

***CURRICULUM VITAE*****Communication**

Office of Chief Medical Examiner – NYC  
Forensic Anthropology Unit  
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**Education / Certification**

- 2010            **Board Certified: Diplomate American Board Forensic Anthropology**, Number 83
- 2005            **Doctor of Philosophy in Biological Anthropology**  
University of Toronto, Toronto, Ontario, CA.  
Dissertation: *Evaluating the use of quantitative bone histology to estimate adult age at death.*
- 2001            **Master of Arts in Anthropology**  
University of Texas at Arlington, Arlington, TX.  
Thesis: *Epiphyseal fusion of the distal tibia and fibula of a modern American population: A radiographic study.*
- 1996            **Bachelor of Arts in Anthropology with minor in Biology**  
Texas A&M University, College Station, TX.

**Professional Experience**

- 2006-present    *Forensic Anthropologist*, Office of Chief Medical Examiner New York City.  
Deputy Director of the Forensic Anthropology Unit (FAU) responsible for daily anthropological casework for the five boroughs of NYC (Manhattan, the Bronx, Brooklyn, Queens, and Staten Island). The FAU handles approximately 150 cases per year. These may include, but are not limited to, cases involving skeletal remains, decomposed remains, burned remains, unidentified individuals, trauma interpretation, and determination of human vs. non-human. Other duties include:
- Assisting the director with coordinating the daily operations of the FAU.
  - Managing the archaeological team and continued recovery operations in and around the World Trade Center.
  - Being a key member of the Special Operations Team and acting as the Fatality Management Branch Director for mass fatality incident operations.
  - Training OCME and law enforcement personnel on laboratory and field techniques relating to Forensic Anthropology.
  - Development and operation of the OCME's hard tissue histology laboratory.
  - Mentor visiting scientists and researchers.
- 2005-2006      *Forensic Anthropologist*, Joint POW/MIA Accounting Command Central Identification Laboratory, Hawaii (JPAC-CIL). Recovery Team Leader and Anthropologist for the recovery and identification of unaccounted US service members from past conflicts.

### **Professional Experience (continued)**

- 2002                    *Osteological Consultant*, Albany Almshouse Cemetery Project, Albany, NY  
Assisted in the examination of over 500 skeletal remains from a pauper's cemetery.  
Performed field assessments, excavated burials, and analyzed remains.
- 2000                    *Assistant Forensic Anthropologist*, United Nations' International Tribunal for Crimes  
in the Former Yugoslavia (ICTY), Kosovo. Performed field assessments, excavated  
burials, and analyzed remains (biological profile, fracture reconstruction, trauma  
interpretation).
- 1999–2000            *Forensic Anthropology Intern*, Tarrant County Medical Examiner's Office in Fort  
Worth, TX. Assisted the TCME forensic anthropologist with daily duties. Assisted  
with search and recovery of remains, gross bone and radiographic examinations,  
trauma analysis, basic trace evidence analysis and evidence handling.
- 1995-1996            *Osteology Laboratory Assistant*, Department of Anthropology, Texas A&M  
University. Volunteer work for Dr. Gentry Steele. Assisted with the inventory of  
Native American skeletal material from the San Juan Capistrano site in accordance  
with NAGPRA.

### **Related Work Experience**

- 2000–2001            *Tissue Procurement Technician*, Community Tissue Services, Fort Worth, TX.  
Procured bones, skin, veins, tendons, and heart valves from tissue donors. Position  
provided training in surgical techniques and the handling of infectious materials.

### **Academic Appointments**

- 2008–Present            *Adjunct Professor*, Department of Forensic Sciences. Pace University, NY, NY.  
    ○ Courses: Forensic Anthropology (FOR 705)  
                  Forensic Anthropology Short Course (Summer Scholars)
- 2006–Present            *Clinical Professor*, New York University Medical Center, NY, NY.
- 2006–Present            *Affiliated Faculty*, Department of Anthropology, New York University, NY, NY.
- 2007–2009            *Lecturer*, Summer Scholars Program, Pace University, NY, NY.  
    ○ Courses: Forensic Anthropology Short Course (Summer Scholars)
- 2006–2008            *Adjunct Professor*, Department of Anthropology, Hunter College, NY, NY.  
    ○ Courses: Human Variation (ANTHP102 – Lab Section)  
                  Introduction to Human Evolution (ANTHP101 – Lab Section)
- 2001–2005            *Teaching Assistant*, Department of Anthropology, University of Toronto, Toronto,  
Ontario, CA.  
    ○ Courses: Advanced Forensic Anthropology (ANT439Y)  
                  Forensic Archaeology (ANT306H)  
                  Human Osteology (ANT334Y)  
                  Introduction to Anthropology (ANT100)  
                  Biological Lab Methods (ANT338H)
- 1999–2000            *Graduate Instructor*, Department of Anthropology, University of Texas at Arlington,  
Arlington, TX.  
    ○ Courses: Introduction to Anthropology (ANTH1306)

## Theses and Research Directed

### MA Theses

- Amelia Baxter-Stoltzfus – *Quantitative Bone Histology as a Predictor of Skeletal Health*. Department of Anthropology, New York University (expected Spring 2012).
- Sophia Mavroudas – *Comparison of Gross Age Indicators and Histological Age Indicators for Estimating Adult Age at Death*. Department of Anthropology, New York University (Fall 2011).
- Victoria Dominguez – *The Utility of Osteon Shape and Circularity for Differentiating Human from Non-human Haversian bone*. Department of Anthropology, New York University (Spring 2011).
- Megan Ingvoldstad – *Differential Decomposition in Mass Burials*. Department of Anthropology, New York University (Spring 2009).

### Research

- Katherine McCullough – *Histological Evaluation of Cremated Bone from the Early Anglo-Saxon period (450-650 A.D.)*. Department of Anthropology, New York University (2011-2012).
- Janna Andronowski – *The Evaluation of Bone Area as a Histomorphometric Variable for Estimating Age at Death*. Department of Anthropology, University of Toronto, Ontario, CAN (2010-2011).
- Deborah Pinto – Post doctorate research exploring bone formation rates in a cadaveric rib sample from the University of Cape Town, University of Toronto, Ontario, CAN. (2010)

## Research Interests

- Refining current age estimating standards with a focus on the analysis of error.
- The use of quantitative and qualitative bone histology to improve adult age estimation.
- Trauma interpretation in juvenile remains.
- Interpretation of sharp force trauma caused by serrated and non-serrated blades.
- Functional anatomy at the histological level

## Grants

- |           |   |
|-----------|---|
| 2010      | Grant supported by Award No. 2010-DN-BX-K035, awarded by the National Institute of Justice, Office of Justice Programs, US Department of Justice (\$114,263.00). Project title: <i>Estimation of Age at Death using Cortical Bone Histomorphometry</i> . Author: <b>C. Crowder</b> .                              |
| 2009      | Grant supported by Award No. 2009-DN-BX-K238, awarded by the National Institute of Justice, Office of Justice Programs, US Department of Justice (\$45,000). Project title: <i>Microscopic Analysis of Sharp Force Trauma in Bone and Cartilage</i> . Coauthors: <b>C. Crowder</b> , C. Rainwater, and J. Fridie. |
| 2003–2004 | School of Graduate Studies research travel grant, University of Toronto (\$1,500 CAD).  |
| 2001–2005 | University of Toronto Travel Grants for Conference Participation (\$500 CAD/yr).  |

## **Awards, Scholarships and Fellowships**

- 2012            *Ellis R. Kerley Award.* Award given by the Kerley Forensic Sciences Foundation for the paper best demonstrating originality, creativity, depth of research, innovation, new methodologies, research design, significance to the field, and/or potential impact on the practices of forensic anthropology. February 2012. (\$1,000).
- 2005            Oak Ridge Institute of Science and Education (ORISE) Fellowship (65,000 USD). Program for anthropologists to work at the JPAC Central Identification Laboratory in Hawaii who have recently completed their PhD and have experience with human osteology and archaeology.
- 2003            Canadian Society of Forensic Sciences Student Paper Award, Presented at the CSFS meetings in Vancouver, B.C.
- 2002            William John Witemburg Research Scholarship, University of Toronto (\$1,500 CAD).
- 2001–2005      Graduate Fellowship, University of Toronto (\$56,000 CAD).
- 2001            Dean of Liberal Arts Award for Outstanding Oral Presentation, Graduate Student Research Symposium, University of Texas at Arlington.

## **Publications – In Progress**

<sup>1</sup>Journal article

<sup>2</sup>Invited

<sup>3</sup>Book review

<sup>1</sup>Heinrich JT, **Crowder CM**, Pinto DC. 2012. Analysis of Histomorphometric Variables Part II: Proposal and Validation of Osteon Definitions. *American Journal of Physical Anthropology*. (To be submitted)

<sup>1</sup>**Crowder C**, Heinrich J, Morris Z. Analysis of Histomorphometric Variables Part I: Establishing Observer Error. *American Journal of Physical Anthropology*. (To be submitted)

<sup>1</sup>Dominguez VM, **Crowder C**. The utility of osteon shape and circularity for differentiating human and non-human Haversian bone. *American Journal of Physical Anthropology*. (Submitted March 2012)

<sup>2</sup>**Crowder C**, Dominguez VM. Histological Analysis of Bone. In Smith C, editor. The Encyclopedia of Global Archaeology. Springer. (Submitted January 2012).

<sup>1</sup>Christensen A, **Crowder C**, Ousley S, Houck, MM. Errors, error rates, and their meanings in forensic science. *Journal of Forensic Sciences*. (Submitted March 2012).

<sup>2</sup>Rainwater C, **Crowder C**, Hartnett K, Fridie J, Figura B, Godbold J, Warnasch S, Adams B. Forensic Anthropology at the New York City Office of Chief Medical Examiner. In Dirkmaat D, editor. Forensic Anthropology Companion. Blackwell Publishing. (Submitted August 2011).

<sup>2</sup>**Crowder C**, Heinrich J, Stout SD. Rib Histomorphometry for Adult Age Estimation. In Bell L, editor. Forensic Microscopy for Skeletal Tissue: Methods and Protocols. Springer/Humana Press. (Submitted May 2010).

## **Publications**

<sup>1</sup>Journal article

<sup>2</sup>Invited

<sup>3</sup>Book review

- <sup>2</sup>**Crowder C**, Adams BJ. *In Press*. Interpreting Blunt Force Trauma: A Case Report. In Galloway A, editor. Broken Bones: Anthropological Analysis of Blunt Force Trauma 2<sup>nd</sup> Edition. Charles C. Thomas, Springfield.
- <sup>2</sup>Stout SD, **Crowder C**. 2011. Bone Remodeling, Histomorphology, and Histomorphometry. In: Stout SD, **Crowder C**, editors: Bone Histology: An Anthropological Perspective. New York: CRC Press.
- <sup>2</sup>**Crowder C**, Pfeiffer S. 2010. The Application of Cortical Bone Histomorphometry to Estimate Age at Death. In: Latham K.E., Finnegan M, editors: Age Estimation of the Human Skeleton. Springfield, IL: CC Thomas. Pp. 193-215.
- <sup>3</sup>**Crowder C**. 2010. *Review of An Introduction to Microscopy*. *Journal of Forensic Sciences* 55(5):1405.
- <sup>1</sup>Christensen A, **Crowder C**. 2009. Evidentiary standards for forensic anthropology. *Journal of Forensic Sciences* 54(6):1211-16.
- <sup>2</sup>Adams BJ, **Crowder C**, DePaolo F. 2009. Renewed Search, Recovery, and Identification Efforts Related to the September 11th 2001 Attacks of the World Trade Center. In: Steadman D, editor. Hard Evidence: Case Studies in Forensic Anthropology 2<sup>nd</sup> Edition. State University of New York, Binghamton. Pp. 289-302.
- <sup>2</sup>**Crowder C**. 2009. Histological Age Estimation. In Blau S, Ubelaker D, editors. Digging Deeper: Current Trends and Future Directions in Forensic Anthropology and Archaeology. World Archaeological Congress Handbook, Left Coast Press. Pp. 222-235.
- <sup>1</sup>**Crowder C**, Rosella L. 2007. Assessment of intra and intercostal variation in rib histomorphometry: Its impact on evidentiary examination. *Journal of Forensic Sciences* 52(2):271-76.
- <sup>1</sup>Chan A, **Crowder C**, Rogers T. 2007. Variation in cortical bone histology within the human femur and its impact on estimating age at death. *American Journal of Physical Anthropology* 132(1):80-8.
- <sup>1</sup>Pfeiffer S, **Crowder C**, Harrington L, Brown M. 2006. Secondary osteon and Haversian canal dimensions as behavioral indicators. *American Journal of Physical Anthropology* 131(4):460-8.
- <sup>1</sup>**Crowder C**, Austin D. 2005. Age Ranges of Epiphyseal Fusion in the Distal Tibia and Fibula of Contemporary Males and Females. *Journal of Forensic Sciences* 50(5):1-7.
- <sup>1</sup>Pfeiffer S, **Crowder C**. 2004. An Ill Child among Mid-Holocene Foragers of Southern Africa. *American Journal of Physical Anthropology* 123:23-9.

## **Publications - Edited Books**

Stout SD, **Crowder C**, eds. 2011. Bone Histology: An Anthropological Perspective. New York: CRC Press.

## **Presentations and Published Abstracts**

<sup>1</sup>Refereed abstract

<sup>2</sup>Non-refereed abstract

<sup>3</sup>Invited presentation

- <sup>1</sup>Heinrich JT, **Crowder CM**, Pinto DC. 2012. Proposal and validation of definitions for intact and fragmented osteons. Program for the 81<sup>st</sup> Annual Meeting of the American Association of Physical Anthropologists. Portland, Oregon.
- <sup>1</sup>Mavroudas SR, **Crowder CM**. 2012. A comparison of gross morphology and histomorphometric age-at-death estimation techniques on a known forensic sample. Program for the 81<sup>st</sup> Annual Meeting of the American Association of Physical Anthropologists. Portland, Oregon.
- <sup>1</sup>Dominguez VM, **Crowder CM**. 2012. The utility of osteon shape and circularity for differentiating human and non-human Haversian bone. Program for the 81<sup>st</sup> Annual Meeting of the American Association of Physical Anthropologists. Portland, Oregon.
- <sup>1</sup>Andronowski JM, **Crowder C**. 2012. Bone area as a histomorphometric variable for evaluating age-related changes. *Proceedings of the American Academy of Forensic Sciences* 18:374-75. American Academy of Forensic Sciences, Atlanta, GA.
- <sup>2</sup>**Crowder C**, Rainwater C, Hartnett K, Fridie J, Figura B, Godbold J, Warnasch S, Adams B. 2012. Roles of the Forensic Anthropology at the New York City Office of Chief Medical Examiner. *Proceedings of the American Academy of Forensic Sciences* 18:393-94. Symposium: Considering a Section Name Change. American Academy of Forensic Sciences, Atlanta, GA.
- <sup>1</sup>**Crowder CM**, Dominguez VM. 2012. A new method for histological age estimation of the femur. Program for the 81<sup>st</sup> Annual Meeting of the American Association of Physical Anthropologists. Portland, Oregon.
- <sup>3</sup>**Crowder CM**. 2011. Overview of 9/11 World Trade Center Attack–Phase II. Symposium on Emergency Preparedness and Management of Mass Fatalities. Department of Health, Hong Kong, SAR-PRC. November 8-9.
- <sup>3</sup>**Crowder CM**. 2011. Role of the Forensic Anthropologist in Disaster Response. Symposium on Emergency Preparedness and Management of Mass Fatalities. Department of Health, Hong Kong, SAR-PRC. November 8-9.
- <sup>3</sup>**Crowder CM**. 2011. Disaster Morgue Operations: Forensic Exam–Autopsy. Symposium on Emergency Preparedness and Management of Mass Fatalities. Department of Health, Hong Kong, SAR-PRC. November 8-9.
- <sup>3</sup>**Crowder CM**. 2011. Disaster Morgue Operations: Forensic Exam–Autopsy. Symposium on Emergency Preparedness and Management of Mass Fatalities. Department of Health, Hong Kong, SAR-PRC. November 8-9.
- <sup>3</sup>**Crowder CM**. 2011. Disaster Morgue Operations: Exit Review (Quality Assurance / Quality Control). Symposium on Emergency Preparedness and Management of Mass Fatalities. Department of Health, Hong Kong, SAR-PRC. November 8-9.

**Presentations and Published Abstracts (continued)**

<sup>1</sup>Refereed abstract

<sup>2</sup>non-refereed abstract

<sup>3</sup>Invited presentation

- <sup>3</sup>**Crowder C.** 2011. Beyond the NAS Report: Facility / Laboratory Implications. Panel discussant at the Syracuse University Dialogues In Forensic Science: Beyond the NAS Report conference. (October 14-16).
- <sup>3</sup>**Crowder C.** 2011. World Trade Center Recovery Operations 2006-2011. Lecture presented at the Syracuse University Dialogues In Forensic Science: Mass Disaster Recovery/Mass Grave Excavation conference. Syracuse, NY. June 17-20.
- <sup>1</sup>Andronowski JM, **Crowder C.** 2011. The Evaluation of Bone Area as a Histomorphometric Variable for Estimating Age at Death. *Proceedings of the American Academy of Forensic Sciences* 17:381-82. American Academy of Forensic Sciences, Chicago, IL.
- <sup>1</sup>Rainwater CW, **Crowder C**, Fridie J. 2011. Microscopic Analysis of Sharp Force Trauma From Knives: A Validation Study. *Proceedings of the American Academy of Forensic Sciences* 17:358. American Academy of Forensic Sciences, Chicago, IL.
- <sup>1</sup>Andronowski JM, **Crowder C.** 2011. The Evaluation of Bone Area as a Histomorphometric Variable for Estimating Age at Death. *Proceedings of the American Academy of Forensic Sciences* 17:381-2. American Academy of Forensic Sciences, Chicago, IL.
- <sup>1</sup>Christensen A, **Crowder C**, Ousley S, Houck, MM. 2011. Errors, error rates, and their meanings in forensic science. *Proceedings of the American Academy of Forensic Sciences* 17:362. American Academy of Forensic Sciences, Chicago, IL.
- <sup>1</sup>Warnasch S, **Crowder C**, Hartnett K. 2011. Archaeological Methodology Used at the World Trade Center Site During the 2006/2007 Recovery Excavation. *Proceedings of the American Academy of Forensic Sciences* 17:365-6. American Academy of Forensic Sciences, Chicago, IL.
- <sup>3</sup>**Crowder C.** 2010. World Trade Center Recovery Operations 2006-2010. Current Trends in Forensic Science Conference. Tarrant County Medical Examiner's Office, Fort Worth, TX.
- <sup>2</sup>Rainwater CW, **Crowder C**, Fridie J. 2010. Microscopic analysis of sharp force trauma from knives: Preliminary results of a validation study. National Institute of Justice Impression and Pattern Evidence Symposium, Clearwater Beach, FL, August 2-5.
- <sup>1</sup>Olmer M, Mavroudas S, Damann F, **Crowder C.** 2010. Improving Histomorphometric Age Estimation: An application of Osteon Population Density (OPD) to Kerley's original sample data. *Proceedings of the American Academy of Forensic Sciences* 16:369-70. American Academy of Forensic Sciences, Seattle, WA.
- <sup>1</sup>Stubblefield P, Anton S, Snodgrass J, **Crowder C**, Di Fiore A, Duren D, Duque E, Leonard W, Leigh S, Madimenos F, McGraw S, Middleton E, Schmitt C, Sherwood R, Turner T, Vallengia C, White F. 2010. Integrative Measurement Protocol Incorporating Morphometric and Behavioral Research Tools from Forensic Anthropology, Human Biology, and Primatology. *Proceedings of the American Academy of Forensic Sciences* 16:366. American Academy of Forensic Sciences, Seattle, WA.

**Presentations and Published Abstracts (continued)**

<sup>1</sup>Refereed abstract

<sup>2</sup>non-refereed abstract

<sup>3</sup>Invited presentation

- <sup>1</sup>**Crowder C**, Ingvoldstad M. 2009. Observer Error Trends in Forensic Anthropology. *Proceedings of the American Academy of Forensic Sciences* 15:343-4. American Academy of Forensic Sciences, Denver, CO.
- <sup>1,3</sup>**Crowder C**, Figura B, Adams B, DePaolo F. 2009. The Role of Forensic Anthropology in Disaster Operations. *Proceedings of the American Academy of Forensic Sciences* 15:330-1. Symposium: Collaboration between Anthropologists and Medical Examiners/Coroners, American Academy of Forensic Sciences, Denver, CO.
- <sup>1</sup>Adams BJ, **Crowder C**, DePaolo F. 2008. Renewed Search, Recovery, and Identification Efforts Related to the September 11<sup>th</sup> 2001 Attacks of the World Trade Center. *Proceedings of the American Academy of Forensic Sciences* 14:370-1. American Academy of Forensic Sciences, Washington, D.C.
- <sup>1</sup>Christensen A, **Crowder C**, Rogers T. 2008. Evidentiary Standards for Forensic Anthropology. *Proceedings of the American Academy of Forensic Sciences* 14:365-6. American Academy of Forensic Sciences, Washington, D.C.
- <sup>1,3</sup>**Crowder C**, Pfeiffer S. 2008. Bone Histomorphometry: Validating Methods of Age Estimation. *American Journal of Physical Anthropology* S45. Wiley-Liss Symposium: Reconstructing Health and Disease from Skeletal and Dental Biology: New Perspectives, New Insights. American Association of Physical Anthropology, Columbus, OH.
- <sup>1,3</sup>**Crowder C**, Rogers T. 2007. Forensic Anthropology: Meeting Evidentiary/Legal Demands. *Proceedings of the American Academy of Forensic Sciences* 13:350-3. Symposium: The 4<sup>th</sup> Era of Forensic Anthropology: Examining the Future of the Discipline. American Academy of Forensic Sciences, San Antonio, TX.
- <sup>1</sup>**Crowder C**. 2006. Reducing Observer Error through Choice of Histological Evaluation Technique. *Proceedings of the American Academy of Forensic Sciences* 12:319-20. American Academy of Forensic Sciences, Seattle, WA.
- <sup>1</sup>Chan A, **Crowder C**, Rogers T. 2006. Variation in Cortical Bone Histology within the Human Femur and its Impact on Estimating Age at Death. *Program for the 34<sup>th</sup> Annual Meeting of the Canadian Association for Physical Anthropologists*. Winnipeg, Manitoba, CA.
- <sup>2</sup>Morris Z, **Crowder C**. 2005. Evaluation of Histomorphometrics: Osteon Population Density. Paper presented at the 40<sup>th</sup> Annual Meeting of the Southern Anthropological Society, Chattanooga, TN.
- <sup>1</sup>**Crowder C**, Morris Z. 2005. Reducing Intra- and Inter-observer Error through Histomorphometric Variable Selection. *Proceedings of the American Academy of Forensic Sciences* 11:301-2. American Academy of Forensic Sciences, New Orleans, LA.
- <sup>1</sup>**Crowder C**. 2005. Measure Twice, Cut Once? Measurement Error Levels in Histomorphometry. *Proceedings of the American Academy of Forensic Sciences* 11:325-6. American Academy of Forensic Sciences, New Orleans, LA.



### **Presentations and Published Abstracts (continued)**

<sup>1</sup>Refereed abstract

<sup>2</sup>non-refereed abstract

<sup>3</sup>Invited presentation

<sup>1</sup>**Crowder C.** 2004. Death Scene Reconstruction of Clandestine Graves. *Program for the 32<sup>nd</sup> Annual Meeting of the Canadian Association for Physical Anthropologists*. London, Ontario, CAN.

<sup>1</sup>**Crowder C.** 2004. A Review of Age Estimation Using Rib Histology: Its Impact on Evidentiary Examination. *Proceedings of the American Academy of Forensic Sciences* 10:326-7. American Academy of Forensic Sciences, Dallas, TX.

<sup>2</sup>**Crowder C.** 2003. The Importance of Context and Analysis during the Recovery of Human Remains. Paper presented at the 36<sup>th</sup> Annual Meetings of the Canadian Archaeological Association. Hamilton, Ontario, CAN.

<sup>1</sup>**Crowder C.** 2003. Assessing the Precision and Accuracy of a Histological Method of Age Estimation. *Canadian Society of Forensic Science Journal* 36(2):49. Canadian Society of Forensic Sciences, Vancouver, B.C.

<sup>1</sup>**Crowder C.** 2002. A Comparison of Histological Age Estimation Methods Using Ribs. *Program for the 33<sup>rd</sup> Annual Meeting of the Canadian Association for Physical Anthropologists*. Ottawa, Ontario, CAN.

<sup>1</sup>**Crowder C.** 2001. Establishing the Range of Variation of Epiphyseal Closure in the Distal Tibia and Fibula in an American population. *Proceedings of the American Academy of Forensic Sciences* 7:276. American Academy of Forensic Sciences, Seattle, WA.

### **Workshops & Short Courses (Invited)**

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|--------------|--|
| 2009-Present | Forensic Sciences Training Program for Death Investigators. Module instructed: Forensic Anthropology Laboratory and Field Techniques. Course held at the NYC Office of Chief Medical Examiner. Co-developed with Dr. Brad Adams. |
| 2011         | Symposium on Emergency Preparedness and Management of Mass Fatalities. Sponsored by the Hong Kong Department of Health, Hong Kong, SAR-PRC. November 8-9.  |
| 2011         | 24 <sup>th</sup> Annual Forensic Anthropology Course. Sponsored by the National Museum of Health and Medicine, Baltimore, MD. Course Organizer: B. Spatola.  |
| 2010         | The ABC's of Forensic Anthropology. Forensic Anthropology workshop at the Current Trends in Forensic Science Conference. Tarrant County Medical Examiner's Office, Fort Worth, TX. Organizer: D. Austin.                         |
| 2010         | Age Estimation Workshop. Sponsored by the American Board of Forensic Odontology, held at the American Academy of Forensic Sciences, Seattle, WA. Organizer: J. Lewis.  |

### **Workshops & Short Courses (Invited) – continued**

- 2010 23<sup>th</sup> Annual Forensic Anthropology Course. Sponsored by the National Museum of Health and Medicine, Armed Forces Institute of Pathology, Washington, D.C. Course Organizers: F. Damann, B. Spatola.
- 2009 Forensic Bone Histology. A workshop sponsored and held at the National Museum of Health and Medicine, Armed Forces Institute of Pathology, Washington, D.C. Organizers: F. Damann, B. Spatola, H. Cho, **C. Crowder**.
- 2004 Forensic Archaeology Short Course. Sponsored by the York Regional Police, Ontario, CAN. Assisted with 40hr course teaching recovery techniques to Police.

### **Other Invited Lectures (selected)**

#### *The Scope of Forensic Anthropology*

- 2008-present Annual Homicide Investigators Course. Course held at the NYC Office of Chief Medical Examiner.
- 2008 Biological Anthropology class at Bryn Mawr College, PA.
- 2007 Introduction to Forensic Science class at Cedar Crest College, PA.
- 2004 Introduction to Archaeology class at Wilfrid Laurier University, Brantford, CA.
- 1999 Criminalistics class at University of Texas at Arlington, TX.

#### *World Trade Center Recovery Operations*

- 2008 FBI Laboratory Lecture Series, Quantico, VA.
- 2007 Annual Forensic Anthropology Course, Armed Forces Institute of Pathology, Washington, D.C.

#### *Forensic Anthropology and Human Rights*

- 2004 Introduction to Forensic Anthropology at the University of Toronto at Mississauga, Ontario, CA.
- 2002 Forensic Anthropology in the Forensic Sciences at McMaster University, Ontario, CA.

#### *Topics in Bone Histology*

- 2010-present Interpreting the Skeleton class at the New York University, NYC
- 2011 Palaeopathology class at the New York University, NYC.
- 2006 -2010 Human Skeletal Biology Colloquia at New York University, NYC.
- 2006 Introduction to Forensic Anthropology at Pace University, NYC.
- 2004 Palaeopathology class at the University of Toronto at Mississauga, CA.

#### *Forensic Archaeology*

- 2006 Physical Anthropology class at Wagner College, NYC.
- 2005 Forensic Anthropology class at the University of Windsor, Ontario, CA.

#### *Mass Fatality Incident Management*

- 2009 Tarrant County Medical Examiner's Office Lecture Series, Fort Worth, TX.
- 2009 Medico-Legal Death Investigation and Mass Fatality Preparedness Conference, Harris County Medical Examiner's Office and the Texas Department of State Health Services, Houston, TX.

#### *NYC Interesting Cases*

- 2010 Grand Rounds Lecture Series, Tarrant County Medical Examiner's Office.

## **Training and Professional Development**

- 2011 Syracuse University Dialogues In Forensic Science: “*Trauma II*” June 14-16 at Syracuse University and Minnowbrook Conference Center.
- 2011 Forensic Discovery and Recovery Workshop. North Carolina University, College of Textiles (May 16-20).
- 2011 Texas Engineering Extension Service (TEEX). Jurisdictional Crisis Incident Management – Incident Command Post Course. Provided by the Emergency Operations Training Center (EOTC) in College Station, TX..
- 2010 Syracuse University Dialogues In Forensic Science: “*Trauma I*” November 5-7 at Syracuse University.
- 2010 Syracuse University Dialogues In Forensic Science: “*Looking to the Future in Forensic Anthropology*” June 17-20 at Syracuse University and Minnowbrook Conference Center.
- 2009 *Leica Geosystems ScanStation / Cyclone 3-D Point Cloud Training*, NYC. Class provided by Leica for crime scene surveying and mapping (28 hrs).
- 2008-Present FEMA Certifications, Incident Command System (ICS) 100, 200, 300, 700, 800.
- 2008 *Advanced Forensic Investigations for Hazardous Environments*, NYC. National Center for Biomedical Research and Training, Academy of Counter-Terrorist Education (40 hrs).
- 2008 *Weapons of Mass Destruction (WMD) Radiologic/Nuclear Responder Operations Course*, NYC. Class provided by U.S. Department of Homeland Security.
- 2008 *Measurements, Statistics, Terminology, and Quantitative Methods: Uses and Interpretations in Forensic Anthropology*. Annual Meeting of the American Academy of Forensic Sciences, Washington, D.C.
- 2007 *Hazardous Material Training*. Class provided by the OCME-NYC.
- 2006 *Emergency Response to Hazardous Material Incidents*, NYC. Class provided by the NYC Police Emergency Service Unit and U.S. Environmental Protection Agency.
- 2006 *Forensic Bone Histology II*. Annual Meeting of the American Academy of Forensic Sciences, Seattle, WA.
- 2005 *Human Remains Recovery: Winter Scene*, Ontario, CAN. Short course for the search and recovery of human remains from rural winter scenes hosted by *Forensix* (24 hrs).
- 2005 *The Use and Abuses of Statistics and FORDISC*. Annual Meeting of the American Academy of Forensic Sciences, New Orleans, LA.
- 2005 *Forensic Bone Histology*. Annual Meeting of the American Academy of Forensic Sciences, New Orleans, LA.

### **Training and Professional Development – continued**

- 2004            *Aircrash Recovery*, Ontario, CAN. Short course for the recovery and processing of remains and material evidence from a mock aviation disaster hosted by *Forensix* (24 hrs).
- 2004            *Death Scene Archaeology II*, Erie, PA. Three-week field school hosted by Mercyhurst Archaeological Institute teaching advanced methods in the location, documentation and recovery of human remains from a variety of contexts.
- 1999            *Death Scene Archaeology I*, Erie, PA. Six-day field school hosted by Mercyhurst Archaeological Institute covering various field methods in the location, recovery, and interpretation of human remains from outdoor contexts.
- 1998            *Advances in Forensic Anthropology*, New Orleans, LA. Six-day conference course hosted by the Southern Institution of Forensic Science covering the interpretation and differentiation of skeletal trauma and non-traumatic fire related fracture patterns (40 hrs).

### **Professional Organizations**

American Academy of Forensic Sciences – Fellow  
Society of Forensic Anthropologists (SOFA) – Board of Directors  
American Association of Physical Anthropologists – Member  
Centre for International Forensic Assistance

### **Service - Professional Activities**

- 2011–2012        AAFS Physical Anthropology section name change committee, (member).
- 2011–present     Scientific Working Group for Disaster Victim Identification (SWGdVI), Recovery and Anthropology role in DVI committees, (member)
- 2011              Reviewer for National Institute of Justice R&D Grants
- 2010              Invited article review for the American Journal of Physical Anthropology
- 2009              Invited article review for the American Association of Anthropologists.
- 2009–Present     *Board Member*, Society of Forensic Anthropologists (SOFA)
- 2008–Present     Scientific Working Group for Forensic Anthropology (SWGANTH), Age estimation, skeletal preparation and sampling committee (Participant)
- 2008–Present     *Manuscript Reviewer* for Journal of Forensic Sciences
- 2008–2009        *Vice President*, Society of Forensic Anthropologists (SOFA)
- 2003–2004        *Anthropology Graduate Student Union Representative*, University of Toronto

**References**

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