

# ANTHROPOLOGY

---

## Wednesday

### Poster Session

---

- 11:30 AM – 1:00 PM    **A1**    **Increasing Access and Engagement at Academic Conferences: Comparing Modalities and Facilitating Interactions**  
*Lisa Monetti, PhD, MSc\**
- 11:30 AM – 1:00 PM    **A2**    **Assessing Opportunities for Forensic Casework Experience for Students Through Educational Programs and Internships**  
*Katherine M. Lane, MA\*; Stephanie Fuehr, MA; Kelly C. McGehee, MA; John J. Schultz, PhD*
- 11:30 AM – 1:00 PM    **A3**    **How Contextual Information and Consideration of the Type of Bones Present Influence Interpretations of Identifiability**  
*Andrea Palmiotto, PhD\*; Allysha P. Winburn, PhD; Christine M. Pink, PhD*
- 11:30 AM – 1:00 PM    **A4**    **Mapping Barriers to Entry of Spanish-Speaking Students of Forensic Anthropology: Diversity in Academic Opportunities at United States Hispanic-Serving Institutions**  
*Patricia N. Morales Lorenzo, BS\*; Samantha H. Blatt, PhD; Juliette Bedard, BA; Bailey Bates; Trace Miles*
- 11:30 AM – 1:00 PM    **A5**    **Using Cause of Death and Skeletal Indicators of Health and Stress to Understand Structural Inequality**  
*Allyson M. Simon, MS\*; Tempest D. Mellendorf, MS; Colleen M. Cheverko, PhD; Melissa A. Clark, PhD; Mark Hubbe, PhD*  
*(FSF Emerging Forensic Scientist Award Poster Presentation)*
- 11:30 AM – 1:00 PM    **A6**    **The Development of a Migrant Profile for Unidentified Human Remains Found Across Three Medicolegal Offices in Greece**  
*Sophia Mavroudas, PhD\*; Despoina E. Flouri, MD; Christina Karydi, MSc, BSc; Valeria M. Karakasi, MD; Konstantinos Moraitis, PhD; Pavlos Pavlidis, MD, PhD; Elena F. Kranioti, MD, PhD*
- 11:30 AM – 1:00 PM    **A7**    **The Development of a Multidisciplinary, Minimally Invasive Approach for the Forensic Examination of Skulls**  
*Ayusha Dahal\*; Dennis McNevin, PhD; Denise Donlon, BSc, PhD; Stewart Fallon, PhD; Jodie Ward*  
*(FSF Emerging Forensic Scientist Award Poster Presentation)*
- 11:30 AM – 1:00 PM    **A8**    **An Investigation Into the Facial Dimensions of a North Indian Population: Implications in Facial Identification**  
*Ankita Guleria, MSc\*; Kewal Krishan, PhD; Vishal Sharma, PhD*
- 11:30 AM – 1:00 PM    **A9**    **The Identification of Fragmented Cranial Remains Exhumed From a Site Adjoining the Ajnala Site: A Forensic Anthropological Case Report**  
*Jagmahender Sehrawat, PhD\*; Niraj Rai, PhD*
- 11:30 AM – 1:00 PM    **A10**    **Forensic Investigations on a Skull Found Inside a Roman Villa in the City of Diamante, Italy**  
*Elena Varotto, PhD; Francesco Maria Galassi; Saverio Gualtieri, MD; Lucia Tarda, MD; Matteo Antonio Sacco, MD\*; Angelica Zibetti, MD; Umberto Rosini, MD; Alessandro Pasquale Tarallo, MD\*; Vincenzo Maria Ritorto, MD; Maria Cristina Verrina, MD\*; Luca Calanna, MD; Wandamaria Mazzuca\*; Isabella Aquila, PhD, MD*

# ANTHROPOLOGY

---

- 11:30 AM – 1:00 PM    **A11**    **Skeletal Indicators of Down Syndrome: A Case Study in Forensic Anthropology**  
*Theresa M. De Cree, MS, BA; Ivanna Robledo, MA\*; Emily Brooks, MS*
- 11:30 AM – 1:00 PM    **A12**    **The Characteristics of a Vertebroplasty in Human Skeletal Remains**  
*Nicholas V. Passalacqua, PhD\*; Rebecca L. George, PhD; Emma F. Taylor; Nuwan Perara; Erin Chapman, PhD*
- 11:30 AM – 1:00 PM    **A13**    **An Unusual Case of Human Remains Found in an Urban Aqueduct**  
*Stephanie Torres, MS\*; Ellen Fricano, PhD*
- 11:30 AM – 1:00 PM    **A14**    **Understanding the Potential of Chemical Anthropology in Burned Human Remains**  
*Calil I. Makhoul, MSc\*; Luís A.E. Batista de Carvalho; David Gonçalves, PhD; Eugénia Cunha, PhD*  
*(FSF Emerging Forensic Scientist Award Poster Presentation)*
- 11:30 AM – 1:00 PM    **A15**    **Is It Scientifically Impossible to Burn Human Bodies to Ashes? Revisiting the 2014 Case of the 43 Missing Students From the Ayotzinapa Rural Teachers College in Guerrero, Mexico**  
*Elayne J. Pope, PhD\*; Alison Galloway, PhD; Chelsey A. Juarez, PhD; James G. Quintiere, PhD; Riccardo Torres, AAS*
- 11:30 AM – 1:00 PM    **A16**    **An Evaluation of Commingled Remains Using Computational Methods to Reconstruct Dental MNI Based on Dental Wear**  
*Melanie Need, BSc\*; Xenia Paula Kyriakou, PhD; Tim Eckhardt, BSc*
- 11:30 AM – 1:00 PM    **A17**    **MNI, NIDS, Centroids: Additional Considerations for Individuating Commingled Remains Using Stable Isotope Ratios**  
*Stephanie B. Hartley, MA\*; Lesley A. Chesson, MS; Gregory E. Berg, PhD*
- 11:30 AM – 1:00 PM    **A18**    **The Accuracy and Reliability of Visual Pair Matching Lower Limb Bones in a Commingled Skeletal Assemblage**  
*Abigail K. Kindler, MA\*; Cortney N. Hulse, PhD; Carrie LeGarde, MA*
- 11:30 AM – 1:00 PM    **A19**    **Assessing the Impact of Opioid Use on Human Clavicles Through Clinical Computed Tomography (CT): A Pilot Study**  
*Randi M. Depp, MS\*; Reed A. Davis, PhD; Evin Hessel, MS*
- 11:30 AM – 1:00 PM    **A20**    **An Evaluation and Integration of Disparate Classification Schemes for Interparietal Bones in the Human Crania**  
*Rhian R. Dunn, MS\*; Holly Long, MS; Melissa Clarkson, MDes, PhD; Joe T. Hefner, PhD*  
*(FSF Emerging Forensic Scientist Award Poster Presentation)*
- 11:30 AM – 1:00 PM    **A21**    **Is Bone Speed of Sound Affected by the Molecular Composition of Infant Bone?**  
*Miriam E. Soto Martinez, PhD\*; Jason M. Wiersema, PhD; Christian Crowder, PhD; Angela Bachim, MD*
- 11:30 AM – 1:00 PM    **A22**    **Laser Me This: Using Laser-induced Breakdown Spectroscopy to Detect Formalin in Human Remains**  
*Morghana Montana Hogg, BS\*; Micki Besse, MS; Savanna Agilar, MS; Heather A. Walsh-Haney, PhD; Jay Radtke, MD*
- 11:30 AM – 1:00 PM    **A23**    **An Application of Dietary Isotopes to Estimate Temporal Context of Unidentified Human Remains in British Columbia, Canada**  
*Damon C. Tarrant, BA\*; Laura Yazedjian, MSc, BA; Michael Richards, PhD*

# ANTHROPOLOGY

---

- 11:30 AM – 1:00 PM    **A24**    **How Low Can You Go? A Lower Bound Limit for  $\delta^{15}\text{N}$  Values From Human Bone Collagen**  
*Amanda N. Friend, PhD\**; *Claire Maass, PhD*; *Lesley A. Chesson, MS*;  
*Gregory E. Berg, PhD*
- 11:30 AM – 1:00 PM    **A25**    **Taphonomic Effects on the C:N Ratio and  $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$  Isotopes in Bone Collagen**  
*Nicole Long\**; *Ann H. Ross, PhD*; *Ethan Hyland*
- 11:30 AM – 1:00 PM    **A26**    **Using Forensic Anthropological Landmarks to Optimize DNA Extractions From Post-Cranial Remains**  
*Keith Biddle, MA, PhD\**
- 11:30 AM – 1:00 PM    **A27**    **Validation and Quality Control of 3D Coordinate Data From Human Crania for Forensic Casework**  
*Amanda R. Hale, MA\**; *Rebecca J. Taylor, PhD*
- 11:30 AM – 1:00 PM    **A28**    **A Multivariate Analysis and Evaluation of Classification of Human Skeletal Vertebrae for an Applied Context**  
*Jolen Anya Minetz, MA\**; *Stephen Ousley, PhD (posthumously)*

## Thursday

### Poster Session

---

- 11:30 AM – 1:00 PM    **A29**    **Investigating Applications of Forensic Fractography of Bone Over the Postmortem Interval**  
*Carter A. Unger, BS\**; *Mariyam I. Isa, PhD*
- 11:30 AM – 1:00 PM    **A30**    **Measuring Volatile Organic Compounds (VOCs) From Decomposing Human Tissue**  
*Sheana S. Ramcharan, MS, BS\**; *Luis L. Cabo, MS*; *Jack D. Williams, PhD*;  
*Michael S. Foulk, PhD*  
*(FSF Emerging Forensic Scientist Award Poster Presentation)*
- 11:30 AM – 1:00 PM    **A31**    **Tracing PMI Through Bone Metabolomics With GC/MS and LC/MS/MS**  
*Elisa Roggia, BS\**; *Luke William Gent, BSc, MRes*; *Andrea Bonicelli, PhD, MA*;  
*Noemi Procopio, PhD*; *Eugenio Alladio*  
*(FSF Emerging Forensic Scientist Award Poster Presentation)*
- 11:30 AM – 1:00 PM    **A32**    **Using Evidence of Microbial Modifications on Postmortem Bone Surfaces to Narrow Down Time Since Death Estimations**  
*Caroline Rowe, PhD\**
- 11:30 AM – 1:00 PM    **A33**    **The Megyesi Total Body Score Method: Inter-Observer Agreement and Sources of Bias**  
*Tempest D. Mellendorf, MS\**; *Madeline R. Leggiero*; *Allyson M. Simon, MS*;  
*Varun V. Tewari, BS, BA*; *Luis L. Cabo, MS*
- 11:30 AM – 1:00 PM    **A34**    **Using Artificial Intelligence: Deep Learning for Human Decomposition Staging**  
*Anna-Maria Nau, BA\**; *Phillip Ditto, BA\**; *Audris Mockus, PhD*; *Dawnie W. Steadman, PhD*
- 11:30 AM – 1:00 PM    **A35**    **Testing Decomposition Scoring Methods at FOREST in Cullowhee, North Carolina**  
*Leilah Melerine\**; *Rebecca L. George, PhD*; *Nicholas V. Passalacqua, PhD*
- 11:30 AM – 1:00 PM    **A36**    **It's a Dry Heat: Testing Existing Postmortem Interval (PMI) Equations in Clark County, Nevada**  
*Dayanira Lopez, MS\**; *Claira Ralston, PhD*; *Jennifer F. Byrnes, PhD*  
*(FSF Emerging Forensic Scientist Award Poster Presentation)*

# ANTHROPOLOGY

---

- 11:30 AM – 1:00 PM     **A37**     **Postmortem Interval in the Pacific Northwest—King County, Washington**  
*Kiana C. Miller, BS\**; *Andrew C. Seidel, PhD*
- 11:30 AM – 1:00 PM     **A38**     **A Drop in the Bucket: An Analysis of Southwest Florida Weather Station Variables to Inform Postmortem Interval**  
*Savanna Agilar, MS\**; *Micki Besse, MS*; *Heather A. Walsh-Haney, PhD*
- 11:30 AM – 1:00 PM     **A39**     **Under the Weather: A Report of Faunal Scavenger Activity During Major Weather Systems Within a Taphonomic Facility in Southwest Florida**  
*Micki Besse, MS\**; *Savanna Agilar, MS*; *Heather A. Walsh-Haney, PhD*
- 11:30 AM – 1:00 PM     **A40**     **Exploring the Scavenging Behavior of Bobcats, *Lynx Rufus*, in the Middle Tennessee Area and Its Forensic Implications**  
*Yangseung Jeong, PhD*; *Aaron Gatewood\**
- 11:30 AM – 1:00 PM     **A41**     **A Longitudinal Observation of Pattern and Trajectory of Packrat Scavenging Among a Cohort of Human Donors**  
*Christiane I. Baigent, MSc\**
- 11:30 AM – 1:00 PM     **A42**     **Multiple Scavenging Agents: The Effect of Termite and Canine Scavenging on Forensic Cases in Northern Thailand**  
*Sittiporn Ruengdit\**; *Sangob Sanit*; *Kwankamol Limsopatham*
- 11:30 AM – 1:00 PM     **A43**     **Soft Tissue Scavenging Patterns of Mice on Human Remains**  
*Alexander J. Smith, BA\**
- 11:30 AM – 1:00 PM     **A44**     **Corpse Concealment by Use of a Foundry Furnace: An Experimental Study on a Swine Carcass**  
*Matteo D'Angiolillo, MD\**; *Ilaria Grasso, MD*; *Alessandro Bonsignore, MD, PhD*; *Francesca Frigiolini, MD*; *Francesco Ventura, MD, PhD*; *Camilla Tettamanti, MD, PhD*  
(FSF Emerging Forensic Scientist Award Poster Presentation)
- 11:30 AM – 1:00 PM     **A45**     **Determining Forensic Significance: Pilot Observations of the Taphonomic Patterning of Greek-Orthodox Cemetery Inhumations in Cyprus**  
*Samantha Cohen, MRes, BA\**; *Xenia Paula Kyriakou, PhD*
- 11:30 AM – 1:00 PM     **A46**     **The Resilience of Cut Mark Characteristics: An Experimental Study on the Effect of Corrosive Chemicals**  
*Maisy Jordan, MSc\**; *Matteo Borrini, PhD, MS\**
- 11:30 AM – 1:00 PM     **A47**     **The Resilience of Cut Mark Characteristics: An Experimental Study on the Effect of Fire Exposure**  
*Katie Griffiths, BSc, MSc*; *Matteo Borrini, PhD, MS\**
- 11:30 AM – 1:00 PM     **A48**     **In Full or in Part: The Effect of Incomplete Remains on Trauma Analysis**  
*Hailey Scacciaferro, BS\**; *Savanna Agilar, MS*; *Micki Besse, MS*; *Heather A. Walsh-Haney, PhD*
- 11:30 AM – 1:00 PM     **A49**     **A Case Presentation of Fractures to the Wrists and Hands in a Suicide and Homicide**  
*Tuesday M. Frasier, MS\**; *Erin H. Kimmerle, PhD*
- 11:30 AM – 1:00 PM     **A50**     **Tibia Size and the Contribution to Variance in Fracture Outcomes**  
*Angela L. Harden, PhD\**; *Kyra Stull, PhD*; *Yun-Seok Kang, PhD*; *Amanda M. Agnew, PhD*
- 11:30 AM – 1:00 PM     **A51**     **An Analysis of Lower Extremity Fracture Patterning in Fatal Motor Vehicle Collisions**  
*Lillian S. Antonelli, BS\**; *Jered B. Cornelison, PhD*; *Christine M. Pink, PhD*

# ANTHROPOLOGY

---

- 11:30 AM – 1:00 PM     **A52**     **Establishing a Skeletal Atlas of Elder Abuse: An Examination of the Relationship Between Bone Density and Skeletal Fractures in Accidental Falls and Suspected Abuse**  
*Emelia Jensen; Kaitlyn J. Fulp, MA; Jacob A. Harris, PhD; Jane E. Buikstra, PhD; Laura C. Fulginiti, PhD; Katelyn L. Bolhofner, PhD\**
- 11:30 AM – 1:00 PM     **A53**     **Assessing Variability in Kerf Floor Shape Utilizing a Revised Set of Shape Categories**  
*Meghan M. Gast, BS\*; Alexis L. VanBaarle, MS; Ann L. Braverman; Heather M. Garvin, PhD*
- 11:30 AM – 1:00 PM     **A54**     **A Comparison of Fatal and Non-Fatal Postcranial Gunshot Wounds**  
*Sam W. Coberly, PhD\**
- 11:30 AM – 1:00 PM     **A55**     **The Patterning of Fracture Characteristics in Gunshot Wounds in Long Bones**  
*Alexandra Semma Tamayo, MSc\*; Laure Spake, PhD*  
*(FSF Emerging Forensic Scientist Award Poster Presentation)*
- 11:30 AM – 1:00 PM     **A56**     **An Analysis of Bevel Angle in Gunshot Trauma to Long Bones**  
*Devin L. Adcox, MA\*; Ashley Kendell, PhD; Eric J. Bartelink, PhD*
- 11:30 AM – 1:00 PM     **A57**     **A Comparison Between Full Metal Jacket and Hollow Point Projectile Effects on Bone**  
*Joe Adserias-Garriga\*; Roberto Escudero-Izquierdo*
- 11:30 AM – 1:00 PM     **A58**     **Antemortem Trauma and Trauma Reporting in the Texas State Donated Skeletal Collection**  
*Theresa M. De Cree, MS, BA\*; Emma M. Giacomello, MA; Katie Gerstner, MA; Elizabeth Moore, MA; Michelle D. Hamilton, PhD*

## Thursday—Session I

### Achieving Justice for All: The Evolving Role of Forensic Anthropology

---

Moderator: Derek, Boyd, PhD

Co-Moderator: Gabriela Rios Santiago, MSc

- 8:30 AM – 8:45 AM     **A59**     **Standards Development in Forensic Anthropology: Updates From the OSAC and ASB**  
*Eric J. Bartelink, PhD\*; Julie M. Fleischman, PhD; Wendy E.P. McQuade, PhD*
- 8:45 AM – 9:00 AM     **A60**     **Assessing the Place and Feasibility of Activism and Advocacy in Forensic Anthropology**  
*Sadie R. Friend, BS\**
- 9:00 AM – 9:15 AM     **A61**     **ForensicAnthroTok: The Depiction of Forensic Anthropology on TikTok**  
*Donovan M. Adams, PhD\*; C M. Trent, MA; Jasper K. Sharpless, BA*
- 9:15 AM – 9:30 AM     **A62**     **Forensic Anthropology and Structural Vulnerability in Casework**  
*Jaymelee Kim, PhD\*; Allysha P. Winburn, PhD*
- 9:30 AM – 9:45 AM     **A63**     **Justice for All Missing: The Mississippi Repository for Missing and Unidentified Persons**  
*Jesse R. Goliath, PhD\*; Jordan Lynton Cox, PhD; Elise J. Adams, BA*
- 9:45 AM – 10:00 AM     **A64**     **The Cold Case Initiative: Bringing Cases Up to Current Investigative Standards**  
*Erin H. Kimmerle, PhD\**
- 10:00 AM – 10:15 AM     **A65**     **The East Marshall Street Well Project: Community-Driven Research to Restore Identity and Dignity**  
*Tal Simmons, PhD\**

# ANTHROPOLOGY

---

10:15 AM – 10:30 AM    **A66**    **Mapping Medicolegal Disparities and Indigenizing Harm Reduction Strategies for Missing and Murdered Indigenous Persons in Idaho**  
*Juliette Bedard, BA\**; *Samantha H. Blatt, PhD*; *Patricia N. Morales Lorenzo, BS*;  
*Jake R. Shields, MS, BS*; *Trace Miles*; *Bailey Bates*  
(FSF Emerging Forensic Scientist Award Oral Presentation)

10:30 AM – 10:45 AM    **BREAK**

## Personal Identification Through Imaging and Radiography

---

Moderator: Kathryn Baustian, PhD

Co-Moderator: Jordan Roberson, BS

10:45 AM – 11:00 AM    **A67**    **The Validity of Radiographic Comparisons: Preliminary Findings by Body Region**  
*Jennifer F. Byrnes, PhD\**; *Timothy P. Gocha, PhD*; *Alan Farahani*; *Amanda Dolan*;  
*Taylor M. Flaherty, MSc*; *Emma M. Giacomello, MA*; *Tessa M. Herbert, BS*;  
*SaMoura Horsley, BA*; *Mariah E. Moe, BS, MA*; *Thomas J. Monticello*; *James R. Sernas*

11:00 AM – 11:15 AM    **A68**    **A Part-to-Part Comparative Analysis to Assess Intra-Individual Similarity and Inter-Level Distinctions for Personal Identification**  
*Summer J. Decker, PhD\**; *Daniel W. Martin, MD*; *Zackery Beauchamp, MD*; *Guy Ruddy, MBE*;  
*Jonathan M. Ford, PhD, LLM*

11:15 AM – 11:30 AM    **A69**    **Automated Comparative Chest Radiography Using Deep Neural Networks**  
*Carolyn V. Isaac, PhD\**; *Redwan Sony, MSc*; *Clara J. Devota, BS, MA*; *Alexis L. VanBaarle, MS*;  
*Todd Fenton, PhD, MA*; *Joe T. Hefner, PhD*; *Arun Ross, PhD*

11:30 AM – 11:45 AM    **A70**    **Visual Comparisons of Frontal Sinus Radiographs: Documenting Accuracy and Exploring the Effects of Experience**  
*Heather M. Garvin, PhD\**; *Jessica L. Campbell, PhD*; *Lauren Butaric, PhD*

11:45 AM – 12:00 PM    **A71**    **Investigating Variation in Trabecular and Cortical Bone Structure Due to Mobility Impairment: A Natural Experiment in Reduced Loading**  
*Devora S. Gleiber, MA\**  
(FSF Emerging Forensic Scientist Award Oral Presentation)

12:00 PM – 1:15 PM    **BREAK**

## Advancements in Cranial Identification

---

Moderator: Ellen Fricano, PhD

Co-Moderator: Kewal Krishan, PhD

1:15 PM – 1:30 PM    **A72**    **Facial Photo-Anthropometry for the Exclusion of Candidates Under Non-Restrictive Photographic Conditions**  
*Oscar Ibáñez Panizo, PhD\**; *Pilar Navarro, BSc*; *Valentino Lugli, BSc*; *Andrea Valsecchi, PhD*;  
*María A. Guativonza*; *Verónica Martínez*; *Guillermo Ramírez*; *Rosario Guerra Martí*;  
*Inmaculada Alemán, PhD*

1:30 PM – 1:45 PM    **A73**    **Correlations of Facial Soft Tissue Thicknesses With Craniometric Dimensions to Improve Craniofacial Identification Estimates: Fact or Fiction?**  
*Te Wai Pounamu Telen Hona, BSc\**; *Carl Stephan, PhD*  
(FSF Emerging Forensic Scientist Award Oral Presentation)

# ANTHROPOLOGY

---

- 1:45 PM – 2:00 PM     **A74**     **Facial Soft Tissue Thickness and the Positional Relationship of Hard and Soft Tissue in a United States Postmortem CT Sample, the New Mexico Decedent Image Database (NMDID)**  
*Rosario Guerra Martí; María A. Guativonza; Verónica Martínez; Guillermo Ramírez; Oscar Ibáñez Panizo, PhD\**; *Andrea Valsecchi, PhD; Enrique Bermejo, PhD; Alejandro Manzanares; Antonio David Villegas, MSc, BS; Fernando Navarro, PhD Inmaculada Alemán, PhD*  
*(FSF Emerging Forensic Scientist Award Oral Presentation)*
- 2:00 PM – 2:15 PM     **A75**     **The Latest Advancements in Craniofacial Superimposition Using Artificial Intelligence**  
*Oscar Ibáñez Panizo, PhD\**; *Praxedes Martinez, MSc; Pilar Navarro, BSc; Valentino Lugli, BSc; Andrea Valsecchi, PhD; Rosario Guerra Martí; María A. Guativonza; Verónica Martínez; Guillermo Ramírez; Pablo Mesejo Santiago, PhD; Sergio Damas, PhD*
- 2:15 PM – 2:30 PM     **BREAK**

## Reconsidering Sex Estimation Methods

---

Moderator: Carolyn Isaac, PhD

Co-Moderator: Christopher Goden, MA

- 2:30 PM – 2:45 PM     **A76**     **Sex Estimation Methods in Forensic Anthropology: Current Practice and Trends**  
*Alexandra R. Klales, PhD\**; *Kate M. Lesciotto, JD, PhD*
- 2:45 PM – 3:00 PM     **A77**     **A Test of the Applicability of Decision Trees for Sex Estimation Utilizing an Expanded Suite of Morphological Traits**  
*Morgan J. Ferrell, MA\**; *John J. Schultz, PhD; Donovan M. Adams, PhD*
- 3:00 PM – 3:15 PM     **A78**     **An Exploration of the Subadult Pelvic Sex Estimation Method Using Pelvic Metrics and Geometric Morphometrics**  
*Leah E. Auchter, MA\**; *Kyra Stull, PhD; Heather M. Garvin, PhD*
- 3:15 PM – 3:30 PM     **A79**     **Sex Estimation From Mandibular Morphometry Using a Discriminant Analysis–CT Scan-Based Retrospective Study**  
*Siddhartha Das, MBBS, MD\**; *Sunitha VC, MBBS, MD; Vasanth Lenin, MBBS*
- 3:30 PM – 3:45 PM     **A80**     **Increasing Transparency in Sex Estimation From the Skull by Monitoring Variation in Decision-Making Patterns**  
*Nicole Mantl, MSc, MPhil\**; *Sherry Nakhaeizadeh, PhD; Ruth M. Morgan, MA, DPhil*
- 3:45 PM – 4:00 PM     **A81**     **Combining Metric and Morphological Traits for Sex Estimation: A Pilot Study Using the Innominate**  
*Kate M. Lesciotto, JD, PhD\**; *Alexandra R. Klales, PhD; Michael Price*
- 4:00 PM – 4:15 PM     **BREAK**

## Bone Chemistry and Isotopes

---

Moderator: Tiffany Saul, PhD

Co-Moderator: Helen Brandt-Litavec, MS

- 4:15 PM – 4:30 PM     **A82**     **The Impact of Chemical Maceration on Elemental Concentrations and <sup>87</sup>Sr/<sup>86</sup>Sr Values in Bone**  
*Julianne J. Sarancha, MS\**; *Gwyneth Gordon, PhD*  
*(FSF Emerging Forensic Scientist Award Oral Presentation)*

# ANTHROPOLOGY

---

- 4:30 PM – 4:45 PM    **A83**    **The Use of Multi-Isotopes for Geoprofiling Unidentified Decedents to Assist Law Enforcement Agencies in the United States**  
*Liotta N. Dowdy, BS, MA\**; *Gennifer M. Goad, BA, MA*; *Anthony Menicucci, PhD*;  
*George Kamenov, PhD*; *Erin H. Kimmerle, PhD*
- 4:45 PM – 5:00 PM    **A84**    **Origins and Isoscapes: A Reassessment of Oxygen and Strontium Isotopic Data for Human Identifications in North America**  
*Kirsten A. Verostick, PhD\**; *Chris Stantis*; *Alejandro Serna, PhD*; *Gabriel Bowen, PhD*
- 5:00 PM – 5:15 PM    **A85**    **Isotopic Taphonomy: A Critical Review of the Effects of Diagenesis on Human Tissues Used for Stable Isotope Analysis**  
*Shelby Hard, BA\**
- 5:15 PM – 5:30 PM    **A86**    **The Impacts of Chronic Opioid Exposure on Bone Biomechanical Parameters**  
*Sydney Q. Chizmeshya, BA\**; *Janna M. Andronowski, PhD*  
*(FSF Emerging Forensic Scientist Award Oral Presentation)*

## Thursday—Session II

### The Right to the Truth I: Analysis of Commingled Remains for Conflict Resolution in Humanitarian Forensics

---

Moderator: Xenia Paula Kyriakou, PhD

Co-Moderator: Julie Evo, MSFS

- 1:00 PM – 1:15 PM    **A87**    **The Right to the Truth: A Multimodal Investigation of Mass Graves and an Analysis of Commingled Remains for Conflict Resolution in Humanitarian Forensics**  
*Xenia Paula Kyriakou, PhD\**; *Nicholas V. Passalacqua, PhD*; *Matthieu Baudelet, PhD*
- 1:15 PM – 1:30 PM    **A88**    **The Use of Computational Methods in Assessing Legacy Databases of Commingled Remains and Reconstructing Stratigraphic Relationships**  
*Chris Mavromatis, PhD\**; *Xenia Paula Kyriakou, PhD*
- 1:30 PM – 1:45 PM    **A89**    **A Case From “EL TUBO”: An Analysis of Commingled and Highly Fragmented Skeletal Remains Recovered From an Abandoned Water Exploration Well in Northeastern Mexico**  
*Nicole Lambacher\**; *Caterina Raffone*; *Benito Ramos-González*; *Sandra Sostaric*;  
*Francisco Etxeberria Gabilondo*
- 1:45 PM – 2:00 PM    **A90**    **The Reassociation of Disparate Elements at a Human Decomposition Facility**  
*Rebecca L. George, PhD\**; *Reagan Baechle, BS*; *Autumn J. Hall*
- 2:00 PM – 2:15 PM    **A91**    **De-Commingling the Past—When an Attempt to Resolve Misidentifications Results in Setbacks: The Tihovici Case**  
*Sandra Sostaric\**; *Bojana Tomasevic*; *Samra Terzic*; *Almir Olovacic*; *Beisa Talic*
- 2:15 PM – 2:30 PM    **A92**    **Matching Antimeres: Prospects and Limitations of Statistical Methods for the Reassociation of Commingled Left and Right Humeri**  
*Erica Baer, PhD, MS\**; *Xenia Paula Kyriakou, PhD*
- 2:30 PM – 2:45 PM    **A93**    **The Chemical Reassociation of Commingled Remains Via Laser-Induced Breakdown Spectroscopy**  
*Kristen Livingston, BS\**; *Katie Zejdlik, PhD*; *Jonathan Bethard, PhD*; *Matthieu Baudelet, PhD*
- 2:45 PM – 3:00 PM    **A94**    **Don’t Forget About ME: How Material Evidence Can Inform (or Complicate) Commingling From the Battle of Tarawa**  
*Allison M. Campo, MA*; *Rylan Tegtmeyer Hawke, PhD\**

# ANTHROPOLOGY

---

3:00 PM – 3:15 PM

**BREAK**

---

## The Right to the Truth II: Multimodal Investigation of Mass Graves and Clandestine Burials

---

Moderator: Xenia Paula Kyriakou, PhD

Co-Moderator: Julie Evo, MSFS

3:15 PM – 3:30 PM

**A95**     **WITHDRAWN.**

3:30 PM – 3:45 PM

**A96**     **The Dirt on DNA: Utilizing Soil as Evidence of Clandestine Burials and Mass Graves**  
*Meradeth H. Snow, PhD\**; *Kaylee Hinds, MA*; *Atlantis Baron, BA*

3:45 PM – 4:00 PM

**A97**     **The Multidisciplinary Resolution of American Military Casualties From the Korean War**  
*Julie Evo, MS\**; *Veronica A. Keyes, MD*; *Matthew C. Go, PhD*; *Esther H. Choo, MS, BA*;  
*Paulina Dominguez Acosta, MA*; *Krystal Estrada, MSc*; *Amanda N. Friend, PhD*;  
*Amanda R. Hale, MA*; *Reshma Satish, MS*; *Melissa Menschel, MS*

4:00 PM – 4:15 PM

**A98**     **The Role of Starvation in the Underestimation of Living Stature From Skeletal Remains**  
*Maryann Hobbs\**; *Rylan Tegtmeier Hawke, PhD*

4:15 PM – 4:30 PM

**A99**     **Mass Graves: An Analysis of Injuries and Causes of Death**  
*Nermin Sarajlic, MD, PhD\**

4:30 PM – 5:00 PM

**QUESTIONS AND ANSWERS**

## Friday

### Poster Session

---

11:30 AM – 1:00 PM

**A100**     **Substance Misuse, Stress, and Sternal Rib End Morphology: Implications for Forensic Age Estimation**  
*Christine M. Pink, PhD\**

11:30 AM – 1:00 PM

**A101**     **Aging Increases Regional Variation in the Pore Morphometry of Human Ribs**  
*Mary E. Cole, PhD\**; *Yun-Seok Kang, PhD*; *Amanda M. Agnew, PhD*

11:30 AM – 1:00 PM

**A102**     **Testing a Novel Method for Estimating Adult Age at Death From the First Rib in Forensic Casework**  
*Amy Joy Spies, PhD\**; *Kaitlyn J. Fulp, MA*; *Laura C. Fulginiti, PhD*

11:30 AM – 1:00 PM

**A103**     **The Utility of Deciduous Dental Microstructures in Forensic Anthropology**  
*Marin Pilloud, PhD\**; *Christopher Aris, PhD*; *Emily Smith, MA*

11:30 AM – 1:00 PM

**A104**     **Dental Age Estimator Performance Relative to Weighted Kappa: A Simulation Study**  
*Valerie Sgheiza, MA, MS\**; *Helen M. Liversidge*

11:30 AM – 1:00 PM

**A105**     **Estimating Age in Adults Using Measurements of Dental Radiographs: A Validation of the Kvaal Method**  
*Katherine Skorpinski, PhD\**; *Laura E. Cirillo, PhD*

11:30 AM – 1:00 PM

**A106**     **Innominate Weight Over the Lifespan: A Method for Estimating Age From the Pelvis**  
*Andrea M. Zurek-Ost, PhD\**; *Mark Sorensen, PhD*

# ANTHROPOLOGY

---

- 11:30 AM – 1:00 PM     **A107**     **An Age-at-Death Estimation From Pubic Bone Mineral Density on Postmortem CTs**  
*Eulalie Pefferkorn\**; *Fabrice Dedouit, MD, PhD*; *Agathe Bascou, MD*; *Pauline Saint Martin, PhD*;  
*Norbert Telmon, MD, PhD*; *Frederic Savall, MD, PhD*
- 11:30 AM – 1:00 PM     **A108**     **Decoding Age-at-Death With DNA Methylomics: A Cutting-Edge Approach for Forensic Analysis of Skeletal Remains**  
*Luke William Gent, BSc\**; *Noemi Procopio, PhD*; *Edward Schwalbe*  
(FSF Emerging Forensic Scientist Award Poster Presentation)
- 11:30 AM – 1:00 PM     **A109**     **Intra-Skeletal Variation in Lower Limb Microstructure for Histological Age Estimation**  
*Victoria M. Dominguez, PhD\**; *Bailey A.G. Colohan*
- 11:30 AM – 1:00 PM     **A110**     **Introducing OA-TA: A New Tool for Adult Age-at-Death Estimation Using Osteoarthritis of the Synovial Joints**  
*Michala K. Stock, PhD\**; *Ariana N. Strasheim, MA, BA*; *Allysha P. Winburn, PhD*
- 11:30 AM – 1:00 PM     **A111**     **Validating Population Affinity Method Platforms for Macromorphoscopic Traits in Specific 20th-Century Contexts**  
*Cortney N. Hulse, PhD\**; *Amanda N. Friend, PhD*; *Amanda R. Hale, MA*; *Abigail K. Kindler, MA*;  
*Rebecca J. Taylor, PhD*
- 11:30 AM – 1:00 PM     **A112**     **A Comparison of Ancestry-Specific Versus Ancestry-Independent Stature Estimation**  
*Rylan Tegtmeyer Hawke, PhD\**; *Laura E. Cirillo, PhD*; *Katie Whitmore, PhD*;  
*Lara E. McCormick, PhD*; *Abigail Kindler, MA*; *Emily S. Tarbet Hust, MA*
- 11:30 AM – 1:00 PM     **A113**     **Evaluating the Prevalence of Torus Mandibularis and Torus Palatinus in Relation to Ancestry, Sex, and Age in a Modern Skeletal Sample**  
*Alex F. Wong, MS, BA\**; *Amandine Eriksen, PhD*; *Stephen Nawrocki, PhD*
- 11:30 AM – 1:00 PM     **A114**     **How Do Agencies Use Biological Profile Data? A Pilot Study Investigating Stakeholder Engagement With Forensic Anthropological Estimates**  
*Samantha M. McCrane, PhD\**; *Allysha P. Winburn, PhD*; *Amanda N. Friend, PhD*  
(FSF Emerging Forensic Scientist Award Poster Presentation)
- 11:30 AM – 1:00 PM     **A115**     **Assessing the Reliability of the DSP2 Software for Skeletal Sex Assessment in a Modern Italian Reference Collection From Syracuse, Sicily**  
*Henrietta Vita\**; *Constantine Eliopoulos, PhD*; *Matteo Borrini, PhD, MS\**
- 11:30 AM – 1:00 PM     **A116**     **Sex Estimation of Modern Greek-Cypriots Utilizing Measurements of the Calcaneus and Talus**  
*Anelis Diaz, MA, BS\**; *Georgia Hennessy\**; *Erica Baer, PhD, MS*; *Xenia Paula Kyriakou, PhD*
- 11:30 AM – 1:00 PM     **A117**     **Sexual Dimorphism in the Human Mandible: The Application of 3D Statistical Shape Modeling**  
*Yu-Young Kim, MS\**; *Kang-Woo Lee, PhD*; *Kyung-Seok Hu, DDS, PhD*
- 11:30 AM – 1:00 PM     **A118**     **The Ontogenetic Development of the Preauricular Sulcus and Its Utility in Estimating Sex in Children and Young Adults With Considerations for Pregnancy and Parturition**  
*Stephanie J. Cole, PhD\**; *Marin Pilloud, PhD*; *Kyra Stull, PhD*
- 11:30 AM – 1:00 PM     **A119**     **The Utility of the Maxillary Sinus in Estimating Biological Sex in a Modern American Population**  
*Abigail Elaine Houkes, MA\**  
(FSF Emerging Forensic Scientist Award Poster Presentation)
- 11:30 AM – 1:00 PM     **A120**     **Translating Results: Accessing Accuracy Within Sex Estimation Methods From the Biological Profile**  
*McKenzie Macon, BAS\**; *Cris E. Hughes, PhD*

# ANTHROPOLOGY

---

- 11:30 AM – 1:00 PM     **A121**     **Creating Continuity: The Proper Handling of Unprovenanced, and Unidentified, Legacy Forensic Cases and Prevention of Future Mishandling**  
*Chelsey A. Juarez, PhD\**; *Alison Galloway, PhD*
- 11:30 AM – 1:00 PM     **A122**     **Identification Trends in Forensic Anthropology Cases at the New Mexico Office of the Medical Investigator**  
*Nicollette S. Appel, MS\**; *Cris E. Hughes, PhD*; *Paige Lynch, MS*
- 11:30 AM – 1:00 PM     **A123**     **Forensic Anthropology Casework and Outreach: 50 Years of Operational Trends for Chico State's Human Identification Laboratory**  
*Colleen Milligan, PhD\**; *Eric J. Bartelink, PhD*; *Shannon Clinkinbeard, MA*; *Cheyenne D. Collins, MA*; *Ashley Kendell, PhD*; *Taylor Lambrigger, MA*; *P. Willey, PhD*
- 11:30 AM – 1:00 PM     **A124**     **The Evolution of Forensic Anthropological Casework: Exemplifying the Importance of Routine Reanalysis of Long-Term Unidentified Remains at the Forensic Anthropology Center at Texas State (FACTS)**  
*Emilie Wiedenmeyer, MA\**; *Theresa M. De Cree, MS, BA*; *Michelle D. Hamilton, PhD*
- 11:30 AM – 1:00 PM     **A125**     **A Comparison of Forensic Anthropology Casework Across Two Urban, Midwest Medical Examiner Offices, 2013–2021**  
*Erin B. Waxenbaum, PhD\**; *Lindsay H. Trammell, PhD*; *Anne Grauer, PhD*
- 11:30 AM – 1:00 PM     **A126**     **Introducing the Forensic Science Research and Training Laboratory (FSRTL), a New Forensic Anthropology Research Facility at George Mason University**  
*An-Di Yim, PhD\**; *Emily D. Rancourt, MS*; *Joseph A. DiZinno, DDS*; *Brian Eckenrode, PhD*; *Kimberly Rule, MS*; *Christopher Durac, MS, BS*; *Mary E. O'Toole, PhD, MA*
- 11:30 AM – 1:00 PM     **A127**     **Stakeholder Perspectives and End-of-Life Planning: The Future for Body Farms, Donation Programs, and Student Development**  
*Natalie S. Wise, BA\**; *Erin H. Kimmerle, PhD*
- 11:30 AM – 1:00 PM     **A128**     **The Forensic Taphonomy Education and Research Facility: An Interdisciplinary Educational and Professional Resource**  
*Sophia I. Reck, MA\**; *Ginesse A. Listi, PhD*
- 11:30 AM – 1:00 PM     **A129**     **WITHDRAWN**

## Rexamining the Biological Profile

---

Moderator: Heather Walsh-Haney, PhD

Co-Moderator: Anthony Lanfranchi, MS

- 8:45 AM – 9:00 AM     **A130**     **Considerations for Age Estimation Accuracy: Method-Derived Outcomes and Practitioner Interpretations**  
*Cris E. Hughes, PhD\**; *Chelsey A. Juarez, PhD*; *An-Di Yim, PhD*
- 9:00 AM – 9:15 AM     **A131**     **A Regression-Based Machine Learning Framework for Adult Skeletal Age Estimation**  
*Eugenia Cunha, PhD\**; *David Navega, PhD*
- 9:15 AM – 9:30 AM     **A132**     **Cranial Masculinization: How Age Progression Affects the Accuracy of Sex Estimations in Adults**  
*Lyndsey Hornagold\**; *Samantha Shipley, MS\**; *Erin H. Kimmerle, PhD*  
*(FSF Emerging Forensic Scientist Award Oral Presentation)*
- 9:30 AM – 9:45 AM     **A133**     **Unaccompanied Minors Automatic Forensic Age Estimation (UMAF AE): Applying Artificial Intelligence-Based Methods to Estimate Legal Age in Undocumented Minors**  
*Stefano De Luca*; *Javier Venema Rodríguez, MSc*; *Pablo Mesejo Santiago, PhD*; *Oscar Ibáñez Panizo, PhD\**

# ANTHROPOLOGY

---

9:45 AM – 10:00 AM    **A134**    **Macroscopic Differences in Adult Human Femora Are Linked to Body Mass Index**  
*Daniel Wescott, PhD\**; Elaine Y. Chu, MA; Adam D. Sylvester, PhD; Wojciech Zbijewski;  
Gengxin Shi; Lauren A. Meckel, PhD; Deborah L. Cunningham, PhD

10:00 AM – 10:15 AM    **A135**    **A Critical Validation of Dental Morphology as a Method of Ancestry Estimation in a Historical Forensic Context**  
*Laura E. Cirillo, PhD\**; Rylan Tegtmeyer Hawke, PhD; Rebecca J. Taylor, PhD  
(FSF Emerging Forensic Scientist Award Oral Presentation)

10:15 AM – 10:30 AM    **BREAK**

## PMI and Taphonomy

---

Moderator: Lauren Pharr Parks, PhD

Co-Moderator: Micayla Spiros, MS

10:30 AM – 10:45 AM    **A136**    **. . . and There Were Only Teeth: Postmortem Interval Estimation Based on XRD and FTIR**  
*Sara C. Zapico, PhD\**; Juan Suárez, PhD; Stella Martín de las Heras, MD, PhD;  
Leticia Rubio, MD, PhD

10:45 AM – 11:00 AM    **A137**    **geoFOR: A Forensic Taphonomy Database for PMI Estimation Using a Machine Learning Model**  
*Katherine E. Weisensee, PhD\**; Madeline Atwell, PhD; Cristina I. Tica, PhD; Carl Ehrett, PhD, BS;  
Dane Smith, PhD; Patricia Carbajales-Dale, MS, Beng; Patrick J. Clafflin; Noah A. Nisbet

11:00 AM – 11:15 AM    **A138**    **Skeletal Element Recovery Rates From Outdoor Surface Contexts in Louisiana**  
*Ginesse A. Listi, PhD\**

11:15 AM – 11:30 AM    **A139**    **Small but Mighty: A Controlled Observation of Magpie Scavenging Among a Cohort of Human Remains in the Rocky Mountain Region of Colorado**  
*Christiane I. Baigent, MSc\**

11:30 AM – 11:45 AM    **A140**    **WITHDRAWN**

11:45 AM – 12:00 PM    **A141**    **The Fluvial Transport of Human Remains: Forensic Application of a HEC-RAS Model for Predicting Search Parameters for Human Remains Recovered From the Sacramento River, California**  
*Eric J. Bartelink, PhD\**; Colleen Milligan, PhD; Steffen Mehl, PhD; Erik Fintel, BA

12:00 PM – 1:15 PM    **BREAK**

## Trauma Assessment and Application

---

Moderator: Mari Isa, PhD

Co-Moderator: Claire Eichen, BA

1:15 PM – 1:30 PM    **A142**    **Standards for Analyzing Skeletal Trauma in Forensic Anthropology**  
*Donna C. Boyd, PhD\**; Julie M. Fleischman, PhD; Carolyn V. Isaac, PhD; Jade S. De La Paz, PhD

1:30 PM – 1:45 PM    **A143**    **The Use of Outline Analyses to Assess Kerf Floor Shape Patterns in Saw Marks**  
*Alexis L. VanBaarle, MS\**

1:45 PM – 2:00 PM    **A144**    **Deep Learning Models for Fracture Detection and Segmentation in Bone Histology**  
*Carolyn V. Isaac, PhD\**; Redwan Sony, MSc; Clara J. Devota, BS, MA; Alexis L. VanBaarle, MS;  
Arun Ross, PhD

