ANTHROPOLOGY

Wednesday

Poster Session

11:30 a.m. - 1:00 p.m.   A1   Quantification of Age-Related Pubic Symphyseal Morphological Changes Based on the Analysis of Clinical Multi-Detector Computed Tomographic (MDCT) Scans in Malaysian Males
Salina Hisham, MSc*; Nurliza Abdullah, MPath; Mohamad Helmee Mohamad Noor, MS; Daniel Franklin, PhD

11:30 a.m. - 1:00 p.m.   A2   An Evaluation of the Inter-Observer Reliability of Aging Methods From the Pubic Symphysis
Tyler E. Dunn, MS*; Sarah C. Kindschuh, PhD; Brittany S. Walter, PhD

11:30 a.m. - 1:00 p.m.   A3   Assessing the Utility of the Suchey-Brooks Method on a Historical Sample
Sarah C. Kindschuh, PhD*; Brittany S. Walter, PhD; Tyler E. Dunn, MS

11:30 a.m. - 1:00 p.m.   A4   Topographic Analyses and the Estimation of Age at Death From the Pubic Bone
Andrew C. Seidel, MA*; Christopher Stojanowski, PhD; Laura C. Fulginiti, PhD; Kristen Hartnett-McCaan, PhD

11:30 a.m. - 1:00 p.m.   A5   An Estimation of American Black and White Ancestry From Measurements of the Vertebrae and Sacrum
Rhian Dunn, MS*; Luis L. Cabo, MS

11:30 a.m. - 1:00 p.m.   A6   Ancestry Estimation Using Vertebrae: Koreans Versus United States Whites
Yangseung Jeong, PhD*; Heli Maijanen, PhD

11:30 a.m. - 1:00 p.m.   A7   Metric Variability in the Femur and Patella: The Potential for Ancestry Assessment
Marica Baldoni, MA*; Rachel Joseph, MSc*; Carole A.L. Davenport, PhD; Constantine Eliopoulos, PhD; Matteo Borrini, PhD

11:30 a.m. - 1:00 p.m.   A8   An Examination of Pelvic Scarring as a Determinant of Sex
Helen M. Brandt, MS*; Stephen P. Nawrocki, PhD; Krista E. Latham, PhD

11:30 a.m. - 1:00 p.m.   A9   The Impact of Antimeric Leg Length Asymmetry on Adult Stature Estimation: A Validation Study
Megan E. Ingvoldstad, PhD*; Brittany S. Walter, PhD

11:30 a.m. - 1:00 p.m.   A10  An Estimation of Stature Using Cranial Dimensions
Mubarak A. Bidmos, PhD*; Abduljelil Adebisin, MSc

11:30 a.m. - 1:00 p.m.   A11  A Comparative Analysis of Stature Estimation Methods for Application in Forensic Anthropology
Susie C. Athey*; Mackenzie Walls; Alexandra R. Klaes, PhD; Heather M. Garvin, PhD

11:30 a.m. - 1:00 p.m.   A12  Tall Tales: Various Regression Stature Methods Applied to the Huntington Collection
Ashley Espinoza,*; David R. Hunt, PhD; Gene Hunt, PhD

*Presenting Author
11:30 a.m. - 1:00 p.m.  A13 Blast and Aircraft Crash Trauma: A Selection of World War II (WWII) Cases From the Defense POW/MIA Accounting Agency (DPAA) Laboratory
Andrea Palmiotto, PhD*; Kyle A. McCormick, PhD; Traci L. Van Deest, PhD; Laurel E. Freas, PhD

11:30 a.m. - 1:00 p.m.  A14 The Prevalence of Peri-Mortem Trauma Among Casualties of Armed Conflict
Andrea Palmiotto, PhD; Carrie B. LeGarde, MA*

11:30 a.m. - 1:00 p.m.  A15 Patterns of Intentional Dismemberment in Florida Medicolegal Death Investigations
Katie M. Rubin, MS*; Janet E. Finlayson, MA

11:30 a.m. - 1:00 p.m.  A16 Skeletal Asymmetry of the World War II (WWII) Battle of Tarawa Skeletal Assemblage: The Impact on the Resolution of Commingling
Caryn E. Tegtmeyer, PhD*; Jesse Roberto Goliath, PhD; Rebecca J. Wilson-Taylor, PhD*

11:30 a.m. - 1:00 p.m.  A17 Reassociating Commingled Human Crania With First Cervical Vertebrae: An Osteometric Approach
Vasiliki Louka, MSc; Ioanna Anastopoulou, BSc; Konstantinos Moraitis, PhD*

11:30 a.m. - 1:00 p.m.  A18 Reassessing Determining Season at Death Using Dental Cementum Increment Analysis (DCIA) in Young Adults
Vicki Wedel, PhD*; Timothy P. Gocha, PhD

11:30 a.m. - 1:00 p.m.  A19 The Application of Textile Biodeterioration Rates to Postmortem Interval (PMI) Estimation
Randi Marie Depp, BS*; Kellie Jones, BA*; Jennifer L. Webb, BS*; Jessica T. Novak, BA*

11:30 a.m. - 1:00 p.m.  A20 Best Practices for Macerating Cartilage
Alexis M. LaGoy*; Tessa Somogyi, MA*; Elizabeth A. Evangelou, MA*; Elizabeth A. DiGangi, PhD*

11:30 a.m. - 1:00 p.m.  A21 Integrating Forensic Anthropology and Cold Case Databases: A Look at Resolved Unidentified and Missing Persons Cases in Louisiana
Emily F. Wiegers, MA*; Teresa V. Wilson, PhD; Ginesse A. Listi, PhD; Maria T. Allaire, MA; Larry J. Livaudais, Jr., MS

11:30 a.m. - 1:00 p.m.  A22 Introduction of a Mobile Digital Database System for Standardization, Quality Assurance, and Efficiency in Forensic Anthropology Casework
Christine M. Pink, PhD*; Rebecca E. Bria, PhD

11:30 a.m. - 1:00 p.m.  A23 A Geospatial Database for Coroner Records: Developing a Collaborative Partnership to Facilitate Undergraduate Research
Katherine E. Weisensee, PhD*

11:30 a.m. - 1:00 p.m.  A24 Hidden in a Dark Past: The 1887 Thibodaux Massacre of Black Sugarcane Workers
Davette N. Gadison, MA*; Mark Rees, PhD
**Thursday—Session I**

**Biological Profile: Age Estimation I**

**Moderator:** Nicholas V. Passalacqua, PhD  
Western Carolina University  
Cullowhee, NC

**Co-Moderator:** Stephanie J. Cole, MS  
University of Nevada, Reno  
Reno, NV

8:30 a.m. - 8:45 a.m.  **A25**  The Use and Misuse of Transition Analysis: An Assessment of the Boldsen et al. Age-at-Death Estimation Method  
Sara M. Getz, PhD*

8:45 a.m. - 9:00 a.m.  **A26**  A New Method for Adult Skeletal Age Estimation Using Transition Analysis: TA³  
Stephen D. Ousley, PhD*; George R. Milner, PhD; Jesper L. Boldsen, PhD; Sara M. Getz, PhD; Svenja Weise, PhD

9:00 a.m. - 9:15 a.m.  **A27**  New Solutions for Old Problems? Examining Machine Learning as a Strategy for Age-at-Death Estimation  
Melissa Ann Brown, MA*; Dillon G. Daudert, BS; James Jenkins, BS

9:15 a.m. - 9:30 a.m.  **A28**  Bone Mineral Density (BMD) as an Indicator of Age at Death in Forensic Anthropology: A Test of DXAGE  
Jonathan D. Bethard, PhD*; Jacqueline M. Berger, MS; Justin R. Maiers, MS; Ann H. Ross, PhD

9:30 a.m. - 9:45 a.m.  **A29**  Age Estimation on Two Mediterranean Populations Using Rib Histomorphology  
Julieta Gomez Garcia-Donas*; Andrea Bonicelli, MSc; Caroline Lill, MSc; Robert R. Paine, PhD; Elena Kranioti, PhD

9:45 a.m. - 10:00 a.m.  **A30**  Utilizing Osteon Volume for Histological Age-at-Death Estimation  
Suzanna Michener, MSc*; Lynne S. Bell, PhD; David Swanlund, BA; Nadine Schuurman, PhD

10:00 a.m. - 10:15 a.m.  **Break**

**Global Applications of Anthropology to Humanitarian and Human Rights Violations**

**Moderator:** Davette N. Gadison, MA  
Tulane University  
Department of Anthropology  
New Orleans, LA

**Co-Moderator:** Douglas H. Ubelaker, PhD  
Smithsonian Institution  
Department of Anthropology  
Washington, DC

10:15 a.m. - 10:30 a.m.  **A31**  Humanitarian Forensics: Applications Today and Emerging Challenges  
Oran Finegan, MSc*; Pierre M.M. Guyomarc'h, PhD

10:30 a.m. - 10:45 a.m.  **A32**  After Atrocity: Why Wouldn’t You Investigate?  
Dawnie W. Steadman, PhD*; Hugh H. Tallur, MA; Julia Hanebrink, MA; Jaymelee Kim, PhD; Tricia Hepner, PhD

10:45 a.m. - 11:00 a.m.  **A33**  Ethical Technologies: The Social Impacts of Forensic Interventions in Human Rights Violations  
Alexa Hagerty, PhD*

*Presenting Author
11:00 a.m. - 11:15 a.m.  A34  Forensic Archaeology in the Horn of Africa: Humanitarian Action and Posthumous Rights  
Franco Mora, BA*; Valeska Martinez, BA*; Jose P. Baraybar, MSc, PhD

11:15 a.m. - 11:30 a.m.  A35  Capacity Building of Forensic Scientists  
Elizabeth A. DiGangi, PhD*; Jonathan D. Bethard, PhD*

11:30 a.m. - 11:45 a.m.  A36  Assessing the Role of Churches in Missing Migrant Identifications  
Richard Phillips, BA*; Sara H. Katsanis

11:45 a.m. - 12:00 p.m.  Discussion

12:00 p.m. - 1:30 p.m.  Lunch

**Poster Session**

11:30 a.m. - 1:00 p.m.  A37  The Assessment of Jugular Growth Plate (JGP) Ossification for Age Estimation  
Brittany S. Walter, PhD*; Katherine Skorpinski, PhD

11:30 a.m. - 1:00 p.m.  A38  Age-at-Death Estimation From the Auricular Surface of the Ilium: A Comparison of Two Methods  
Andrea Ost, MS*; Luis L. Cabo, MS

11:30 a.m. - 1:00 p.m.  A39  A New Version Release of 3D-ID Geometric Morphometric Classification of Crania for Forensic Scientists  
Ann H. Ross, PhD*; Dennis E. Slice, PhD; Desiré Brits, PhD; Tamara L. Lottering, BSc; Candice Small, PhD

11:30 a.m. - 1:00 p.m.  A40  A Reevaluation of the (hu)MANid Classification Software Using Virtually Collected Mandibulometer Measurements  
Heather M. Garvin, PhD*; Kelsey A. Carpenter, MS; Gregory E. Berg, PhD; Michael W. Kenyhercz, PhD

11:30 a.m. - 1:00 p.m.  A41  Craniometric Variation and Sexual Dimorphism in a Chilean Population  
Rachel M. Kreher, BS*; Krista E. Latham, PhD; Stephen P. Nawrocki, PhD

11:30 a.m. - 1:00 p.m.  A42  The Application of the Optimized Summed Scored Attributes (OSSA) Method to Sex Estimation in Whites and Blacks  
Summer M. Mizell*; Holly Long*; Alexandra R. Klales, PhD

11:30 a.m. - 1:00 p.m.  A43  Worldwide Population Variation in Skull Sexual Dimorphism  
Alexandra R. Klales, PhD*; Stephanie J. Cole, MS; Kyra E. Stull, PhD; Heather M. Garvin, PhD; Matthew C. Go, MA; Antinea Menéndez Garmendia, MS; Mackenzie Walls; Gabriela Sánchez-Mejorada, PhD

11:30 a.m. - 1:00 p.m.  A44  Cognitive Bias and the Order of Examination on Skeletal Remains  
Marion E. Davidson*; Carolyn Rando, PhD; Sherry Nakhaeizadeh

11:30 a.m. - 1:00 p.m.  A45  The Impact of Bone Density and Bone Thickness on Gunshot Trauma to the Skull  
Elizabeth A. Evangelou, MA*; Tessa Somogyi, MA*; Alexis M. LaGoy*; Kevin E. Sheridan, PhD*; Elizabeth A. DiGangi, PhD*
11:30 a.m. - 1:00 p.m.  A46  A Comparison of Bullet Construction to the Area and Perimeter of Gunshot Entrance and Exit Wounds
Tessa Somogyi, MA*; Elizabeth A. Evangelou, MA*; Alexis M. LaGoy*; Kevin E. Sheridan, PhD*; Elizabeth A. DiGangi, PhD*

11:30 a.m. - 1:00 p.m.  A47  Differential Mass Loss in Bullets From Frontal and Temporal/Parietal Bone Impacts
Kevin E. Sheridan, PhD*; Donald Poon, BA; Jessica E. Sanger, BA; Elizabeth A. Evangelou, MA; Tessa Somogyi, MA; Elizabeth A. DiGangi, PhD

11:30 a.m. - 1:00 p.m.  A48  Scanning Electron Microscopes With Energy Dispersive X-Ray Spectroscopy (SEM/EDX) Analysis of Gunshot Residue (GSR) on Pig Bone
Anthony B. Falsetti, PhD*; Natalie R. Langley, PhD; Blake D. Ehlers; Bethany M. Pittman; AmberCherie Lasala; Kimber G. Cheek, BS; Derek A. Boyd, MA

11:30 a.m. - 1:00 p.m.  A49  Thermogravimetric Analysis (TGA) of Juvenile Pig Rib Compositional Changes
Luisa Marinho, MSc*; Dev Sharma, PhD; Carolyn J. Sparrey, PhD; Stephen N. Robynovitch, PhD; Alison Golloway, PhD; Hugo Cardoso, PhD

11:30 a.m. - 1:00 p.m.  A50  The Effects of Chemotherapy and/or Radiotherapy Treatment on Decomposition
Shelby Garza, BS*; Daniel J. Wescott, PhD

11:30 a.m. - 1:00 p.m.  A51  Time to Skeletonization (TTS): Dermeses maculatus De Geer Skin/Hide Beetles and Skeletonization on Python Bivittatus Kuhl Burmese Python Remains
Amy Pham, BA*; Shannon L. Dery*; Heather A. Walsh-Haney, PhD; Jason H. Byrd, PhD; Ian Bartoszek

11:30 a.m. - 1:00 p.m.  A52  Understanding Bone Diagenesis and Its Effects on Commingled Remains: The Potential and Hazards of Portable X-Ray Fluorescence (pXRF) Analysis
Kent M. Adamson, MSc*; Tim Thompson, PhD

11:30 a.m. - 1:00 p.m.  A53  DNA Preservation in Bone From a Multi-Individual Burial
Alexandra L. Emmons, MA*; Sarah W. Keenan, PhD; Jon Davoren; Jennifer M. DeBruyn, PhD; Amy Z. Mundorff, PhD

11:30 a.m. - 1:00 p.m.  A54  Recognizing Transplanted Allograft Bone in Forensic Anthropological Cases
Angi M. Christensen, PhD*; Louis Jares, BS

11:30 a.m. - 1:00 p.m.  A55  Inferring Species Origin Through Virtual Histology: A Comparison of Third Metapodials From Homo Sapiens and Ursus Americanus Using Micro-Computed Tomography
Hannah Stephen, BS*; Reed A. Davis, MSc*; Janna M. Andronowski, PhD

11:30 a.m. - 1:00 p.m.  A56  The Scavenging Patterns of Feral Cats on Human Remains in an Outdoor Setting
Sara N. Garcia*; Alexander J. Smith*; Christiane Baigent, MSc; Melissa A. Connor, PhD

11:30 a.m. - 1:00 p.m.  A57  Positive Identification Via Frontal Sinus Morphology: A Geographic Information Systems (GIS) Approach
Jenna M.S. Watson, MA*

11:30 a.m. - 1:00 p.m.  A58  The Identification of United States Casualties by the Central Identification Unit in Kokura, Japan
Alexander F. Christensen, PhD*

11:30 a.m. - 1:00 p.m.  A59  Interactive Resources for Craniofacial Identification
Terrie Simmons-Ehrhardt, MA*; Anthony B. Falsetti, PhD; Catyana R. Falsetti, MFS; Christopher J. Ehrhardt, PhD

*Presenting Author
### Postmortem Interval and the Recovery Scene

**Moderator:** Christine M. Pink, PhD  
**Co-Moderator:** Haley Rock, BS  
*Presenting Author*

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<th>Time</th>
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<tr>
<td>1:30 p.m.</td>
<td>1:45 p.m.</td>
<td>A60 What Can Forensic Proteomics Tell Us About Biological Age and Postmortem Interval (PMI) Estimation?</td>
<td>Noemi Procopio, PhD*; Anna Williams, PhD; Andrew Chamberlain, PhD; Michael Buckley, PhD</td>
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<td>1:45 p.m.</td>
<td>2:00 p.m.</td>
<td>A61 Using Stable Nitrogen Isotope Ratios From Human Muscle Tissue for Postmortem Interval (PMI) Estimation</td>
<td>Melanie M. Beasley, PhD*; Julie Lesnik, PhD; Hayden McKee, MSc; Dawnie W. Steadman, PhD</td>
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<td>2:00 p.m.</td>
<td>2:15 p.m.</td>
<td>A62 The Human Cadaver Decomposition Island and the Vegetation Regrowth Interval</td>
<td>Haeli Kennedy; Jasmine Garcia; West Ryan; Jacqueline A. Aitkenhead-Peterson, PhD*; Joan A. Bytheway, PhD*</td>
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<td>2:15 p.m.</td>
<td>2:30 p.m.</td>
<td>A63 Longitudinal Comparison of the Megyesi and Moffatt Total Body Scoring (TBS) Methods for Estimating the Postmortem Interval (PMI)</td>
<td>Derek A. Boyd, MA*; Kelly Sauerwein, PhD; Angela M. Dautartas, PhD</td>
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<td>2:30 p.m.</td>
<td>2:45 p.m.</td>
<td>A64 The Effects of Hydrochloric Acid (HCl) on Decomposition: Evidence of Preferential Destruction to the Head and Extremities</td>
<td>Dayanira Lopez, BS*; Heather A. Walsh-Haney, PhD; Laura Frost, PhD; Brian Johnson, PhD</td>
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<td>2:45 p.m.</td>
<td>3:00 p.m.</td>
<td>A65 Outdoor Crime Scene Reconstruction</td>
<td>Dennis C. Dirkmaat, PhD*; Luis L. Cabo, MS</td>
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<td>3:00 p.m.</td>
<td>3:15 p.m.</td>
<td>A66 Use of an Alternate Light Source (ALS) to Locate Surface-Deposed Skeletal Remains</td>
<td>Tracy E. Brown*; Angi M. Christensen, PhD</td>
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<td>3:15 p.m.</td>
<td>3:30 p.m.</td>
<td>A67 Evaluating the Use of Photogrammetry in the Excavation of Buried Human Remains</td>
<td>Kathleen Flor-Stagnato, MA*</td>
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<td>3:30 p.m.</td>
<td>3:45 p.m.</td>
<td>A68 Complexities in Transporting Human Remains Across International Borders</td>
<td>Denise To, PhD; Debra Prince Zimm, PhD*</td>
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<td>3:45 p.m.</td>
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<td>Break</td>
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Defining Qualifications and Competencies in Forensic Anthropology: Implications for Education, Training, Accreditation, and Certification

Moderator: Natalie R. Langley, PhD
Mayo Clinic School of Medicine
Department of Anatomy
Scottsdale, AZ

Co-Moderator: MariaTeresa A. Tersigni-Tarrant, PhD
Saint Louis University School of Medicine
Center for Anatomical Science
St. Louis, MO

4:00 p.m. - 4:15 p.m. A69 Qualifications for Forensic Anthropologists
Marin A. Pilloud, PhD; Nicholas V. Passalacqua, PhD*

4:15 p.m. - 4:30 p.m. A70 Harris County Forensic Anthropology Training Program
Deborrah C. Pinto, PhD*; Michal L. Pierce, MS

4:30 p.m. - 4:45 p.m. A71 The American Board of Forensic Anthropology (ABFA) Examination Turns 40: Historical Perspectives and Current Trends in Certification for Forensic Anthropology
Eric J. Bartelink, PhD*; Donna C. Boyd, PhD; Diane L. France, PhD; James Pokines, PhD; Debra Prince Zinni, PhD

4:45 p.m. - 5:00 p.m. A72 Exploring Educational Needs Beyond Technical Competency: Laboratory Management, Testimony, and Vicarious Trauma
Jennifer C. Love, PhD*

5:00 p.m. - 5:15 p.m. A73 Core Competencies and Entrustable Professional Activities: A Model for Forensic Anthropology Qualifications
Natalie R. Langley, PhD*; MariaTeresa A. Tersigni-Tarrant, PhD*

5:15 p.m. - 5:30 p.m. Discussion

Thursday—Session II

Isotopic Analyses and Taphonomy

Moderator: Lauren R. Pharr, PhD
Memphis, TN

Co-Moderator: William D. Cawley, MA
University of Tennessee
Knoxville, TN

8:45 a.m. - 9:00 a.m. A74 Using Apatite Yield From Bone Sample Preparations for Quality Control in Stable Isotope Analysis Applications
Lesley A. Chesson, MS*; Gregory E. Berg, PhD; Eric J. Bartelink, PhD; Melanie M. Beasley, Ph.D; Miranda Jans, PhD

9:00 a.m. - 9:15 a.m. A75 A Large-Scale Evaluation of Intraperson Isotopic Variation Within Human Bone Collagen and Bioapatite
Gregory E. Berg, PhD*; Eric J. Bartelink, PhD; Jang Yuryang, PhD; Youngsook Shin, MA; Lesley A. Chesson, MS

9:15 a.m. - 9:30 a.m. A76 Conservation of Isotope Ratios in Burned Bones of Pigs and Humans
Julianne J. Sarancha, MS*; Gwyneth W. Gordon, PhD; Jelmer Eerkens, PhD; Christopher J. Hopkins, MS; Eugenia Cunha, PhD; David Gonçalves, PhD; Inês Santos, MSc; Ana Vassalo, MSc

*Presenting Author
9:30 a.m. - 9:45 a.m.  A77  The Role of Stable Isotope Analysis in Forensic Cases From Flagstaff, Arizona  
Taylor Lambrigger*

9:45 a.m. - 10:00 a.m.  A78  Experimental Lacustrine Taphonomy: Decompositional Changes in Freshwater Lake-Submerged Skeletal Remains  
Vienna C. Lam, MA*; Lynne S. Bell, PhD

10:00 a.m. - 10:15 a.m.  A79  Modeling the Fluvial Transport of Human Remains in the Sacramento River of California  
Colleen F. Milligan, PhD*; Eric J. Bartelink, PhD

10:15 a.m. - 10:30 a.m.  A80  Introducing Forensic Investigation Research Station (FIRS-TB40): Scavenger Succession and Progression at a High-Altitude Site in Colorado  
Christiane Baigent, MSc*; Melissa A. Connor, PhD; Gretchen R. Dabbs, PhD

10:30 a.m. - 10:45 a.m.  Break

Sex Estimation and Methods in Forensic Anthropology

Moderator: Megan K. Moore, PhD  
Eastern Michigan University  
Department of Sociology, Anthropology, and Criminology  
Ypsilanti, MI

Co-Moderator: Derek A. Boyd, MA  
University of Tennessee, Knoxville  
Knoxville, TN

10:45 a.m. - 11:00 a.m.  A81  Sex Estimation of Black South African Sacra Using Geometric Morphometrics  
Tamara L. Lottering, BSc*; Jason Hemingway, PhD; Candice Small, PhD

11:00 a.m. - 11:15 a.m.  A82  Virtual Forensic Anthropology: The Accuracy of Osteometry on 3D Virtual Models of the Os Coxa Derived From Clinical Computer Tomography (CT) Scans  
Kerri L. Colman, MSc; Hans H. De Boer, MD, PhD*; Johannes G. G. Dobbe, PhD; Niels Liberton; Kyra E. Stull, PhD; Maureen van Eijnatten, PhD; Johannes G. Streekstra, PhD; Roelof-Jan G. Oostra, PhD; Rick R. Van Rijn, PhD; Lida A.E. Van der Merwe, PhD

11:15 a.m. - 11:30 a.m.  A83  Virtual Anthropology: The Interchangeability of Morphological Sex Estimation Methods on 3D Models of the Pelvis and Their Dry Skeletal Counterpart  
Kerri L. Colman, MSc; Lida A.E. Van der Merwe, PhD; Kyra E. Stull, PhD; Aubrey Van Het Reve, BSc; Hannah E.M. Crijns, BSc; Johannes G.G. Dobbe, PhD; Johannes G. Streekstra, PhD; Rick R. Van Rijn, PhD; Roelof-Jan G. Oostra, PhD; Hans H. De Boer, MD, PhD*

11:30 a.m. - 11:45 a.m.  A84  Perceptions and Cognitive Bias in Decomposition Scoring Methods in Forensic Anthropology  
Kelly Sauerwein, PhD*; Xiaojuan Zhu, PhD; Dawnie W. Steadman, PhD

11:45 a.m. - 12:00 p.m.  A85  Evaluation and Minimization of Contextual Bias in Forensic Anthropological Casework in the Context of a Medical Examiner’s Office  
Julie M. Fleischman, PhD*; Michal L. Pierce, MS; Christian Crowder, PhD

12:00 p.m. - 1:30 p.m.  Lunch
## International Forensic Anthropology

**Moderator:** Melina Calmon Silva, MA  
New Orleans, LA

**Co-Moderator:** Eugenia Cunha, PhD  
National Institute of Legal Medicine  
and Forensic Sciences  
Coimbra, PORTUGAL

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<td>1:30 p.m.</td>
<td>A86</td>
<td>Forensic Anthropology Down Under: Reflections on the Development and Practice of Forensic Anthropology in Australia</td>
<td>Soren Blau, PhD; Samantha K. Rowbotham, MArSc*</td>
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<td>1:45 p.m.</td>
<td>A87</td>
<td>Forensic Anthropology: A View of Brazil</td>
<td>Yara V. Lemos, MS*</td>
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<td>2:00 p.m.</td>
<td>A88</td>
<td>Forensic Anthropology and the Philippines</td>
<td>Matthew C. Go, MA*</td>
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<td>2:15 p.m.</td>
<td>A89</td>
<td>An Anthropology Roadmap: Sri Lanka</td>
<td>Sunil P.A. Hewage*</td>
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<td>2:30 p.m.</td>
<td>A90</td>
<td>Forensic Anthropology As a Neglected Field of Inquiry in Forensic Death Investigations in India: A Critical Evaluation of the Current Scenario and Future Possibilities</td>
<td>Jagmahender Singh Sehrawat, PhD*</td>
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<td>2:45 p.m.</td>
<td>A91</td>
<td>Forensic Anthropology Practice in Indonesia</td>
<td>Evi Untoro, MD*</td>
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<td>3:00 p.m.</td>
<td>A92</td>
<td>Forensic Anthropology Research Centre (FARC): An Emerging Community of Practice in South Africa</td>
<td>Ericka N. L’Abbe, PhD*; Leandi Liebenberg, MS; Gabriele C. Kruger, MSc; Anna C. Oettle, MBChB, PhD; Steven A. Symes, PhD; Shari A. Eppel, BA; Kyra E. Stull, PhD; Marie Christine Dussault, PhD; Michael W. Kenyhercz, PhD; Yvette Scholtz, MSc; Clarisa Sutherland, BSc; Alieske C. Hagg, MSc</td>
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<td>3:15 p.m.</td>
<td>A93</td>
<td>Forensic Anthropology in Greece: An Overview of the Discipline's Status</td>
<td>Elena Kranioti, PhD*; Konstantinos Moraitis, PhD*</td>
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<td>3:30 p.m.</td>
<td>A94</td>
<td>Routine Practice in Forensic Anthropology in Europe: Attempting to Achieve a State of the Art</td>
<td>Eugenia Cunha, PhD*; Elena Kranioti, PhD; Pascal Adalian; Eric Baccino, MD; Cristina Cattaneo, PhD</td>
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<td>3:45 p.m.</td>
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<td>Discussion</td>
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<td>4:00 p.m.</td>
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<td>Break</td>
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*Presenting Author
### Identification Efforts in Forensic Anthropology

**Moderator:** Annarita Franz, PhD  
Department of Experimental & Clinical Biomedical Sciences  
University of Florence  
Florence, ITALY

**Co-Moderator:** Katie M. Rubin, MS  
University of Florida  
C.A. Pound Human Identification Laboratory  
Gainesville, FL

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<tr>
<td>4:15 p.m.</td>
<td>A95</td>
<td>The Use of a Gelatin-Based Consolidant to Preserve Thermally Altered Remains</td>
<td>Jan J. Topoleski, MFS*; Angi M. Christensen, PhD</td>
</tr>
<tr>
<td>4:30 p.m.</td>
<td>A96</td>
<td>The Application of X-Ray Photoelectron Spectroscopy to Examine the Surface Chemistry of Cancellous Bone and Medullary Contents to Refine Bone Sample Selection for Nuclear DNA Analysis</td>
<td>Janna M. Andronowski, PhD*; Amy Z. Moudorff, PhD; Jon Davoren; Reed A. Davis, MSc; Eric W. Price, PhD</td>
</tr>
<tr>
<td>4:45 p.m.</td>
<td>A97</td>
<td>Forensic Anthropology and Identification at the State Level: Lessons From the Louisiana Repository for Unidentified and Missing Persons</td>
<td>Teresa V. Wilson, PhD*; Ginesse A. Listi, PhD; Maria T. Allaire, MA</td>
</tr>
<tr>
<td>5:00 p.m.</td>
<td>A98</td>
<td>Forensic Anthropology and Identification in Natural Disaster-Related Cemetery Disruptions</td>
<td>Ginesse A. Listi, PhD*; Christine L. Halling, MS; Ryan M. Seidemann, MA; Teresa V. Wilson, PhD</td>
</tr>
<tr>
<td>5:15 p.m.</td>
<td>A99</td>
<td>A Virtual Anthropology Consultancy Service (VACS)</td>
<td>Lucina Hackman, PhD*; Sue Black, PhD</td>
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### Friday

#### Biological Profile: Ancestry Estimation

**Moderator:** Gregory E. Berg, PhD  
Defense POW/MIA Accounting Agency  
Identification Laboratory  
Joint Base Pearl Harbor-Hickam, HI

**Co-Moderator:** Janet E. Finlayson, MA  
University of Florida  
Gainesville, FL

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<tr>
<td>8:30 a.m.</td>
<td>A100</td>
<td>Ancestry Estimation Using Cranial and Postcranial Macromorphoscopical Traits</td>
<td>Micayla C. Spiros, MS*</td>
</tr>
<tr>
<td>8:45 a.m.</td>
<td>A101</td>
<td>Macromorphoscopical Trait Analysis in Forensic Anthropological Casework</td>
<td>Joseph T. Hefner, PhD*; Stephen D. Ousley, PhD</td>
</tr>
<tr>
<td>9:00 a.m.</td>
<td>A102</td>
<td>A Reevaluation of Tooth Crown Measurements in the Estimation of Ancestry Using Random Forest Classification</td>
<td>Michael W. Kenyhercz, PhD*; Marin A. Pilloud, PhD; Joseph T. Hefner, PhD</td>
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<tr>
<td>9:15 a.m.</td>
<td>A103</td>
<td>Assessing the Within-Group Structure of the “Hispanic” Sample in FORDISC® 3.1</td>
<td>Dorianis Perez, BS*; Luis L. Cabo, MS</td>
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*Presenting Author
ANTHROPOLOGY

9:30 a.m. - 9:45 a.m. A104 Testing the Homogeneity of “White”: Dental Morphology in Americans and Australians of European Decent
Heather J.H. Edgar, PhD*; Shamsi Berry, PhD

9:45 a.m. - 10:00 a.m. A105 Estimating Ancestry and Region of Origin: A Multidisciplinary Approach to the Identification of Unknown Individuals
Angela Soler, PhD*; Andrew J. Schweighardt, PhD; Laura Huynh, MS; Carl Gajewski, MS

10:00 a.m. - 10:15 a.m. A106 Using Mitochondrial DNA (mtDNA) -Derived Maternal Ancestry to Assist in Forensic Anthropology Investigations of Deceased Unidentified Individuals From the United States-Mexico Border
Cris E. Hughes, PhD*; Charla Marshall, PhD; Sonia E. John; Bruce E. Anderson, PhD

10:15 a.m. - 10:30 a.m. Break

Biological Profile: Age Estimation II

Moderator: Denise To, PhD
Defense POW/MIA Accounting Agency
Identification Laboratory
Joint Base Pearl Harbor-Hickam, HI

Co-Moderator: Laura Cirillo, BA
San Francisco, CA

10:30 a.m. - 10:45 a.m. A107 New Methods for Forensic Age Estimation Based on Dental Development
Kelly Heim, PhD*; Marin A. Pilloud, PhD; Hassem Geha, DDS; Ying Wu, DDS, PhD

10:45 a.m. - 11:00 a.m. A108 Variations in Skeletal and Dental Growth and Development Patterns and Their Effect on Age Estimation: A Preliminary Study of Five Populations
Louise K. Corron, PhD*; Kyra E. Stull, PhD; Michael H. Price, PhD; Yueran Yang, PhD

11:00 a.m. - 11:15 a.m. A109 Estimation of Juvenile Age at Death Using Anterior-Posterior (AP) Radiographs of the Knee
Rachel E. Smith*; Carolyn V. Isaac, PhD; Jered B. Cornelison, PhD; Jane Wankmiller, PhD

11:15 a.m. - 11:30 a.m. A110 WITHDRAWN

11:30 a.m. - 11:45 a.m. A111 Staging Clavicular Development on Magnetic Resonance Imaging (MRI): Pitfalls and Recommendations for Age Estimation
Jannick De Tobel, MD*; Elke Hillewigs, MSc; Mayonne Van Wijck, MSc; Steffen Fieeuws; Patrick W. Thevissen, PhD; Koenraad L. Verstraete, PhD

11:45 a.m. - 12:00 p.m. A112 Age-at-Death Estimation: Accuracy and Reliability of Age-Reporting Strategies
Christine Bailey, MA*

12:00 p.m. - 1:30 p.m. Lunch

*Presenting Author
Poster Session

11:30 a.m. - 1:00 p.m.  A113  The Validation of a New Age-at-Death Method Utilizing Osteoarthritis (OA) of the Shoulder  
Morgan J. Ferrell*; Jonathan D. Bethard, PhD*

11:30 a.m. - 1:00 p.m.  A114  The Application of Dental Cementochronology in Unidentified Migrants in South Texas  
Mary C. Swearinger, MA*; Nicholas P. Herrmann, PhD; Kate Spradley, PhD;  
Sophia Mavroudas, MA

11:30 a.m. - 1:00 p.m.  A115  Ancestral Variation of the Relative Proportionality of Skeletal Facial Features: A Metric Assessment  
Janet E. Finlayson, MA*; Michala K. Stock, PhD

11:30 a.m. - 1:00 p.m.  A116  Undocumented Border Crossers (UBCs) By Sea: Investigating the Eastern Border Crisis  
Amanda N. Friend, MA*

11:30 a.m. - 1:00 p.m.  A117  Examining Differences in Presumed Migrants From Texas and Arizona Using Cranial and Dental Data  
Christopher A. Maier, PhD*; Rebecca L. George, MA

11:30 a.m. - 1:00 p.m.  A118  A Mixed-Method Approach to Predicting Deceased Migrant Attributes in the Southern Arizona Desert  
Caitlin C.M. Vogelsberg, MS*

11:30 a.m. - 1:00 p.m.  A119  A Validation of the 2014 Hefner and Ousley Decision Tree Model for Ancestry in a Mexican Population  
Bersal C. Villegas-Camposoco; Mackenzie Walls*; Antinea Menéndez Garmendia, MS;  
Gabriela Sánchez-Mejorada, PhD; Alexandra R. Klales, PhD; Jorge A. Gómez-Valdés, PhD

11:30 a.m. - 1:00 p.m.  A120  Spatial Distributions of Stable Isotope Ratios in Tap Water From Mexico for Region of Origin Predictions of Unidentified Border Crossers  
Saskia Ammer, MSc*

11:30 a.m. - 1:00 p.m.  A121  Using Semimechanistic Modeling for the Prediction of Oxygen and Hydrogen Drinking Water Isotopes From Human Hair in Mexican Populations  
Chelsey A. Juarez, PhD*

11:30 a.m. - 1:00 p.m.  A122  Predicting Region of Origin for Unidentified Deceased Migrants at the Texas-Mexico Border Utilizing Stature and Stable Isotopes  
Nicholas P. Herrmann, PhD*; Robyn Theresa Kramer, BA; Christopher A. Wolfe, MA;  
Kate Spradley, PhD

11:30 a.m. - 1:00 p.m.  A123  Early Bone Healing Response in an Acute Occipital Skull Fracture of a 19-Month-Old After a 72- to 78-Hour Survival Interval  
Dana Austin, PhD*; Maryvi Gonzalez-Sola, PhD; Susan J. Roe, MD

11:30 a.m. - 1:00 p.m.  A124  Fracture Surface Characteristics for the Interpretation of Peri-Mortem Blunt Force Fractures in Bone  
Christopher W. Rainwater, MS*; Derek Congram, PhD; Steven A. Symes, PhD;  
Nicholas V. Passalacqua, PhD

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<td>11:30 a.m.</td>
<td>A125</td>
<td>Buckle Rib Fractures: More Than a Pleural Surface Phenomenon</td>
<td>Timothy P. Gocha, PhD*, Mariah E. Moe, BS*</td>
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<td>11:30 a.m.</td>
<td>A126</td>
<td>Is Puppe's Rule That Flawless? Two Peculiar Cases of Cranial Fractures Running Through Craniotomy Holes</td>
<td>Alberto Amadasi, MD*, Francesca Magli, MA; Debora Mazzarelli, BS; Annalisa Cappella, PhD; Enrico A. Muccino, MD; Katiucia Bisogmi, MD; Cristina Cattaneo, PhD</td>
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<td>11:30 a.m.</td>
<td>A127</td>
<td>Using High Resolution Mass Spectrometry Analysis to Investigate Trabecular Bone Metabolomics for Postmortem Interval (PMI) Estimation</td>
<td>Beatriz Dudzik, PhD*; Natalie R. Langley, PhD; Kathleen Hauther; Lee Meadows Jantz, PhD; Taylor Beckmann, BS; Johnny E. Cebak, PhD; Michelle Donohue, BS; Corey Hoch, BS; Stacy Chelf, MS; Paul Wood, PhD</td>
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<tr>
<td>11:30 a.m.</td>
<td>A128</td>
<td>Assessing the Accuracy of Decomposition Scoring Methods in Arizona's Sonoran Desert</td>
<td>Shari G. Ex, BA*; Jason P. De León, PhD</td>
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<td>11:30 a.m.</td>
<td>A129</td>
<td>Deconstructing Non-Carious Cervical Lesions on Teeth in Forensic Contexts</td>
<td>Jessica I. Cerezo-Román, PhD*; Bruce E. Anderson, PhD</td>
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<tr>
<td>11:30 a.m.</td>
<td>A130</td>
<td>A Retrospective Study of the Forensic Anthropology Cases Investigated by the Legal Medicine Institute in Rio de Janeiro, Brazil, From 2011 Through 2017</td>
<td>Melina Calmon Silva, MA*; Marcos Paulo Machado</td>
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<td>11:30 a.m.</td>
<td>A131</td>
<td>Beyond the Biological Profile: Demographic Patterns in Forensic Anthropology Casework in Honolulu, Hawaii</td>
<td>Jennifer F. Byrnes, PhD*; William R. Belcher, PhD; Christina G. Mello, PhD</td>
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<td>11:30 a.m.</td>
<td>A132</td>
<td>The Use of Ground Penetrating Radar (GPR) in the Search for Remains of Missing United States Servicemembers</td>
<td>Sabrina C. Ta’ala, MA*; Ryan Taira, BA</td>
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<tr>
<td>11:30 a.m.</td>
<td>A133</td>
<td>The Use of Ground Penetrating Radar (GPR) to Possibly Locate Remains Associated With Surgical Devices</td>
<td>Adam Munera*</td>
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<td>11:30 a.m.</td>
<td>A134</td>
<td>The Forensic Utility of Photogrammetry in Surface Scene Documentation</td>
<td>Elizabeth Church*; James Pokines, PhD; Christopher J.H. Ames, PhD</td>
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<td>11:30 a.m.</td>
<td>A135</td>
<td>Best Practice Procedures for Sampling Differentially Burned Bone for Successful DNA Recovery</td>
<td>Katelyn L. Bolhofner, PhD*; Matthew V. Emery, PhD; Jane E. Buikstra, PhD; Laura C. Fulginiti, PhD; Anne Stone, PhD</td>
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<tr>
<td>11:30 a.m.</td>
<td>A136</td>
<td>Putting Life Back Into the Bones: The Symptomatology of Pain and Suffering in the Cyprus Research Reference Collection and Its Relationship to Positive Identification</td>
<td>Jennifer A. Sizemore*; Anna S. La Valley, MSc; Emily Brooks; Xenia Paula Kyriakou*</td>
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*Presenting Author
## Skeletal Trauma

**Moderator:** Julie M. Fleischman, PhD  
**Harris County Institute of Forensic Sciences**  
**Houston, TX**  

**Co-Moderator:** Ashley E. Kendell, PhD  
**California State University, Chico**  
**Department of Anthropology**  
**Chico, CA**

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<td>1:30 p.m. - 1:45 p.m.</td>
<td>A137</td>
<td>A Multidisciplinary Investigation of Chronic Animal Abuse: Contributions From Veterinary Forensics and Forensic Anthropology</td>
<td>Jonathan D. Bethard, PhD*; Martha Smith-Blackmore, DVM</td>
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<td>1:45 p.m. - 2:00 p.m.</td>
<td>A138</td>
<td>Evaluating Non-Accidental Injury and Comorbidity in Elderly Decedents Through Macroscopic and Microscopic Patterning of Fracture and Fracture Repair</td>
<td>Donna C. Boyd, PhD*; Jennifer C. Love, PhD</td>
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<tr>
<td>2:00 p.m. - 2:15 p.m.</td>
<td>A139</td>
<td>An Experimental Investigation of Blunt Force Fracture in the Human Mandible</td>
<td>Mariyam I. Isa, MA*; Todd W. Fenton, PhD; Alexis C. Goots, MA; Feng Wei, PhD; Roger C. Haut, PhD</td>
</tr>
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<td>2:15 p.m. - 2:30 p.m.</td>
<td>A140</td>
<td>Assessing the Impact of High- Versus Low-Velocity Thoracic Trauma: A Study of Experimental Rib Fracturing Using Juvenile Pigs (Sus Scrofa)</td>
<td>Harman Nahal, BSc*; Luisa Marinho, MSc; Carolyn J. Sparrey, PhD; Hugo Cardoso, PhD</td>
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<td>2:30 p.m. - 2:45 p.m.</td>
<td>A141</td>
<td>Factors Affecting Bone Speed of Sound (SOS) in Infants</td>
<td>Miriam E. Soto Martinez, PhD*; Christian Crowder, PhD; Brian Dawson, MS; Urszula Polak, MS</td>
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<td>2:45 p.m. - 3:00 p.m.</td>
<td>A142</td>
<td>An Analysis of Skeletal Demographics and Traumatic Injuries From the Khmer Rouge Period in Cambodia</td>
<td>Julie M. Fleischman, PhD*</td>
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<td>3:00 p.m. - 3:15 p.m.</td>
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<td><strong>Break</strong></td>
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## Diversity and Inclusion

**Moderator:** Allysha P. Winburn, PhD  
**University of West Florida**  
**Department of Anthropology**  
**Pensacola, FL**

**Co-Moderator:** Susan C. Anton, PhD  
**New York University**  
**Department of Anthropology**  
**New York, NY**

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<td>3:15 p.m. - 3:30 p.m.</td>
<td>A143</td>
<td>Diversity and Inclusion in Forensic Anthropology: Where We Stand and Prospects for the Future</td>
<td>Sean D. Tallman, PhD*; Cate E. Bird, PhD</td>
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<td>3:30 p.m. - 3:45 p.m.</td>
<td>A144</td>
<td>Increasing Graduate Student Diversity in Forensic Anthropology Through Research</td>
<td>Kate Spradley, PhD*; Olivia A. Jones</td>
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<tr>
<td>3:45 p.m. - 4:00 p.m.</td>
<td>A145</td>
<td>Perspectives on Diversity in Skeletal Collections</td>
<td>Allysha P. Winburn, PhD*; Antaya L. Jennings, BA*; Dawnie W. Steadman, PhD; Elizabeth A. DiGangi, PhD</td>
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ANTHROPOLOGY

4:00 p.m. - 4:15 p.m.  A146  Why Are There So Many Women in Forensic Anthropology? A Critical Evaluation of Gender Politics in Forensic Anthropology  
Marin A. Pilloud, PhD*; Nicholas V. Passalacqua, PhD

4:15 p.m. - 4:30 p.m.  A147  Recruitment Strategies From the Increasing Diversity in Evolutionary Anthropological Sciences (IDEAS) Program of the American Association of Physical Anthropology (AAPA)  
Phoebe R. Stubblefield, PhD*; Susan C. Anton, PhD

4:30 p.m. - 4:45 p.m.  A148  The Morphology of Intersectionality: Discordance Between Ancestry Estimates and Social Identifiers  
Chaunsey Clemmons, BA*

4:45 p.m. - 5:00 p.m.  A149  A Push for Trans-Inclusive Language in Forensic Sciences  
Fatimah Bouderdaben*

5:00 p.m. - 5:30 p.m.  Discussion

*Presenting Author