

Angi M. Christensen, PhD

Forensic Anthropologist
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EDUCATION

The University of Tennessee (1998-2003)

Degrees: Doctor of Philosophy (August 2003), Master of Arts (May 2000)
Major: Anthropology with an emphasis on forensic anthropology

University of Washington (1993-1997)

Degree: Bachelor of Arts (August 1997)
Major: Anthropology with an emphasis on physical anthropology and human anatomy

PROFESSIONAL EXPERIENCE

Federal Bureau of Investigation Laboratory – Quantico, Virginia June 2006-present

Physical Scientist, Forensic Examiner (Anthropology): Responsibilities include performing and reporting forensic anthropological examinations, providing field assistance with detection and recovery of remains, conducting research and validation, and providing training, teaching and outreach in forensic anthropology. Responsibilities also include serving as a Technical Manager in Forensic Anthropology, and as the Unit Travel Coordinator.

George Mason University – Fairfax, Virginia February 2011-present

Adjunct Professor of Forensic Science: Responsibilities include instruction of graduate courses in forensic anthropology and advising graduate research.

Federal Bureau of Investigation Laboratory – Quantico, Virginia September 2004-April 2010

Physical Scientist, Trace Evidence Technician (February 2005-April 2010): Responsibilities included collection of trace evidence, identification of potential hairs and fibers, and preservation of evidence on glass microscope slides.

Physical Scientist, Evidence Analyst (September 2004-October 2005): Responsibilities included evidence management.

Forensic Anthropology Consultation – Knoxville, Tennessee September 2003-September 2004

Consultant: Responsibilities included independent advising, assistance and anthropological analysis.

Tennessee Valley Authority Police – Knoxville, Tennessee September 1999-July 2003

Intern: Responsibilities included instructing training courses on forensic anthropology, assisting with TVA jurisdiction death investigation cases, collecting data on regional fire deaths, and conducting computer fire modeling analysis.

The University of Tennessee, Department of Anthropology – Knoxville, Tennessee December 1998-May 2003

Graduate Assistant, Forensic Anthropology Center (August 1999-May 2003): Responsibilities included recovery and analysis of forensic remains, skeletal collection and database management, providing training, and teaching graduate courses.

Laboratory Assistant, Zooarchaeology Laboratory (July-August 1999, July-September 2000): Responsibilities included processing marmoset remains for research.

Laboratory Assistant, Contract Archaeology (December 1998-December 1999): Responsibilities included artifact processing, flotation, labeling, database management, and computer graphics.

University of Washington, Infant Primate Research Laboratory – Seattle, Washington June 1995-June 1997

Research Assistant and Project Co-coordinator: Responsibilities included taking and analyzing anthropometric assessments and radiographs of infant macaques.

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

American Academy of Forensic Sciences (AAFS)

Fellow, Physical Anthropology Section 2010-present
2013 Program Committee 2012-2013
Member since 1996

Meetings attended: Atlanta 2012, Chicago 2011, Seattle 2010, Denver 2009, Washington DC 2008, San Antonio 2007, New Orleans 2005, Dallas 2004, Chicago 2003, Atlanta 2002, Seattle 2001, Orlando 1999

Scientific Working Group for Forensic Anthropology (SWGANTH)

Board Member 2008-present

Vice-Chair 2011-present

Secretary 2008-2011

Meetings attended: Honolulu 2012, Washington DC 2011, Honolulu 2011, Washington DC 2010, Honolulu 2010, Washington DC 2009, Honolulu 1/2008, Rockville 5/2008, Honolulu 11/2008

Scientific Working Group on Disaster Victim Identification (SWGDI)

Advisory Member, Anthropology Subcommittee 2011-present

Advisory Member, Reconciliation Subcommittee 2012-present

Meetings attended: Washington DC 2012, Washington DC 4/2011, Washington DC 8/2011, Washington DC 2010

Scientific Working Group on Medicolegal Death Investigation (SWGMDI)

Meetings attended: Pittsburgh 2011, Washington DC (teleconference) 2011

National Institute of Justice (NIJ) Technology Working Group

Member 2012-present

Meetings attended: Arlington 2012

International Academy of Legal Medicine (IALM)

Member 2012-present

Forensic Anthropology Society of Europe (FASE)

Member 2012-present

International Association for Identification (IAI)

Active Member 2006-present

Forensic Anthropology Subcommittee 2008-present

Meetings attended: Tampa 2009, Louisville 2008

American Association of Physical Anthropologists (AAPA)

Member 1999-present

Meetings attended: Columbus 2008, Philadelphia 2007, Milwaukee 2005, Tampa 2004, Buffalo 2002, Kansas City 2001, Columbus 1999

Society of Forensic Anthropologists (SOFA)

Member 2011-present

Meetings attended: Atlanta 2012, Chicago 2011

Smithsonian Institution, National Museum of Natural History (NMNH)

Research Collaborator, November 2007-present

American Society of Crime Laboratory Directors Laboratory Accreditation Board (ASCLD/LAB)

Technical Assessor 2012-present

Research Peer Review

Serve as a peer-reviewer for:

American Journal of Physical Anthropology

Forensic Science Communications

Forensic Science International

International Journal of Osteoarchaeology

Journal of Forensic Identification

Journal of Forensic Sciences

NIJ Forensic Science Research and Development

Office of Justice Programs

Mid-Atlantic Forensic Identification Group (MAFIG)

Member 2007-present

Disaster Mortuary Operational Response Team (DMORT)

Forensic Anthropologist May 2004-April 2008

Young Forensic Scientists Forum (YFSF)

Member 1998-2005

Co-chair, Special Projects Committee 1999-2000

Meetings attended: New Orleans 2005, Orlando 1999

International Homicide Investigators Association

Meetings attended: Sparks, NV 2010

Mid-Atlantic Association of Forensic Scientists

Meetings attended: Washington, DC 2007

Geological Society of America

Meetings attended: Camp Hill 2006

Mountain, Swamp and Beach Regional Forensic Anthropology Meetings

Meetings attended: Knoxville 2002, Knoxville 2000, Columbia 1999, Knoxville 1998

FRENZY Forensic Sciences and Crime Scene Technology Conference and Exposition

Meetings attended: Washington, D.C. 2001

TRAINING AND PROFESSIONAL DEVELOPMENT

The Anatomy of Error: Dissecting Adverse Events to Strengthen the Forensic Sciences

February 21, 2012 (8 hours)

AAFS Annual Scientific Meeting, Atlanta GA

Measurement Confidence:

100A Measurement Traceability

100B Measurement Assurance

100C Measurement Uncertainty

February 7-9, 2012 (6 hours)

ASCLD/LAB, Webinar courses

ASCLD/LAB Assessor Course

December 12-16, 2011 (40 hours)

ASCLD/LAB, Alexandria VA

Face Recognition Workshop: From Bones to Bits

October 19-20, 2011 (14 hours)

Central Intelligence Agency, Herndon VA

Digital Crime Scene Diagramming

September 19-23, 2011 (40 hours)

FBI Laboratory (ERTU), Fredericksburg VA

Syracuse University Dialogues in Forensic Science:

Beyond the NAS Report October 14-16, 2011 (18 hours)

Field Challenges June 17-19, 2011 (28 hours)

Trauma II – Blast Trauma June 14-16, 2011 (28 hours)

New Techniques for Identification March 18-20, 2011 (28 hours)

Syracuse University, Syracuse NY

H₂O Criminalistics and Pathology Symposium

November 18-21, 2010 (40 hours)

Magna Graecia University, Catanzaro Italy

Instructor Development Course

September 8-14, 2010 (48 hours)

FBI Academy, Quantico VA

Forensic Death Investigation Symposium

June 7-9, 2010 (20 hours)

National Institute of Justice, Scottsdale AZ

Forensic Dental Identification

May 3-7, 2010 (40 hours)

Armed Forces Institute of Pathology, Scottsdale AZ

Taphonomy of Bone Destruction

February 22, 2010 (7 hours)

AAFS Annual Scientific Meeting, Seattle WA

Forensic Bone Histology

July 13-15, 2009 (24 hours)

Armed Forces Institute of Pathology, Silver Spring MD

Underwater Post-Blast Investigator Course

June 9-11, 2009; September 22-24, 2008 (24 hours)

FBI Laboratory (USERT), Manassas VA

Quality Assurance in Human Identification

February 16, 2009 (5 hours)

AAFS Annual Scientific Meeting, Denver CO

Measurements, Statistics, Terminology and Quantitative Methods: Uses and Interpretations in Physical/Forensic Anthropology

February 19, 2008 (7 hours)

AAFS Annual Scientific Meeting, Washington DC

Mass Fatality Incidents for Medicolegal Professionals

October 23-26, 2007 (30 hours)

National Transportation Safety Board, Ashburn VA

The Incident Command System:

Introduction to the Incident Command System

ICS for Single Resources and Initial Action Incidents

National Incident Management System

National Response Plan

October 1-9, 2007 (9 hours)

Emergency Management Institute (FEMA), Online courses

Anthropological Analysis of Saw Marks

December 15, 2006 (8 hours)

FBI Laboratory (FTU), Quantico VA

Cadaver Dog and Underwater Search and Evidence Response Team (USERT) Training Courses

June 6-9, 2006; September 6-9, 2005 (30 hours)

FBI Laboratory (ERTU), Willingsboro Township NJ, Gallatin TN

Forensic Mitochondrial DNA

June 13-17, 2005 (5 hours)

FBI Laboratory (mtDNA), Quantico VA

Evidence Response Team Basic Crime Scene Course

May 2-12, 2005 (80 hours)

FBI Laboratory (ERTU), Quantico VA

Multijurisdictional Counterdrug Task Force Training – Clandestine Laboratory Investigations I: Safety, Awareness and Basic Case Development

June 26-27, 2002 (16 hours)

Appalachia HIDTA, Knoxville TN

PEER-REVIEWED PUBLICATIONS

- In Press **Christensen AM**, Smith VA. Rib butterfly fractures as a possible indicator of blast trauma. *Journal of Forensic Sciences*.
- 2012 **Christensen AM**, Smith MA, Thomas RM. Validation of X-ray fluorescence spectrometry to determine osseous or dental origin of unknown material. *Journal of Forensic Sciences* 57(1):47-51.
- 2012 **Christensen AM**, Smith VA, Ramos V, Shegogue C, Whitworth WM. Primary and secondary skeletal blast trauma. *Journal of Forensic Sciences* 57(1):6-11.
- 2011 **Christensen AM**, Myers SW. Macroscopic observations of the effects of varying fresh water pH on bone. *Journal of Forensic Sciences* 56(2):475-479.
- 2010 Smith VA, **Christensen AM**, Myers SW. The reliability of visually comparing small frontal sinuses. *Journal of Forensic Sciences* 55(6):1413-1415.
- 2009 **Christensen AM**. Techniques for siding manual phalanges. *Forensic Science International* 193:84-87.
- 2009 **Christensen AM**, Lowe WM, Reinecke GW. The "forensic bulldozer" as a clandestine grave search tool. *Forensic Science Communications* 11(4).
- 2009 **Christensen AM**, Crowder CM. Evidentiary standards for forensic anthropology. *Journal of Forensic Sciences* 54(6):1211-1216.
- 2008 Chewning DD, Deaver KL, **Christensen AM**. Persistence of Fibers on Ski Masks during Transit and Processing. *Forensic Science Communications* 10(3).
- 2008 **Christensen AM**, Sylvester AD. Physical matches of bone, shell and tooth fragments: A validation study. *Journal of Forensic Sciences* 53(3):694-698.
- 2006 Sylvester AD, **Christensen AM**, Kramer PA. Factors influencing osteological changes in the hands and fingers of rock climbers. *Journal of Anatomy* 209(5):597-610.
- 2006 **Christensen AM**. Moral considerations in body donation for scientific research: A unique look at the University of Tennessee's Anthropological Research Facility. *Bioethics* 20(3):136-145.
- 2005 **Christensen AM**. Assessing the variation in individual frontal sinus outlines. *American Journal of Physical Anthropology* 127(3):291-295.
- 2005 **Christensen AM**. Testing the reliability of frontal sinus outlines in personal identification. *Journal of Forensic Sciences* 50(1):18-22.
- 2004 **Christensen AM**. The impact of *Daubert*: Implications for testimony and research in forensic anthropology (and the use of frontal sinuses in personal identification). *Journal of Forensic Sciences* 49(3):427-430.
- 2004 **Christensen AM**. The influence of behavior on free fall injury patterns: Possible implications for forensic anthropological investigations. *Journal of Forensic Sciences* 49(1):5-10.
- 2004 **Christensen AM**, Icove DJ. The application of NIST's Fire Dynamics Simulator to the investigation of carbon monoxide exposure in the deaths of three Pittsburgh firefighters. *Journal of Forensic Sciences* 49(1):104-107.
- 2002 **Christensen AM**. Experiments in the combustibility of the human body. *Journal of Forensic Sciences* 47(3):466-470.

OTHER PUBLISHED WORKS

- In Press **Christensen AM**, Anderson, BE. Methods of personal identification. In *Forensic Anthropology: An Introduction*. MT Tersigni-Tarrant and N Shirley, eds.
- 2010 **Christensen AM**. The FBI Laboratory's New Forensic Anthropology Program. *The Investigator* July/August; 19-20.
- 2003 **Christensen AM**. An Empirical Examination of Frontal Sinus Outline Variability Using Elliptic Fourier Analysis: Implications for Identification, Standardization, and Legal Admissibility. The University of Tennessee [PhD dissertation].
- 2000 **Christensen AM**. Debunking the Spontaneous Human Combustion Myth: Experiments in the Combustibility of the Human Body. The University of Tennessee [MA thesis].

PROFESSIONAL PRESENTATIONS (PUBLISHED ABSTRACTS)

- 2012 Holland TD, **Christensen AM**. Recent activities of the Scientific Working Group for Forensic Anthropology (SWGANTH). Proceedings of the 64th Annual Meeting of the AAFS February 20-25; Atlanta, GA.
- 2011 **Christensen AM**, Smith MA, Thomas RM. Validation of X-ray fluorescence spectrometry (XRF) to determine osseous or dental origin of unknown material. Proceedings of the 63rd Annual Meeting of the AAFS February 20-26; Chicago, IL.
- 2011 Smith VA, **Christensen AM**. Analysis of primary blast rib fractures. Proceedings of the 63rd Annual Meeting of the AAFS February 20-26; Chicago, IL.
- 2011 **Christensen AM**, Crowder CM, Ousley SD, Houck MM. Error, error rates, and their meanings in forensic science. Proceedings of the 63rd Annual Meeting of the AAFS February 20-26; Chicago, IL.
- 2010 **Christensen AM**, Ramos V, Sanford R, Shegogue C, Smith VA, Whitworth WM. Primary and secondary skeletal blast trauma. Proceedings of the 62nd Annual Meeting of the AAFS February 22-27; Seattle, WA.
- 2010 **Christensen AM**, Horn KJ, Myers SW. The effects of varying pH on bone in aquatic environments. Proceedings of the 62nd Annual Meeting of the AAFS February 22-27; Seattle, WA.
- 2010 Holland T, **Christensen AM**, et al. The Scientific Working Group for Forensic Anthropology. Proceedings of the 62nd Annual Meeting of the AAFS February 22-27; Seattle, WA.
- 2009 Smith VA, **Christensen AM**, Myers SW. The reliability of visually comparing small frontal sinuses. Proceedings of the 61st Annual Meeting of the AAFS February 16-21; Denver, CO.
- 2008 **Christensen AM**. Putting your scientific expertise to work: Suggestions for science education activism in your community. Proceedings of the 77th Annual Meeting of the AAPA April 7-12; Columbus, OH.
- 2008 Smith VA, Carroll BJ, **Christensen AM**. Expert witnesses as science educators. Proceedings of the 77th Annual Meeting of the AAPA April 7-12; Columbus, OH.
- 2008 **Christensen AM**, Crowder CM, Rogers T. Evidentiary standards for forensic anthropology. Proceedings of the 60th Annual Meeting of the AAFS February 18-23; Washington, DC.
- 2007 Chewning DD, Deaver KL, **Christensen AM**. Inside vs. outside: Fact or fiction? Proceedings of the NIJ/FBI Trace Evidence Symposium August 13-16; Clearwater Beach, FL.
- 2007 **Christensen AM**, Sylvester AD. Physical matches between bone, shell, and tooth fragments: A validation study. Proceedings of the 59th Annual Meeting of the AAFS February 19-24; San Antonio, TX.
- 2005 **Christensen AM**, Sylvester AD, Kramer PA, Lubke GH. Factors influencing osteological changes in the hands of rock climbers. Proceedings of the 74th Annual Meeting of the AAPA April 6-9; Milwaukee, WI.
- 2005 **Christensen AM**, Hobbs AL. Forensic science at the FBI Laboratory. Proceedings of the 57th Annual Meeting of the AAFS February 21-26; New Orleans, LA.
- 2004 **Christensen AM**. Assessing the uniqueness of frontal sinus outlines using elliptic Fourier analysis. Proceedings of the 73rd Annual Meeting of the AAPA April 14-17; Tampa, FL.
- 2004 **Christensen AM**. Testing the reliability of frontal sinuses in positive identification using elliptic Fourier analysis. Proceedings of the 56th Annual Meeting of the AAFS February 16-21; Dallas, TX.
- 2003 **Christensen AM**. The influence of behavior on free fall injury patterns: Possible implications for forensic anthropological investigations. Proceedings of the 55th Annual Meeting of the AAFS February 17-22; Chicago, IL.
- 2003 **Christensen AM**, Icove DJ. The application of NIST's Fire Dynamics Simulator to tenability analysis and fire death investigations. Proceedings of the 55th Annual Meeting of AAFS February 17-22; Chicago, IL.
- 2002 **Christensen AM**, Slice D. New morphometric approaches to positive identification from frontal sinuses. Proceedings of the 71st Annual Meeting of the AAPA April 9-13; Buffalo, NY.
- 2002 **Christensen AM**. The impact of *Daubert* on testimony and research in forensic anthropology. Proceedings of the 54th Annual Meeting of the AAFS February 11-16; Atlanta, GA.
- 2001 **Christensen AM**. Experiments in the combustibility of the human body. Proceedings of the 53rd Annual Meeting of the AAFS February 19-24; Seattle, WA.