

## CURRICULUM VITAE

Last Edited: May 31, 2023

**Melinda L. Carter, MA, MD, PhD**  
**Associate Professor**  
**Department of Anatomical Sciences**

### CONTACT INFORMATION

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### EDUCATION

Medical School      Southern Illinois University School of Medicine, Springfield, Illinois.  
M.D., 2012.  
Graduate School    University of Chicago, Chicago, Illinois, M.A., Anthropology, 1991  
University of Chicago, Ph.D., Anthropology, 2001.  
College              University of Tennessee, Knoxville, Tennessee, B.A., Organismal  
Biology, B.A. Anthropology, 1989

### CERTIFICATIONS

**Basic Life Support**, American Heart Association, Alabama, May 1, 2018.  
**Advanced Cardiac Life Support**, American Heart Association, Alabama, May 4, 2018.  
**Certified Human Osteologist**, Illinois Historic Preservation Agency, Springfield, since  
1996

### ACADEMIC APPOINTMENTS

2021-              **Associate Professor, Anatomical Sciences Faculty**, Edward Via  
College of Osteopathic Medicine (VCOM), Auburn University Campus,  
Auburn, Alabama, July 1, 2021 – current  
2013-2021      **Associate Professor of Anatomy**, Alabama College of Osteopathic  
Medicine (ACOM), Dothan  
2004-2007      **Instructor of Anatomy**, Department of Anatomy, Southern Illinois  
University School of Medicine (SIU SOM), Carbondale  
2002-2013      **Research Associate**, Illinois State Museum  
2002              **Adjunct Instructor**, Departments of Sociology/Anthropology and Criminal  
Justice, University of Illinois, Springfield  
2001-2002      **Adjunct Instructor**, Biology Department, Richland Community College,  
Decatur, Illinois  
2001              **Adjunct Instructor**, Department of Sociology, Illinois College,  
Jacksonville, Illinois  
1996              **Adjunct Instructor**, Natural Sciences Department, John Wood  
Community College, Quincy, Illinois

- 1994 **Private Tutor in Clinical Anatomy**, Chicago College of Osteopathic Medicine, Midwestern University, Downers Grove, Illinois, 6 months.
- 1992 **Teaching Assistant**, Anthropology, University of Chicago
- 1990-1995 **Teaching Assistant**, Biology and Anatomy (including histology and embryology), University of Chicago

## **COMMITTEES AND LEADERSHIP**

### **Leadership Role**

- Organizer, VCOM Clinical Forensic Medicine Interest Group, Sub-group of Family Medicine Interest Group, 2023-
- Organizer, VCOM Music Jams, monthly event, 2023-
- Chair, ACOM Faculty Assembly (June 2017-current), Vice-Chair (2014, 2016-2017)
- Chair, ACOM Faculty Handbook Committee (2014, 2016-17), Member (2017-2018)
- Chair of Health Sciences Division, Alabama Academy of Science, (2014-2016)
- Class Representative, Student Member, SIU School of Medicine, Carbondale, Illinois (2007-2008)
- Organizer, Global Health Interest Group, SIU School of Medicine, Carbondale, Illinois (2007-2008)

### **Member**

- VCOM, Auburn, Faculty Senate, senator (2021 – current)
- VCOM, Auburn, Promotions Committee, OMS 1&2 (2021 – current)
- ACOM Sub-Committee for Strategic Planning (2018-2019)
- ACOM Admissions Committee, (2014 - 2018)
- ACOM Faculty Promotion Committee, (2016 - 2021)
- ACOM Institutional Review Board, (2016 - 2021)
- ACOM Willed Body Program Memorial Committee (2016-2017)

### **Faculty Service**

- VCOM, Judge for Research Recognition Day, February 3, 2023
- VCOM Peer Exam Review Committee (exam item editing), Spring 2022 - current
- VCOM, Auburn, Judge for Research Recognition Day, February 18, 2022
- VCOM Research Recognition Day Committee, Auburn, 2021-22
- VCOM, Auburn, LBGTQ+ Organization, Faculty Advisor (2021 – current)
- ACOM Student Muslim Association, Faculty Advisor (2019 - 2021)
- ACOM Creativity Club, Faculty Advisor and Co-organizer (2018 - 2021)
- ACOM Suicide Prevention Task Force, Faculty Advisor (2018 - 2019)
- ACOM Mental Health Task Force, Faculty Advisor (2018 - 2020)
- ACOM Faculty Marshall, Graduation (2017 - 2019)
- International Osteopathic Medical Outreach trip to Imbabura, Ecuador, Faculty Chaperone (2015)
- MEDPREP Student Progress Committee, Faculty Member, SIU School of Medicine (2005-2007)

## CLINICAL TEACHING EXPERIENCE

2022- **Clinical Mentor for Early Clinical Experiences** for OMSII students at VCOM Auburn. Worked with student assistants on forensic cases at the Montgomery Medical Examiner's Office and on the Auburn University campus. 2-4 students per month, beginning fall 2022.

## TEACHING EXPERIENCE

### Medical School

#### *As Faculty*

- 2023- **Cell Biology and Physiology Course**, Lecturer in Block 2, bone physiology
- 2022- **Pathology and Histology Course**, Lecturer in Blocks 1 and 2 (histology and bone pathology) and Virtual Lab Facilitator, VCOM Auburn
- 2021- **Anatomical Sciences Course** (clinical gross anatomy, embryology, and neuroanatomy), Lecturer and Gross Dissection Faculty, VCOM Auburn
- 2021 **Clinical Forensic Medicine Course**, ACOM, Course Creator and Clerkship Director, Lecturer and Small-Group Facilitator, distance-learning elective
- 2021 **Osteopathic Practice and Principals**, Lecturer on Pediatric Cranial Osteology
- 2013-2020 **Anatomical Sciences Course** (clinical gross anatomy, embryology, and histology), ACOM, Co-Director (2016-2020), Lecturer, Gross Dissection Faculty, Virtual Histology Laboratory Facilitator, Team-Based Learning Facilitator
- 2013-2021 **Neuroanatomy Course**, ACOM, Lecturer, Laboratory Faculty, Team-Based Learning Facilitator
- 2013-2021 **Musculoskeletal Course** (bone pathology and rheumatology, anatomy and physiology of fascia), ACOM, Co-Director (2014-2016) and Lecturer
- 2019-2021 **Hematology and Lymphatics Course**, ACOM, Lecturer in histology
- 2004-2007 **Anatomical Sciences Course** (clinical gross anatomy, embryology, histology and neuroanatomy), SIU SOM, Lecturer, Gross Dissection Faculty, Histology Laboratory Faculty, Tutor in Problem-Based Learning Curriculum

#### *As Graduate Student Assistant*

*Human Morphology* (gross anatomy, embryology, and histology), University of Chicago (1990-1995)

### College and University

#### *As Faculty*

*Human Anatomy and Physiology*, John Wood Community College (Spring 1996), Richland Community College (Fall 2001 and Winter 2002)

*General Biology*, John Wood Community College (Spring 1996 and Fall 1996)

*Introduction to Anthropology* (four-field approach), Illinois College (Spring 2001)

*Introduction to Forensic Science and Anthropology*, University of Illinois, Springfield  
(Summer 2002)

*As Graduate Teaching Assistant*

*Apes and Human Evolution*, University of Chicago (Spring 1992)

*Comparative Primate Morphology*, University of Chicago (Fall 1992)

*Biological Diversity*, University of Chicago (1993-1995)

## **OTHER PROFESSIONAL EXPERIENCE**

### **Forensics**

- 2022- **Member, Child Fatality Review Board**, Lee County, Alabama (contact Evette Daniels, Trial Litigation Assistant, Lee County District Attorney's Office, Opelika).
- 2021- **Opelika Police Department**, Contact Sergeant Alfred White, Homicide
- 2018- **Consulting Anthropologist, Alabama Department of Forensic Sciences**  
Vendor status approved summer, 2022; contact Edward Reedy, PhD, MD, State Medical Director, Montgomery Medical Examiners Office
- 2018- **Consulting Anthropologist**, Alabama Law Enforcement Agency State Bureau of Investigation; contact Special Agent Heath Carpenter, Dothan, Alabama.
- 2020- **Consulting Anthropologist** for Alfredo A. Paredes, MD, forensic pathologist in Florida and Alabama
- 2014-15 **Volunteer Death Investigator** with Houston County Coroner's Office, Dothan, Alabama; contact Houston County Coroner Robert Byrd. Sunset Funeral Home.
- 2013- **Consulting Anthropologist**, Dothan City Police Department, Houston County Sheriff's Office, Eufala Police Department. Bone identification
- 2003 **Consulting Anthropologist**, Champaign Police Department, Champaign, Illinois; crime scene investigation and excavation of suspected burial in house basement; report submitted
- 2002 **Consulting Anthropologist**, Illinois State Police. Case numbers and reports available upon request. Contact First Deputy Director Matthew Davis, MA, JD
- 2002 **Consulting Anthropologist**, Menard County Coroner, Illinois. Case report submitted
- 2002 **Consulting Anthropologist**, Sangamon County Coroner, Illinois. Case report submitted. Contact Kent Harshbarger, MD, JD
- 2002 **Consulting Anthropologist**, Monmouth County Sheriff's Office, Illinois
- 2001 **Consulting Anthropologist**, Peoria Police Department Case No. 01-37944; exhumation of homicide victim from basement of residence; trauma analysis; report submitted to PPD and Peoria County Coroner

## **Bioarchaeology**

- 2012 –2013 **Human Skeletal Analyst**, Illinois State Archaeological Survey (formerly known as ITARP)
- 2002-2004 **Physical Anthropologist**, Illinois Transportation Archaeological Research Program (ITARP), University of Illinois, Urbana-Champaign
- 1996-2002 **Director, Human Osteology Program**, Illinois State Museum and Center for American Archaeology

## **Clinical**

- 1988-1989 **Laboratory Technician**, Neuroscience, University of Tennessee Memorial Research Center and Hospital
- 1988 **Autopsy and Histology Assistant**, Pathology, University of Tennessee Memorial Research Center and Hospital, UTK Pre-Medical Honor Society Summer Internship, 8 weeks, full-time

## **PROFESSIONAL AFFILIATIONS**

- 2023- Member, American Society of Bone and Mineral Research
- 2022- present Member, Board of Directors, Society of Forensic Anthropologists
- 2022- present Member, American Association of Biological Anthropologists
- 2022- present Member, Mountain, Swamp & Beach Forensic Anthropology Organization
- 2022- present Professional Affiliate Member, National Association of Medical Examiners
- 1997- present Member (since 2022), American Academy of Forensic Sciences, Affiliate Member (1997-2008; 2019-2021)
- 2013- present Member, American Association of Anatomists
- 2013- 2020 Member, American Association of Clinical Anatomists
- 2014- 2019 Member, International Association of Medical Science Educators
- 1989-2008, 2014- Member, American Association of Physical Anthropologists
- 1997-2007 Member, Midwest Bioarchaeology and Forensic Anthropology Association
- 2007-2012 Student Member, American Medical Association

## **HONORS AND AWARDS**

### **Honor Societies**

Phi Beta Kappa, University of Tennessee, Knoxville, awarded 1988

### **Academic Awards**

Century Fellowship for Doctoral Study, University of Chicago, 1989-1993

Brewer Liberal Arts Scholarship, University of Tennessee, Knoxville, 1985-1989

Phi Kappa Phi Scholarship for Top Juniors, University of Tennessee, Knoxville, 1988

National Alumni Freshman Scholarship, University of Tennessee, Knoxville, 1985-1986

National Alumni Upper-class Scholarship, University of Tennessee, Knoxville, 1986-1987

Andrew Holt Scholarship, University of Tennessee, Knoxville, 1987-1989

West Knoxville Rotary Club College Scholarship, 1985-1986

## **PROFESSIONAL SERVICE**

### **National Advisory Committees or Service**

- 2023-2026 Member, Board of Directors, Society of Forensic Anthropologists
- 2023- Member, Age Estimation Best Practices Working Group (ASBCB),  
Chair Sara Getz, PhD, D-ABFA
- 2022- Member, Anthropology Standards Board Consensus Body,  
Academy Standards Board, American Academy of Forensic  
Sciences
- 2020-2022 50<sup>th</sup> Anniversary Celebration Task Force, Anthropology Section,  
American Association of Forensic Sciences

### **Reviewer**

*Medical Science Educator*, Reviewer (2015 - 2020)

### **Ad-hoc Reviewer**

*Journal of Medical Primatology*, Invited Reviewer (2013)

*Folia Primatologica*, Invited Reviewer (2019)

## **MENTORING ACTIVITIES**

- 2022- Research advisor to MD/JD student Justine Newman, BS, at Southern  
Illinois University School of Medicine (Mentored Professional Enrichment  
Experience, Summer 2023)
- 2022- Mentor to Anthropology graduate student, Austin Lee, at University of  
Alabama, Tuscaloosa, who is working on Missing Persons Database  
research for Alabama

## **INSTITUTIONAL SERVICE**

- 2023 VCOM, Interprofessional Professional Experience, Small Group  
Facilitator, School of Nursing, Auburn University, March 17
- 2023 VCOM, Auburn, Judge for Research Recognition Day, February 3
- 2022- VCOM Peer Exam Review Committee (exam editing)
- 2022 VCOM, Auburn, Judge for Research Recognition Day, February 18
- 2021-22 VCOM Research Recognition Day Committee, Auburn

## **GRANTS AND CONTRACTS**

### **Active**

KNN Innovation Award

National Network for Flourishing in Medicine Grant

Feb 2023-Jun 2024

Grant Title: Flourishing Approach to Physician Formation

PI: William Pearson

Project title: Vertically Integrated Curriculum for Death and End-of-Life Patient Care

Faculty Lead (.02 FTE): Melinda Carter

### Completed

- 2020 Institutional (ACOM) Intermural Grant for Continuing Research (\$2500)  
Cadaveric Evidence of Age Changes in the Petro-sphenoidal and Petro-basilar Synchrondroses in the Human Skull with Implications for Cranial Osteopathic Manipulative Medicine. Research intern: Jordan Coulter
- 2019 Institutional (ACOM) Intermural Grant for Continuing Research (\$2500)  
Cadaveric Evidence of Age Changes in the Petro-sphenoidal and Petro-basilar Synchrondroses in the Human Skull with Implications for Cranial Osteopathic Manipulative Medicine. Research intern: Nazieh Masserani.
- 2018 Institutional (ACOM) Intermural Grant for Continuing Research (\$2500)  
Project I: Cadaveric Evidence of Age Changes in the Petro-sphenoidal and Petro-basilar Synchrondroses in the Human Skull with Implications for Cranial Osteopathic Manipulative Medicine (Co-PI Kevin Hayes, DO)  
Research Intern: Tristan Frick  
Project II: Examining Intraskkeletal Variability in Bone Chemistry Based on Differential Remodeling Rates
- 2017 Institutional (ACOM) Intermural Grant for Continuing Research (\$2500)  
Project I: Cadaveric Evidence of Age Changes in the Petro-sphenoidal and Petro-basilar Synchrondroses in the Human Skull with Implications for Cranial Osteopathic Manipulative Medicine (Co-PI Kevin Hayes, DO)  
Research Intern: Eric Emery  
Project II: Examining Intraskkeletal Variability in Bone Chemistry Based on Differential Remodeling Rates
- 2016 Institutional Startup Support, Alabama College of Osteopathic Medicine (\$8,293)
- 2008 Mentored Professional Enrichment Experience, SIU School of Medicine summer research project. Project title: Postmortem detection of abused drugs in bone.  
Mentor: John Murphy, M.D., Department of Pathology, Memorial Medical Center, Springfield, Illinois.
- 1999 Principal Investigator (with J.E. Buikstra): Wenner-Gren Foundation Pre-doctoral Grant
- 1996 Principal Investigator: Sigma Xi Research Society, Dissertation Research Grant
- 1996 Principal Investigator: Hinds Fund Grant, Committee on Evolutionary Biology, University of Chicago
- 1995 Principal Investigator: Overseas Studies Dissertation Research Fellowship, University of Chicago
- 1994 Principal Investigator: Research and Travel Grant, Center for International Studies, University of Chicago

## PUBLICATIONS

### Peer-Reviewed Journals and Archaeological Reports

- In prep* **Carter ML** et al. Progressive ossification in joints of the skull base correlates with advanced age. *Clinical Anatomy or Journal of Osteopathic Medicine*
- In prep.* **Carter ML** et al. Technique for defleshing embalmed cadaveric specimens for research and teaching specimens. To be submitted to *Anatomical Education*.
- 2022 **Carter ML**, Newman JL, Seidemann RM, Reedy EA. Review of United States laws pertaining to the recovery and analysis of human skeletal remains. *Journal of Forensic Sciences*. 67(5): 1876-1889. <https://doi.org/10.1111/1556-4029.15082>.
- 2017 **Carter ML**. Human remains from the East St. Louis Site (11S706/6): EB1 Expansion. Addendum to Skeletal Report 2010-3. Illinois State Archaeological Survey. Prairie Research Institute, University of Illinois at Urbana-Champaign.
- 2016 Bukowski JA, Hedman KM, **Carter ML**, Hargrave EA, and Fort, MA. Human Remains and Late Woodland Mortuary Features, in *A Late Woodland Extractive Campsite and Designated Mortuary Location at the Lillie Site in the Northern American Bottom Uplands*, edited by AC Fortier, Technical Report No. 168, Illinois State Archaeological Survey, Champaign, Illinois.
- 2016 **Carter ML** and Bradbury M. Oxygen isotope ratios in primate bone carbonate reflect amount of leaves and vertical stratification in the diet. *American Journal of Primatology*, Vol. 78 (10): 1086-1097.
- 2010 Crowley BE, **Carter ML**, Karpanty SM, Zihlman AL, Koch PL, and Dominy NJ. Stable carbon and nitrogen isotope enrichment in primate tissues. *Oecologia* 164(3): 611-626.
- 2008 **Carter ML**, Pontzer H, Wrangham RW, and Kerbis Peterhans J. Skeletal pathology in *Pan troglodytes schweinfurthii* in Kibale National Park, Uganda. *American Journal of Physical Anthropology*. 135(4): 389–403.
- 2006 Ensor, HB, Parker KE, McNerney MJ, Titus S, **Carter ML**, Mather D, and Parr RE. Archaeological Investigations at the Isle du Bois Site (23SG1), A Patrick Phase Settlement in Northern Ste. Genevieve County, Missouri. Cultural Resource Management Report No. 1070. American Resources Group, Ltd. Carbondale, Illinois.
- 2003 **Carter ML**, Fulton CL, and Koldehoff B. Rest in pieces: A forgotten cemetery is rediscovered in East St. Louis, Illinois. *Illinois Antiquity*, 38(1):3-8.
- 2002 **Carter ML**. ISM and Illinois State Police co-host forensic anthropology workshop. *Impressions* (Illinois State Museum Quarterly) 20(4): 4.
- 2002 Koldehoff B, **Carter ML**, and Fulton CL. Phase II testing at the Canaday School Site (11S1525), St. Clair County, Illinois. Archaeological Testing Short Report. Illinois Transportation Archaeological Research Program, Urbana. Submitted to Illinois Historic Preservation Agency, Springfield.
- 2001 **Carter ML**, Cobb DE, and Wiant MD. Preparing for bioanthropological research after repatriation: Documenting Native American human remains in the Illinois State Museum Collection. *Human Remains: Conservation, Retrieval and*



- Analysis*, British Archaeological Reports International Series 934, edited by E. Williams, Oxford: Archaeopress, pp. 249-254.
- 2000 **Carter ML**, Cobb DE, and Warren RW. The beauty of bone: II. Human osteology and the lifeways of the Historic Illinois Indians. *The Living Museum*, 61(4):16-20.
- 2000 Cobb DE, Wiant MD, and **Carter ML**. Human Skeletal Remains Protection Act Investigations, Report No. 9: A Nineteenth-Century Cemetery on Kaskaskia Island, 11R675, Randolph County, Illinois. Illinois State Museum Quaternary Studies Program, Technical Report No. 99-0000-28. Illinois Historic Preservation Agency.
- 1999 **Carter ML**. Human Skeletal Remains Protection Act Investigations, Report No. 11: Fulton County Coroner Case, Fulton County, Illinois. Illinois State Museum Quaternary Studies Program, Technical Report No. 99-0000-28. Illinois Historic Preservation Agency.
- 1999 **Carter ML** and Cobb DE. The beauty of bone: I. Structure and function of the human skeleton. *The Living Museum*, 61(3):8-12.
- 1999 **Carter ML**. Human Skeletal Remains Protection Act Investigations, Report No. 8: Mees-Nochta Site, 11-S-1198, St. Clair County, Illinois. Illinois State Museum Quaternary Studies Program, Technical Report No. 99-000-05. Illinois Historic Preservation Agency.
- 1993 Kerbis Peterhans JC, Wrangham RW, **Carter ML**, and Hauser M. A contribution to tropical rain forest taphonomy: Retrieval and documentation of chimpanzee remains from Kibale Forest, Uganda. *Journal of Human Evolution*, 25:485-514.

## PROFESSIONAL PRESENTATIONS

- 2023 Creating a Clinical Forensic Medicine Elective for Advanced Medical Students in the U.S. Podium presentation to the Forensic Nursing Section at annual American Academy of Forensic Sciences conference, Orlando, FL, Feb. 16 (PUBLISHED ABSTRACT)
- 2023 Age Changes in Cranial Base Synchronoses in a Cadaveric Population. **Carter ML**, Coulter J, Pandey R, Hayes K. Podium presentation to the Anthropology Section at annual American Academy of Forensic Sciences conference, Orlando, FL, Feb. 17. (PUBLISHED ABSTRACT)
- 2022 A Multi-Disciplinary Clinical Forensic Medicine Elective for Primary Care Physicians. **Carter ML**, Mount G, Rodriguez M, Lall R, Stephen D, Reedy E, Shuler K, Ennis L, Ledbetter M, White A, Snider P. Lightning Round Podium Presentation, Innovations in Scholarship of Teaching and Learning (SoTL) in Medical Education Conference, Harrison College of Pharmacy, Auburn University, June 9.
- 2020 U.S. State Laws and Human Skeletal Remains: Are Old Bones Better Protected than Forensic Cases? **Carter ML**, Newman J, Seidemann R, and Alston S. Podium presentation, annual conference of the American Academy of Forensic Sciences, Anaheim, CA, February 17-20, 2020. (PUBLISHED ABSTRACT)
- 2018 Clinical Implications of Age-Related Changes in the Articulations of the Apical Petrous Bone. **Carter ML**, Emery E, Berry B, Lindsey T, Abene F, and Hayes K. Podium presentation, American Association of Clinical Anatomists, Atlanta, GA, July 9. Abstract published in *Clinical Anatomy*. (PUBLISHED ABSTRACT)

- 2015 Establishment of a New Anatomical Donation Program in Alabama for Medical Education and Research. Wood KL, Foster JD and **Carter ML**. Alabama Academy of Science 92nd Annual Meeting. (PUBLISHED ABSTRACT)
- 2008 Forensic Bone Toxicology. Podium presentation at annual meetings of the American Academy of Forensic Sciences, Washington, D.C., February 21. (PUBLISHED ABSTRACT)
- 2006 Faded Memories: The Rediscovery of “Lost” Nineteenth-Century Cemeteries. Invited participant for symposium, “Death and Loss in America: Colonial Era to the Present,” in Springfield, Illinois. Hosted by the Museum of Funeral Customs and Illinois Funeral Directors Association, October 19, 2006. 2023 Applied Expertise in Human Osteology: Legal Considerations in the United States.
- 2003 Late Woodland Mortuary Practices in the American Bottom: Evidence from the Lillie Site (11MS662). Podium presentation at American Bottom Upland Symposium at Midwestern Archaeological Conference, Milwaukee Wisconsin
- 2002 Rest in Pieces: Phase II Investigation of the Illinois City Cemetery, East St. Louis. **Carter ML** and Fulton CL. Podium presentation at the annual meeting of the Illinois Archaeological Survey, Bloomington, Illinois, November 22-23.
- 2000 Evaluating Bone Coloration and Taphonomy to Determine Source of Human Skeletal Remains. Podium presentation at the annual meeting of the Midwest Bioarchaeology and Forensic Anthropology Association, Columbia, MO, October 20-22.
- 1998 Infectious Disease and Diffuse Osteopenia in Prehistoric Illinois: A Unique Case from the Larson Site (11F3). Podium presentation at the annual meeting of the Midwest Bioarchaeology and Forensic Anthropology Association, Iowa City, Iowa, October 16-18.
- 1998 Sensitivity of Stable Isotopes in Bone to Dietary Specialization and Niche Separation of Primates in Kibale National Park, Uganda. Podium presentation at the annual meeting of the American Association of Physical Anthropologists, Salt Lake City, Utah. *Am. J. Phys. Anthropol. Suppl. 26*: 119. (PUBLISHED ABSTRACT)
- 1998 Osteological Evidence for Prehistoric Violence at the Larson Site (11F3), Fulton County, Illinois. **Carter ML**, Harn DE, and Tiné AL. Podium presentation at the annual meeting of the Midwest Bioarchaeology and Forensic Anthropology Association, Iowa City, Iowa, October 16-18.

#### **POSTER PRESENTATIONS**

- 2023 Expertise in Human Osteology: Legal Considerations in the United States. **Carter ML**, Seidemann RM, Newman JL, Reedy EA. Abstract accepted for invited poster symposium, Forensic Anthropology as Practiced in the United States: Qualifications, Standards, and Ethical Practice. Annual conference of the American Association of Biological Anthropologists, Reno, NV, April 19-22. (PUBLISHED ABSTRACT)
- 2018 Research Skills in Medical Students Contribute to Patient Safety. **Carter ML** and Foster JD. Poster presentation, International Association of Medical Science Educators, Las Vegas, NV, June 9-12. (PUBLISHED ABSTRACT)

- 2016 Age-Related Changes in the Temporal Bone Support Osteopathic Theory of Cranial Vault Mobility. **Carter ML**, Hayes K, Mann D, Nordike M, Osland E, and Rogers E. Poster presentation, American Association of Clinical Anatomists, Oakland, CA. (PUBLISHED ABSTRACT)
- 2016 A Supportive Role for Basic Science Faculty in the Establishment of an Osteopathic Medical Outreach Experience. Hernandez, M, **Carter M**, and Foster JD. American Association of Colleges of Osteopathic Medicine. (PUBLISHED ABSTRACT)
- 2014 Intraskkeletal Variability in Bone Remodeling: Implications for Clinical Sampling and Bone Chemistry Research. Poster presentation, American Association of Clinical Anatomists, Orlando, FL. (PUBLISHED ABSTRACT)
- 1993 Skeletal and Dental Pathology of Wild and Captive Chimpanzees: Clinical and Evolutionary Implications. Poster presented at the annual meeting of the American Association of Physical Anthropologists, Toronto, Ontario, Canada. *Am. J. Phys. Anthropol. Suppl.* 16:67-68. (PUBLISHED ABSTRACT)

### OTHER ABSTRACTS

- 2023 A Tragic Outcome for a Surgical Patient in Alabama Highlights Obstacles for Rural Healthcare and Avenues for Forensic Science Research. **Carter ML** and Reedy, EA. Presentation at University of Alabama Rural Health Conference, hosted by the Institute for Rural Health Research and the National Center on Forensics. April 12, University of Alabama, Tuscaloosa.
- 2023 Educating Rural Physicians About Death Certification and Medicolegal Death Investigation Will Save Lives and Money. **Carter ML**, Newman J, Rihner E, Malin O, Sanders M, Snider P, Rodriguez M, Douthit N, and Reedy E. Abstract submitted for presentation at VCOM Rural Medicine Conference, Nashville, TN, August 24-26.
- 2022 Severe Orthopedic Trauma, Suspected Drug Abuse, and Homelessness: A Forensic Death Investigation Highlights a Need for Better Support for Vulnerable Populations in Southern Alabama. **Carter ML**, Bush T, Cumbie D, Ford P, Sisson J, Reedy EA. Poster presented at annual Edward Via College of Osteopathic Medicine Research Retreat, Spartanburg, SC, November 12.

#### *Student Posters/Presentations*

- 2023 Bush T, Cumbie D, **Carter ML**, Reedy EA. Oral Health and Mental Illness in Diabetic Patients: A Forensic Death Case Report. Poster presented for VCOM Research Recognition Day, Auburn, AL, February 3.
- 2023 Ford P, Sisson M, **Carter ML**, Reedy EA. Diabetes and Fracture Healing: Death Investigation Highlights Post-Operative Concerns for a Vulnerable Patient. Poster presented for VCOM Research Recognition Day, Auburn, AL, February 3.
- 2023 Moralejo E, Murphy C, Moralejo L, Kanakrieh R, **Carter ML**. A Large Torus Palatinus in an Elderly Cadaver: Etiology and Health Implications. Poster presented for VCOM Research Recognition Day, Auburn, AL, February 3.

- 2023 Rihner E, Malin O, **Carter ML**. Skeletons in the Closet: Systematic Review of the Importance of Proper Death Investigation in Rural Areas. Poster presented for VCOM Research Recognition Day, Auburn, AL, February 3.
- 2023 Sisson J, Ford P, Lusk J, **Carter ML**. Bilateral Aplasia of Anterior Cruciate Ligament. Poster presented for VCOM Research Recognition Day, Auburn, AL, February 3.
- 2020 Fusion Status of the Petro-Occipital Fissure and the Petro-Sphenoidal Fissure in Cadaveric Specimens Donated to the ACOM Willied Body Program. Coulter J and **Carter ML**. Poster presentation, Research Day, Co-hosted by Alabama College of Osteopathic Medicine and the Society of Hospital Medicine, Dothan, AL, September.
- 2019 Changes in Cranial Vault Synchondroses with Age and their Implications to Osteopathic Medicine. Massarani N and **Carter ML**. Poster presentation, Research Day, Co-hosted by Alabama College of Osteopathic Medicine and the Society of Hospital Medicine, Dothan, AL, September.
- 2018 Observation of Articulations of the Apical Petrous Temporal Bone to Identify an Anatomic Basis for Cranial Osteopathic Manipulative Medicine in Older Adults. Frick TS, Abdullaj SA, **Carter ML**. Poster presentation, Research Day, Co-hosted by Alabama College of Osteopathic Medicine and the Society of Hospital Medicine, Dothan, AL, September.
- 2017 Examination of Articulations between the Apical Petrous Portion of the Temporal Bone and Adjacent Bones in the Cranial Base of Aging Adults: Implications for Cranial Osteopathic Manipulative Medicine. Emery E and **Carter ML**. Poster presentation, Alabama Osteopathic Medical Association, Birmingham, AL, January 23.

## OTHER

### **Forensic/Death Investigation Experience**

*Itemized case reports available upon request.*

- 2018- Consultant to Alabama Department of Forensic Sciences. Contact: Edward Reedy, PhD, MD, Senior Medical Director, Montgomery, Alabama
- 2021- Consultant to Opelika Police Department, Contact: Sgt. Alfred White.
- 2018- Consultant to Alabama State Bureau of Investigation. Contact: Special Agent Heath Carpenter, Dothan, Alabama.
- 2015 Houston County Coroner's Office, volunteer; death scene investigation of stabbing victim in Pansey, Alabama (April)
- 2014 Houston County Coroner's Office, volunteer; examination of self-inflicted gunshot wound victim, SAMC morgue (February)
- 2014 Houston County Coroner's Office, volunteer; death scene investigation of decomposed body, Dothan, Alabama (February)
- 2014 Houston County Coroner's Office, volunteer; death scene investigation of GSW/suicide, Ashford, Alabama (July)
- 2014 Houston County Coroner's Office, volunteer; death scene investigation of decomposed body, Dothan, Alabama (November)

- 2003 Champaign Police Department; crime scene investigation and excavation of suspected burial in house basement; report submitted.
- 2002 Illinois State Police; crime scene mapping and recovery of skeletonized human remains found along Wabash River, Lawrence County, Illinois.  
Illinois State Police Case No. N02-0309-9-1; maceration and analysis of badly decomposed body of adult female found along Interstate 64 in Mascoutah, St. Clair County, Illinois; report submitted.  
Illinois State Police Case No. N02-0321-9-1; maceration and analysis of badly decomposed body of adult female found along Interstate 70 in Madison County Illinois; report submitted.  
Illinois State Police; investigation of human remains found under foundry building in Galena, Illinois.  
Illinois State Police Case No. G02-3846-6-3; analysis of adult human cranium found along railroad tracks in Kankakee County, Illinois; trauma analysis; report submitted.  
Menard County Coroner: analysis and field investigation of human cranium found in Oakland Cemetery, Petersburg, Illinois; report submitted.  
Sangamon County Coroner Case No. CC292-02; maceration and analysis of badly decomposed body of adult female found in old refrigerator in Springfield, Illinois; short report submitted.  
Monmouth County Police Department, Illinois; analysis of various bones to determine if human; short reports submitted. 2022- Member, Child Fatality Review Board, Lee County, Alabama (contact Evette Daniels, Trial Litigation Assistant, Lee County District Attorney's Office, Opelika).
- 2001 Peoria Police Department Case No. 01-37944.  
exhumation of homicide victim from basement of residence; trauma analysis; report submitted to PPD and Peoria County Coroner.

### **Workshops**

- 2002 *Organizer and Instructor*, Educational Workshop in Forensic Archaeology. October 7-8, 2002. Sponsored by the Illinois Mobile Training Unit. Hosted by Morgan County Coroner, Jeff Lair.
- 2002 *Co-organizer and Instructor*, "The Role of Anthropology and Archaeology in Modern Death Investigations." May 2-3, 2002; workshop co-sponsored by Illinois State Museum and Illinois State Police

### **Field Schools and Continuing Education**

- 2023 Webinar Attendance: Collaborative Forensic Pathology with Forensic Anthropologists and Biologists, National Association of Medical Examiners Interim Scientific Program, April 11.
- 2022- Monthly Medical Student Webinars on forensic pathology, hosted by the National Association of Medical Examiners (<https://name.memberclicks.net/name-medical-student-webinars>).
- 2018 Homicide Investigation Training, Alabama State Association of Forensic Sciences Annual Training Event, May 30, Miramar Beach, FL.

- 2018 Workshop Attendance: Introduction to the Medical Science Educator Journal and Basic Reviewing Tips, June 9, International Association of Medical Science Educators, Las Vegas, NV.
- 2018 Workshop Attendance: Expanding Your Horizons Beyond Your Current Academic Unit: What's Next on Your Leadership Pathway, June 9, International Association of Medical Science Educators, Las Vegas, NV.
- 2017 Workshop Attendance: Animal/Plant Health Joint Criminal-Epidemiological Investigations Course, Co-sponsored by the Federal Bureau of Investigation and Animal Plant Health Inspection Service, Auburn University School of Veterinary Medicine, Auburn, AL, May 16-17.
- 2002 Workshop Attendance: Medicolegal Death Investigators Training Course, Saint Louis University School of Medicine, St. Louis, Missouri, April 22-26
- 1994 Graduate Student in tropical rain forest ecology and conservation field school in Kibale National Park, Uganda; directed by Drs. Colin and Lauren Chapman (Zoology, Univ. of FL) (6 weeks) 2019
- Death Scene Archaeology: Outdoor Crime Scene Recovery and Reconstruction Field School, presented by HD Forensics and Tripwire Operations Group, August 5-9, Gettysburg, PA. Instructors: Dennis Dirkmaat, PhD, D-ABFA and FBI Special Agent (Retired) Michael Hochrein
- 1991 Student in University of Chicago archeological field school, Center for American Archaeology, Kampsville, Illinois, under direction of Dr. Jane Buikstra (9 weeks)

### **Field and Laboratory Research Experience**

- Forensic crime scene recovery, approximately 20 scene recoveries over the past 25 years with various agencies in Illinois and Alabama; details available upon request.
- Analysis of and research on human skeletal remains full-time for 5.5 years at the Illinois State Museum Research and Collections Center, Springfield, Illinois (1996-2002).
- Approximately 36 months of archaeological excavations on mortuary and habitation sites in Illinois/USA (1991-current) and Crete, Greece (June/July 1989).
- Approximately 12 months part-time dedicated to skeletal analysis and documentation of Native American remains from the Neville Public Museum, Green Bay, Wisconsin, while a graduate student at the University of Chicago. Work supervised by Dr. Jane Buikstra (1993).
- 11 weeks of research (collections and ecological) in Kibale National Park, Uganda, East Africa (June - July 1994 and October 1995)
- Collections research at 6 institutions: nonhuman primate skeletal remains at the Field Museum of Natural History (Chicago); faunal remains at the Makerere University Biological Field Station, Uganda; modern primate remains at the National Museum of Kenya; prehistoric human skeletons at Dickson Mounds Museum (1990-1995); modern and prehistoric human skeletons at Illinois State Museum (1996-current)

3 months of sample preparation and analysis, stable isotope laboratories, University of Chicago Hospital (D. Schoeller, PhD), Augustana College (Dept. of Biology, L. Tieszen, PhD), University of Florida, Gainesville (Dept. of Anthropology, L. Norr, PhD) (1993-2000)

### **Research Interests**

Age changes in the skull base; sources of bias in mortality data; bone chemistry, pathology, and toxicology; stable isotopes in bone and dietary modeling; chronic drug use and abuse and effects on skeletal and dental health; skeletal biology and physiology; orthopedic pathology; biomedical ethics of death and dying; medicolegal death investigation; application of forensic anthropology/archaeology to death investigations and forensic pathology; forensic taphonomy

### **Invited Lectures**

- 2023 "How Laws Influence Death Investigation Involving Human Skeletal Remains in the United States." Virginia Commonwealth University Department of Forensic Science Seminar. Virtual Lecture via Zoom, March 22. Contact Victoria Parks, Adjunct Instructor.
- 2023 Speaker for Physician Flourishing Rounds, Internal Medicine Residency Program, East Alabama Medical Center, Dr. Stephen Presley, Program Director and Dr. Nathan Douthit, Associate Program Director. Topic: Benefits of discussing death openly with patients and loved ones. March 10.
- 2022 The Intersection of Anthropology and Medicine. For Dr. Kris Shuler's undergraduate course in Medical Anthropology, Haley Center, Auburn University.
- 2020 "Pediatric Cranial Osteology," for Osteopathic Principals and Practice, Year II medical students, Jeffrey Johns, DO, Course Director, Alabama College of Osteopathic Medicine, January.
- 2001 "Discoveries Resulting from the Analysis of the Illinois State Museum Human Remains Collection." Illinois State Museum Monthly Archaeology Series, Springfield, Illinois, July 11, with Dawn Cobb.
- 2001 "The Contributions of Bioarchaeology to Modern Forensic Investigations." Illinois State Museum Brown Bag Lecture Series, Springfield, Illinois, April 13.
- 2000 "Prehistoric Cahokia and the Rise of North American Civilizations." Invited lecture for Dr. William Cross's class *Urban Civilizations*, Illinois College, Jacksonville, September.
- 2000 "Adventures and Research in Kibale National Park, Uganda." Illinois State Museum Brown Bag Lecture Series, Springfield, Illinois, September 20.
- 1999 "Sacred Journey, Scientific Loss: Mitigating the Consequences of NAGPRA." Center for American Archaeology Archaeological Field School, Kampsville, Illinois, August 4.
- 1998 "Maize and Mayhem at the Larson Site: Osteological Interpretations of a Mississippian Mortuary Assemblage from Central Illinois." Illinois State Museum Brown Bag Lecture Series, Springfield, Illinois, March 25, with Dawn Cobb and Angela Tiné

1997 "How the Anatomy, Physiology, and Chemistry of Human Bone Contribute to the Archaeological Record." Center for American Archaeology Archaeological Field School, Kampsville, Illinois, July.