADD00062

Max M. Houck

Awards

- ▶ Quality Award, FBI Laboratory, 1999
- ▶ American Society for Testing and Materials, Forensic Sciences Award, 2001
- ▶ Merit raise, West Virginia University, 2006, 2007
- ▶ Mary E. Cowan Outstanding Service Award, American Academy of Forensic Sciences, 2008

Journal Editor

- ▶ Co-editor and founder, *Journal of Forensic Science Policy and Management*, Taylor and Francis

Editorial Boards

- ▶ *Journal of Forensic Sciences*
- ▶ *Journal of Forensic Identification*
- ▶ *Science and Justice*

Committees

- ▶ Forensic Educational Program Accreditation Commission (FEPAC) Chairman (2005-current)
- ▶ Forensic Educational Program Accreditation Commission (FEPAC) Member (2003-current)
- ▶ Business Conference Advisory Panel, Nemaquin Woodlands Resort and Spa (2003)
- ▶ National Library of Medicine Planning Panel, History of Forensic Science exhibit, 2002-2003
- ▶ Science and Law Planning Panel, 2002 meeting
- ▶ Technical Working Group on Education and Training in Forensic Science
- ▶ Technical Working Group on Forensic Accounting and Fraud Investigation Curricula
- ▶ Technical Working Group on Digital Forensics Curricula
- ▶ American Association of Textile Chemists and Colorists. Committees: Color Measurement, Spectroscopy, Statistics
- ▶ ASTM Committee E30 on Forensic Sciences
- ▶ ASTM Committee E54 on Homeland Security
- ▶ Technical Support Working Group
- ▶ Imaging Technology Coordination Committee (FBI), Chairman, Standards and Practices
- ▶ AEGIS Council, Support (NonAgent) Employee Advisory Committee to the FBI Director (1997-1999). Addressed and mitigated FBI employee concerns with administration and reported to Director Freeh.
- ▶ AEGIS Representative for Division 7 (Laboratory), 1995-1997, 199-1999. Represented Division 7 employee concerns to AEGIS Council.
- ▶ Technical Advisory Panel, Revision of Standard Reference Collection of Forensic Science Materials: Status and Needs (1977), through Office of Law Enforcement Standards (OLEs) and National Institute of Technology and Standards (NIST).
- ▶ FBI Education Committee, reviewing scientific educational programs for Laboratory employees to receive advanced degrees.
- ▶ FBI Forensic Science Intern Program Committee, surveyed existing internships in forensic science graduate programs and suggested ways to implement a graduate forensic science internship at the FBI.

Keynote addresses and lectures

- ▶ Science and the Law: Nexus of Conflict and Resolution, 2003 Forum on Crime Laboratory Management for Criminal Justice Agencies, The Performance Institute, Arlington, VA, July 30-31.

000064

ADD00063

Max M. Houck

- ▶ Making Legal Evidence Count, Max Planck Institute Summer Course in Bounded Rationality, Berlin, Germany, August 13-22, 2003.

Books and book chapters

- Houck, MM and Gialamas, D. *The Management of Forensic Science*, Taylor and Francis, London, *in press*.
- Houck, MM and Bowen, RT, *The Ethical Practice of Forensic Science*, Taylor and Francis, London, *in press*.
- Houck, MM (ed) *Fiber Identification*, Woodhead Publishing, London, *in press*.
- Houck, MM *Science vs Crime*, Facts on File, New York, *in press*.
- Houck, MM *Trace Evidence*, Facts on File, New York, *in press*.
- Feder, H and Houck, MM 2008. *Feder's Succeeding as an Expert Witness*, Taylor and Francis, London.
- Houck, MM and Siegel, JA, 2006. *Fundamentals of Forensic Science*, Academic Press, San Diego.
- Houck, MM, Preparation of Witnesses (U.S.), 2005 *Encyclopedia of Legal and Forensic Medicine*, Corey, T., Henderson, C. (eds). Academic Press: San Diego.
- Houck, MM (editor), *Trace Evidence Analysis: More Cases from Mute Witnesses*, Academic Press: San Diego, 2003.
- Grieve, M. and Houck, MM, "Introduction", in Houck, MM (ed) *Trace Evidence Analysis: More Cases from Mute Witnesses*, Academic Press: San Diego, 2003.
- Houck, MM, "My Roommate is Using the Refrigerator", in Houck, MM (ed) *Trace Evidence Analysis: More Cases from Mute Witnesses*, Academic Press: San Diego, 2003.
- Houck, MM (editor), *Mute Witnesses: Trace Evidence Analysis*, Academic Press: San Diego, 2001.
- Houck, MM, "A Case of Cross Transfer", in Houck, MM (ed), *Mute Witnesses: Trace Evidence Analysis*, Academic Press: San Diego, 2001.
- Ryland, S and Houck MM, "Only Circumstantial Evidence," in Houck, MM (ed), *Mute Witnesses: Trace Evidence Analysis*, Academic Press: San Diego, 2001.
- Wiggins, K and Houck, MM, Introduction, in Houck, MM (ed), *Mute Witnesses: Trace Evidence Analysis*, Academic Press: San Diego, 2001.
- Siegel, J and Houck, MM, Chapter 36: Forensic Textile Fiber Analysis, In *Forensic Sciences* (3 vol.), C.

000065

ADD00064

Max M. Houck

Wecht, ed., 2001.

Houck, MM, 1998, Skeletal Trauma and the Individualization of Knife Marks in Bone, in *Forensic Osteology*, 2nd ed., Reichs K (ed.), 410424.

Publications

Houck, MM, *in press*, Forensic Science and Biometrics: What is the Difference? *Journal of Forensic Identification*.

Vatsa, M, Singh, R, Noore, A, Houck, MM, Morris, K. 2005, Robust biometric image watermarking for fingerprint and face template protection, *IEICE Electronics Express*, 3(2): 23-28.

Noore, A, Tungala, N, and Houck, MM. 2004, Embedding biometric identifiers in 2D barcodes for improved security, *Computers and Security* 23(8): 679-686.

Houck, MM, 2003, Inter-comparison of unrelated textiles, *Forensic Science International*, 135(2): 146-149.

Houck, MM, and Ubelaker, DH, 2002, Utilization of Radiocarbon Dating and Paleontological Extraction Techniques in the Analysis of a Human Skull in an Unusual Context, *Forensic Science Communications*, V4, N4, available: www.fbi.gov.

Houck, MM, and Budowle, B, 2002, Correlation of Microscopic and Mitochondrial DNA Analysis of Hairs, *Journal of Forensic Sciences*, V45, N5: 1-4.

Houck, MM, 2001, A bibliography of hair references for the forensic scientist, *Forensic Science Communications*, V4, N1, Available: www.fbi.gov.

Houck, MM, Menold, RE, Huff, R, and Lowe, P, 2001, Poly(trimethylene) terephthalate (PTT): A new type of polyester, *Forensic Science Communications*, V3, N3, Available: www.fbi.gov.

Houck, MM, 1999, Statistics and Trace Evidence: The Tyranny of Numbers, *Forensic Science Communications*, V1, N3, Available: www.fbi.gov.

Houck MM, Ubelaker DH, Owsley DW, Craig EA, Grant WE, Fram R, Woltanski T, Sandness KL, 1996, The Role of Forensic Anthropology in the Recovery and Analysis of Branch Davidian Compound Victims: Assessing the Accuracy of Age Estimations, *Journal of Forensic Sciences*, 41(5): 796801.

Singer RL, Davis D, and Houck MM, 1996, A Survey of Gunshot Residue Analysis Methods, *Journal of Forensic Sciences*, 41(2):195198.

Ubelaker DH, Owsley DW, Houck MM, Craig EA, Grant WE, Woltanski T, Fram R, Sandness KL, and Peerwani N, 1995, The Role of Forensic Anthropology in the Recovery and Analysis of Branch Davidian

000066

ADD00065

Max M. Houck

Compound Victims: Recovery Procedures and Characteristics of the Victims, *Journal of Forensic Sciences*, 40(3): 335340.

Owsley DW, Ubelaker DH, Houck MM, Sandness KL, Grant WE, Craig EA, et al., 1995, The Role of Forensic Anthropology in the Recovery and Analysis of Branch Davidian Compound Victims: Techniques of Analysis, *Journal of Forensic Sciences*, 40(3): 341348.

Houck, MM, 1994, Peak Performance Column, *The SEMinar*, FBI Publication. (Publication ended 1995).

Houck, MM, 1992, Logical Conclusions From Pattern Analysis: Matches, NonMatches and Exclusions, *Journal of the Canadian Society of Forensic Sciences*, 25(1): 25-29.

Houck, MM, 1992, Microscopy in Forensic Science, *Microscopy Today*, July.

Houck, MM, 1992, Gunshot Residue Analysis by SEM/EDS, *Microscopy Today*, August.

Houck, MM, 1989, Microanalysis of the Earliest French Issue Coins in the New World, *Midwest Microscopy*, 20(1), 24-30.

Skowronek R and Houck MM, 1990, The NonDestructive Identification of the Worn Coins from the Marquette Mission Site, St. Ignace, Michigan, *American Antiquity*, 55(2): 337-347.

Houck, MM, 1987, Histological Analysis of Bone: 20WA176, *Michigan Archaeologist*, 33

I have made hundreds of scientific and popular presentations on a wide variety of topics in forensic science. The topics include forensic science, trace evidence, the philosophy of forensic science, management issues, and forensic science education.

000067

ADD00066