

# YFSF POSTER SESSION

## Wednesday

### Poster Session

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| 11:30 am—1:00 pm | Y1  | <b>The Feasibility of Using ATR/FTIR for the Differentiation of Different Brands of Brown Eyeliners</b><br>Urja Desai, MS*   |
| 11:30 am—1:00 pm | Y2  | <b>Intimate Partner Violence Against Women Murders: Forensic Features and Differences With Domestic Violence</b><br>Miguel Lorente, PhD*; María Cuadros, MCrim   |
| 11:30 am—1:00 pm | Y3  | <b>A Comparative Analysis of Textile Damage Caused by Canines vs. Firearms and Knives</b><br>Tabitha Hammond, BS*; Sandra Koch, PhD; Lawrence Quarino, PhD; Andra Lewis, PhD   |
| 11:30 am—1:00 pm | Y4  | <b>Investigating the Patterning of Postmortem Fractures in Human Dentition</b><br>Bec Krolczyk, BS*; Danny Wescott, PhD  |
| 11:30 am—1:00 pm | Y5  | <b>The Differentiation and Identification of Fentanyl Analogs Using Portable Ion Trap Mass Spectrometry</b><br>Mei Yuan, BS*; Ella M. Galvan, BS; Jeffery D. Johnson, Jr., PhD; Seth Fisher, BS; Pauline E. Leary, PhD ; Brooke W. Kammrath, PhD<br>( <i>FSF Emerging Forensic Scientist Award Poster Presentation</i> ) |
| 11:30 am—1:00 pm | Y6  | <b>Comparative Evaluation of Machine Learning Models for Criminal Attribute Estimation: Explainable AI Perspectives</b><br>Daisuke Imoto, PhD*; Kazuki Hirama, PhD; Kengo Furuhashi, PhD; Yusuke Otsuka, MPhil; Kaeko Yokota, PhD; Masakatsu Honma, PhD  |
| 11:30 am—1:00 pm | Y7  | <b>A Bloody Window to the Past: STR Analysis of DNA From a Bloodstained Civil War Surgical Table</b><br>Nadia Walter*; Alyssa Spillar, BS; J. Thomas McClintock, PhD; Kristin Mossé, MScFS;  |
| 11:30 am—1:00 pm | Y8  | <b>Direct Analysis of Ink on Documents and Other Substrates Using Attenuated Total Reflectance Fourier Transform Infrared Microscopy</b><br>Sophie Krumhansl, APM*; Cadence Manning, APM*; Boluwatife Olubusoye, BS; James Cizdziel, PhD   |
| 11:30 am—1:00 pm | Y9  | <b>Understanding Sleep-Related Infant Deaths: A Forensic Perspective on SIDS, SUID, and Safe Sleep Practices</b><br>Sandra Shapiro, DNP*; Rachel Thomas, PhD; Orli Grinstein-Cohen, PhD  |
| 11:30 am—1:00 pm | Y10 | <b>Utilizing Fourier Transform Infrared Spectroscopy for Age-at-Death Estimations in Human Skeletal Remains: A Pilot Study</b><br>Anna K. Maier, MSc*  |
| 11:30 am—1:00 pm | Y11 | <b>A Field-Ready Method for Wildlife Identification Using Noninvasive Genetic Sampling</b><br>Rosemary van der Net, BS*; Pamela Marshall, PhD; Jan Janecka, PhD; Joshua Robinson, MS; Andrea Kautz, MS; Joseph Saxfield, BS  |
| 11:30 am—1:00 pm | Y12 | <b>A New Spin on DNA Extraction: Validating SpermX™ GenSpin Differential Extraction for Sexual Assault Evidence Processing</b><br>Tori Tyree, BS; Amy McGuckian, MFS; Julie Sikorsky, MSc; Kelly Beatty, MSFS  |

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| 11:30 am—1:00 pm | <b>Y13</b> | <b>WITHDRAWN</b>  |
| 11:30 am—1:00 pm | <b>Y14</b> | <b>Revisiting the Resolution and Accuracy of Year-of-Birth Estimations Based on Bomb Pulse Radiocarbon (14C) Dating of Human Enamel</b><br>Camille Martin, BA*; Rhonda Quinn, PhD   |
| 11:30 am—1:00 pm | <b>Y15</b> | <b>Fungal Succession During Decomposition: A DNA-Based Analysis of Forensic Significance</b><br>Lewis Burnett*; Brittney Sylvester; Latavia Williams; Alyssa Lavasseur; Georgia Williams, MS; Meiko Thompson, PhD                                     |
| 11:30 am—1:00 pm | <b>Y16</b> | <b>Exposing Forgery: Ink Analysis via Raman Spectroscopy</b><br>Alex Potter, MSFS*; Ellen Hondrogiannis, PhD; Mary Devadas, PhD   |
| 11:30 am—1:00 pm | <b>Y17</b> | <b>Enhancing Nuclear DNA Recovery From Soil: A Comparative Analysis of Resin, Silica Membrane, and Silica Bead Extraction Methods</b><br>Ashley Espinoza, MS*; Todd Disotell, PhD   |
| 11:30 am—1:00 pm | <b>Y18</b> | <b>Accuracy of the Transition Analysis 3 (TA3) Method for Age Estimation in the John A. Williams Human Skeletal Collection</b><br>Blue Wonhof, MS*  |
| 11:30 am—1:00 pm | <b>Y19</b> | <b>Visual Examination of Physical Properties of Blood as a Result of Ignitable Liquid and High Heat Affect From an Arson Scene</b><br>Victoria Bascou, BS*;   |
| 11:30 am—1:00 pm | <b>Y20</b> | <b>The Quantitation of Organic Compounds in Smokeless Powder Using High-Performance Liquid Chromatography</b><br>Kayla South, BS*; Ellen Hondrogiannis, PhD   |
| 11:30 am—1:00 pm | <b>Y21</b> | <b>Network Graphs for Visualizing Handwriting Individuality</b><br>Clarissa Giefer, MS*; Cami Fuglsby, PhD; Janean Hanka, MS; Jack Hietpas, PhD; JoAnn Buscaglia, PhD; Christopher Saunders, PhD  |
| 11:30 am—1:00 pm | <b>Y22</b> | <b>Direct Analysis in Real Time Tandem Mass Spectrometry (DART-MS/MS) for the Characterization and Profiling of Street-Level Fentanyl Samples</b><br>Joel Moss*; Alexis Quinter, MASc; Heather Harris, MFS; Nicholas Khorozov, MS; Joshua DeBord, PhD |
| 11:30 am—1:00 pm | <b>Y23</b> | <b>Investigating the Effects of Soil pH and Fluoride Content on Hydroxyapatite Degradation Using pXRF Technology</b><br>Madeline June Leeah, BA*;   |
| 11:30 am—1:00 pm | <b>Y24</b> | <b>When Experts Lie: Fraudulent Forensics, Wrongful Convictions, and the Call for Basics and Reform</b><br>Megan Cramer*; Jordan Stephens*  |
| 11:30 am—1:00 pm | <b>Y25</b> | <b>Analysis of Smokeless Powder Using Infrared and Uv-Visible Spectroscopy With a Focus on Nitrated Derivatives of Diphenylamine</b><br>Meredith Elko*; Ellen Hondrogiannis, PhD; Mary Devadas, PhD   |
| 11:30 am—1:00 pm | <b>Y26</b> | <b>Suicide by Sodium Nitrite/Nitrate: A 10-Year Retrospective Review</b><br>Rachel Guest, MD*; John Powell, MD  |

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| 11:30 am—1:00 pm | Y27 | <b>DNA Extraction From Bone: A Novel Workflow Using Theralin™ and Magnetic Beads</b><br>Marguerite Godwin, BS*; Mark Wilson, PhD; Charla Marshall, PhD; Joseph DiZinno, DDS  |
| 11:30 am—1:00 pm | Y28 | <b>The Application of ATR-FTIR Spectroscopy for the Identification of Cosmetic Foundations Versus Environmental Materials Such as Food or Soil on Cloth</b><br>Jaden Force, BS*; Kelly Elkins, PhD   |
| 11:30 am—1:00 pm | Y29 | <b>Optimizing DNA Extraction and Communicating PhenoTrivium Panel Results for Cold Case Skeletal Samples</b><br>Madison Townsend, BS*; Brittania Bintz, MS; Maureen Hickman, MS; Tiffany Fracchia, PhD; Alice Gooding, PhD; Frankie West, PhD          |
| 11:30 am—1:00 pm | Y30 | <b>The Development of Recombinase Polymerase Amplification (RPA) to Augment mini STR Amplification of 'Touch' DNA Samples for Human Identification (HID) Workflows</b><br>Joseph Rahm, MSFS*; DeEtta Mills, PhD  |
| 11:30 am—1:00 pm | Y31 | <b>Investigating the Correlation Between Body Mass and Hip Joint Measurements in a Taiwanese Non-Adult Sample</b><br>Rachel Riddell, BA; An-Di Yim, PhD  |
| 11:30 am—1:00 pm | Y32 | <b>Basic Tools, New Approaches: Using Mandibular Canine Index and 3D Imaging for Subadult Sex Determination</b><br>Jorja Hill*; Satu Valoriani, PhD  |
| 11:30 am—1:00 pm | Y33 | <b>Differentiating Blunt Force Trauma Fractures From Thermal Fractures in Fleshed and Skeletal Deer Heads</b><br>Alyssa Ranney, MS*  |
| 11:30 am—1:00 pm | Y34 | <b>Evaluating IR Spectra Variation of Pepper Based Defense Products</b><br>Jocelyn Polanco, BS*  |
| 11:30 am—1:00 pm | Y35 | <b>Enhancing Forensic Toxicology Through Postmortem Applications: Evaluating the Viability of Skin Swabbing as a Drug Testing Matrix</b><br>Hannah Schaeffer, BS*; Abigail Burke, MS; Rebecca Wagner, PhD; Jennifer Hammers, DO; Stephanie Wetzel, PhD |

## Thursday

### Poster Session

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| 11:30 am—1:00 pm | Y36 | <b>Color Spectrophotometer as a Powerful Tool to Evaluate Human Fluid Stains on Denim Fabrics</b><br>Shelby Barrager*; Mazeyar Parvinzadeh Gashti, PhD   |
| 11:30 am—1:00 pm | Y37 | <b>WITHDRAWN</b>   |
| 11:30 am—1:00 pm | Y38 | <b>Towards Mass Spectrometry Imaging of Latent Prints Using Visible Matrix-Assisted Laser Desorption Electrospray Ionization</b><br>Julia Morelli*; Kenyon Evans-Nguyen, PhD                         |
| 11:30 am—1:00 pm | Y39 | <b>Assessing the Prevalence of p-Phenylenediamine in Henna Tattoo Inks Purchased in Northern Delaware</b><br>Laell Sands*; Muhammed Taimoor Chaundry, MPhil; Tom Gluodenis, PhD; John Stallworth, BS |

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| 11:30 am—1:00 pm | <b>Y40</b> | <b>Petroleum-Utilizing and Hemolytic Soil Microbes: Environmental Impacts on Decomposition in Forensic Contexts</b><br>Tristen Howell*; Lewis Burnett; Brittney Sylvester; Latavia Williams; Georgia Williams, MS; Meiko Thompson, PhD  |
| 11:30 am—1:00 pm | <b>Y41</b> | <b>The Evaluation and Comparison of Portable FTIR/Raman Instruments for Field Testing of Illicit Drugs</b><br>Sydney Ma, BS*; Alexandra Evans, MFS; Ya-Chih (Jessica) Cheng, PhD; Ira Lurie, PhD  |
| 11:30 am—1:00 pm | <b>Y42</b> | <b>Microbial Succession in Uncovered Remains: Establishing a Baseline for Postmortem Interval Estimation</b><br>Diamon Raymond*; Brittney Sylvester; Latavia Williams; Alyssa Lavasseur; Georgia Williams, MS; Meiko Thompson, PhD  |
| 11:30 am—1:00 pm | <b>Y43</b> | <b>The Determination of Neurotransmitter Levels in Rat Brain Following Opioid-Sedative Exposure Using Liquid-Chromatography Quadrupole-Time-of-Flight Mass Spectrometry</b><br>Laerissa Reveil, MS*; Maria Lasaosa, PhD; Amanda Furman, MS; Alia Marie Iqbal O'Meara, MD; Matthew Halquist, PhD |
| 11:30 am—1:00 pm | <b>Y44</b> | <b>Using Positive and Negative Image Overlap for Image Forensics: Examples From Taiwan</b><br>Teng-Kai Shih, BASc*; Min-Neng Hsu, PhD; Wen-Chao Yang, DSc; Wen Chung Chen, LLM; Yi Fang, MSc  |
| 11:30 am—1:00 pm | <b>Y45</b> | <b>Vitreous Fluid as a Stable Matrix for Postmortem Toxicology</b><br>Miriam Fisher, MD*; Ben Murie, MD   |
| 11:30 am—1:00 pm | <b>Y46</b> | <b>The Effects of Latent Print Development Techniques on Over-the-Counter Drug Detection by Liquid Chromatography Triple Quadrupole Mass Spectrometry</b><br>Jessica Pichat, BS*; Ashley Ebert, PhD; Lyndsie Ferrara, PhD; Stephanie Wetzel, PhD  |
| 11:30 am—1:00 pm | <b>Y47</b> | <b>Lying Labels? An Analysis of Caffeine Content in Common United Kingdom Caffeinated Products</b><br>Noah Cannon*; John Paul Planchet*; Carolina Sartori*  |
| 11:30 am—1:00 pm | <b>Y48</b> | <b>An Assessment of the FARO Freestyle 2 Handheld Scanner on Skeletal Analyses in the Estimation of the Biological Profile</b><br>Chloe R. Cummings, BS*; An-Di Yim, PhD<br>( <i>FSF Emerging Forensic Scientist Award Poster Presentation</i> )  |
| 11:30 am—1:00 pm | <b>Y49</b> | <b>Vicarious Trauma and its Effects on Public Safety Professional's Ability to Complete Unbiased Investigations</b><br>Madison Turner*; Kelly Crockett, MSFS  |
| 11:30 am—1:00 pm | <b>Y50</b> | <b>An Evaluation of Immunoassay Test Strips for Detection of Medetomidine in Urine and Drug Products</b><br>Liliane Audet, BS*; Alex Krotulski, PhD; Heather Harris, MFS; Alyssa Reyes, MS  |
| 11:30 am—1:00 pm | <b>Y51</b> | <b>An Evaluation of Alternative Solvents for Forensic Fire Debris Analysis</b><br>Tessa Monroe*; Jenna Leppek, BS; Hannah LaVoie, BS; Ruth Waddell Smith, PhD; Kenyon Evans-Nguyen, PhD   |
| 11:30 am—1:00 pm | <b>Y52</b> | <b>An Evaluation of Vapor Pressures of Ignitable Liquids, Water and Fire Debris Analysis, and the Effects on Extraction</b><br>Carson Kleider, BS*  |

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| 11:30 am—1:00 pm | <b>Y53</b> | <b>A Quick Method of Measuring Bullet Angles on Auto Metal Surface at Crime Scenes: A Novel Method Using a Digital Angle Measurer</b><br>Heather Armistead, BS; John Wang, PhD*  |
| 11:30 am—1:00 pm | <b>Y54</b> | <b>Developmental Changes in Frontal Sinus Morphology: Significance in a Forensic Context</b><br>Allison L. Deemter, MA*  |
| 11:30 am—1:00 pm | <b>Y55</b> | <b>Single Step Fingerprint Fumigation With Common Dyes</b><br>Abigail Proffitt*; Jared Filegar*; Kristin Mossé, MSFS   |
| 11:30 am—1:00 pm | <b>Y56</b> | <b>When Cleanliness Obscures: How Can Common Disinfecting Cleaners Hinder Forensic Investigations?</b><br>Shaifer Goalen, BS*; Kristin Ornelas   |
| 11:30 am—1:00 pm | <b>Y57</b> | <b>A Comparison of Genetic Analysis Methodologies on Spermatozoa DNA Recovered From the Orifices of Burned Human Remains</b><br>Andrew Brown*; Brittanica Bintz, MS; Darren Solomon, MS; David Schuable, BS; Charles Giblin, PE; Rebecca George, PhD |
| 11:30 am—1:00 pm | <b>Y58</b> | <b>The Impact of Firearm Type and Orientation on Gunshot Residue Distribution Patterns on a Shooter</b><br>Emily Miller, BS*; Peter Valentin, PhD; Virginia Maxwell, DPhil, BSc; Virginia Maxwell, DPhil   |
| 11:30 am—1:00 pm | <b>Y59</b> | <b>Effects on Skeletonization and Skeletal Weathering Across Contrasting Annual Seasonal Cycles</b><br>Maeghan Fisher, BS*; Kristy Henson, PhD   |
| 11:30 am—1:00 pm | <b>Y60</b> | <b>Investigating the Postmortem Degradation of Identifiable Fingerprint Minutiae Over Time</b><br>Emma L. Scheidt, BA; Sahar Rahman, BA  |
| 11:30 am—1:00 pm | <b>Y61</b> | <b>An Evaluation of DNA Recovery From Fingernails Post-Hair Washing</b><br>Alexia A. Cassman, BS*; Tyra Volney, MS; Tim Kalafut, PhD<br>( <i>FSF Emerging Forensic Scientist Award Poster Presentation</i> )   |
| 11:30 am—1:00 pm | <b>Y62</b> | <b>Evaluating the Efficiency of Laundry Sanitizers on the Removal and Transfer of DNA in a Washing Machine</b><br>Nicole Agre, BS*; Rhonda Williams, PhD   |
| 11:30 am—1:00 pm | <b>Y63</b> | <b>An Expanded Evaluation of XRD and SEM-EDS for the Characterization of Inorganic Particles in Eyeshadows</b><br>Taylin Naquin*; Anna Duggar, PhD   |
| 11:30 am—1:00 pm | <b>Y64</b> | <b>An Analysis of Changes in Fingerprints Before and After Recent Death on Paper Documents Using Statistical and Technical Methods</b><br>Khalid AlDaoud, BA*; Zainab almansoor, MS; Sara Alsubaie, MA   |
| 11:30 am—1:00 pm | <b>Y65</b> | <b>The Development and Validation of an Analytical Method for the Determination of Stress Biomarkers in Hair</b><br>Brooke Fontaine, BS*; Alexis Palma*; Marta Concheiro-Guisan, PhD   |
| 11:30 am—1:00 pm | <b>Y66</b> | <b>A Forensic Approach to the Identification and Interpretation of Intimate Partner Violence (IPV) in Human Skeletal Remains</b><br>Catarina Vazquez*  |

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| 11:30 am—1:00 pm | <b>Y67</b> | <b>Postmortem Predators: Identifying and Tracking Scavengers of Remains in a Northwest European Context</b><br>Sarina Riechmann, MSc*  |
| 11:30 am—1:00 pm | <b>Y68</b> | <b>Attempting More Detailed Discrimination of Plants Using Next-Generation Sequencing</b><br>Ryuta Nakamura, MS*; Hitomi Kikkawa, PhD; Koichiro Tsuge, PhD                               |
| 11:30 am—1:00 pm | <b>Y69</b> | <b>Unveiling the Interference of Alcohol Intoxication on Salivary Detection of Codeine: A UV/Vis Spectroscopic Insight</b><br>Danae Alvarez*; Madison Carrillo*; Hamidreza Sharifan, PhD |
| 11:30 am—1:00 pm | <b>Y70</b> | <b>WITHDRAWN</b>   |
| 11:30 am—1:00 pm | <b>Y71</b> | <b>Homicide by Hot Dog: Choking in the Setting of Blunt Force Trauma of the Jaw by Another</b><br>Reece Foehr, BS*; Kayden Hadlock, BS; Katie Hanson, MD                                 |
| 11:30 am—1:00 pm | <b>Y72</b> | <b>Deadlining: Gentrification and the Spatial Forensics of Missing and Murdered Black Women in Washington, DC</b><br>Avery Bernard Johns*  |

## *Friday*

### Poster Session

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| 11:30 am—1:00 pm | <b>Y73</b> | <b>Identification of Ignitable Liquids in the Post-Fire Carpet Debris by Complementary GC-MS and DART-MS Methods</b><br>Mikayla Miles, BS*; Shruthi Perna, PhD; Ngee Chong, PhD; Mengliang Zhang, PhD                       |
| 11:30 am—1:00 pm | <b>Y74</b> | <b>A Preliminary Study on How Shooting Distance and Lens Focal Length at Crime Scenes Affect Footwear Impression Examination</b><br>Wen Chung Chen, LLM*; Kuo Lan Liu, PhD; Min-Neng Hsu, PhD                               |
| 11:30 am—1:00 pm | <b>Y75</b> | <b>Would You Like Fries With That? A Case of Fatal Asphyxia Due to Food Bolus Airway Obstruction in the Setting of Xylazine and Fentanyl Intoxication</b><br>Kayden Hadlock, BS*; Reece Foehr, BS; Katie Hanson, MD         |
| 11:30 am—1:00 pm | <b>Y76</b> | <b>Microbial Succession in Clothed Remains: Forensic Insights into Postmortem Interval ‘Estimation</b><br>Brittney Sylvester8; Latavia Williams; Lewis Burnett; Alyssa Lavasseur; Georgia Williams, MS; Meiko Thompson, PhD |
| 11:30 am—1:00 pm | <b>Y77</b> | <b>Computationally-Guided Design of a Molecularly Imprinted Polymer for the Detection of Psilocybin in Unregulated Drug Products</b><br>Hannah Peterson, BS*; Balaji Nagarajan, APM; Matthew Halquist, PhD                  |
| 11:30 am—1:00 pm | <b>Y78</b> | <b>Back to Basics: Approaching Cold Cases With Open-Source Intelligence: An Undergraduate Perspective</b><br>Maylynn Burns*; Kelly Crockett, MSFS; Maylynn Burns*   |
| 11:30 am—1:00 pm | <b>Y79</b> | <b>A Comparative Analysis of Volatile Memory Analysis Tools in Digital Forensics</b><br>Jaden McIntosh, BS*   |

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| 11:30 am—1:00 pm | <b>Y80</b> | <b>Bone and Tooth: Elemental Analysis of Cremated Remains</b><br>Ella Mitchell*; Dustin Holland*  |
| 11:30 am—1:00 pm | <b>Y81</b> | <b>ATR/FTIR Characterization of Pressure Sensitive Adhesives: Before and After Chemical Fingerprint Processing</b><br>Meagan MiguelPablo*; Khanh-Hoa Tran-Ba, PhD   |
| 11:30 am—1:00 pm | <b>Y82</b> | <b>Investigation of Gas Chromatography (GC) Coupled With Mass Spectrometry (MS) and Vacuum Ultraviolet (VUV) Spectroscopy for Analysis of Ignitable Liquid Samples</b><br>Bryn Boznanski, BS*; Ira Lurie, PhD; Walter Rowe, PhD             |
| 11:30 am—1:00 pm | <b>Y83</b> | <b>Protective and Risk Factors in Sex Trafficking</b><br>Sophia Thompson*   |
| 11:30 am—1:00 pm | <b>Y84</b> | <b>Determining the Feasibility of UV/Vis and ATR/FTIR in Identifying Neat Analytes in Smokeless Powders</b><br>Rorie Anderson, BS*; Ellen Hondrogiannis, PhD; Mary Devadas, PhD   |
| 11:30 am—1:00 pm | <b>Y85</b> | <b>Transfer of Material Derived From Polymer-Jacketed Bullets During Cycling and Discharge</b><br>Ethan Frazer, MS*; Peter Diaczuk, PhD   |
| 11:30 am—1:00 pm | <b>Y86</b> | <b>Microbes in the Mist: Microbiological Analysis of E-liquids and Aerosols</b><br>Ankita Gola, BS*; Jessemia Meekins, BS; Alaina Holt, PhD; Justin Poklis, BS; Christopher Ehrhardt, PhD; Michelle Peace, PhD                              |
| 11:30 am—1:00 pm | <b>Y87</b> | <b>Microbial Succession in Buried Remains: A Controlled Pig Study at Three Feet Depth</b><br>Latavia Williams*; Brittney Sylvester; Alyssa Lavasseur; Lewis Burnett; Georgia Williams, MS; Meiko Thompson, PhD                              |
| 11:30 am—1:00 pm | <b>Y88</b> | <b>Various Animal Species Microscopic Hair Analysis</b><br>Bryanna Smith*; Kristin Mossé, MSFS  |
| 11:30 am—1:00 pm | <b>Y89</b> | <b>An Investigation of Water Effect on Ignitable Liquid Residue Analysis by Coupling Solid-Phase Microextraction With Direct Analysis in Real Time Mass Spectrometry</b><br>Victoria Bascou, BS*  |
| 11:30 am—1:00 pm | <b>Y90</b> | <b>WITHDRAWN</b>  |
| 11:30 am—1:00 pm | <b>Y91</b> | <b>Time Since Intercourse and Serological Testing in Sexual Assault Homicides: A Case Report and Brief Review of the Literature</b><br>Peyton Byers, BS*; Pamela Marshall, PhD  |
| 11:30 am—1:00 pm | <b>Y92</b> | <b>The Development of Preprocessing Workflow for Computed Tomography Images for Artificial Intelligence Applications in Forensic Anthropological Research</b><br>Gargi Jani, MSc*; Smit Patel, BEng; Mohendra Roy, PhD; Bhoomika Patel, PhD |
| 11:30 am—1:00 pm | <b>Y93</b> | <b>Recalibrating Forensic Science: DNA, Microbial Signatures, and Methodological Equity in Montana's Differential Burial Contexts</b><br>Kaylee M. Hinds, MA*; Meradeth H. Snow, PhD  |
| 11:30 am—1:00 pm | <b>Y94</b> | <b>Microbial Succession in Carpet-Wrapped Remains: Implications for Postmortem Interval Estimation</b><br>Alyssa Lavasseur*; Brittney Sylvester; Latavia Williams; Lewis Burnett; Georgia Williams, MS; Meiko Thompson, PhD                 |

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| 11:30 am—1:00 pm | <b>Y95</b>  | <b>A Reevaluation of a Mandibular Tori Scoring Method: Limitations and Revisions</b><br>Amanda Jokela, BA*; Danny J. Wescott, PhD; Michele M. Bleuze, PhD  |
| 11:30 am—1:00 pm | <b>Y96</b>  | <b>Optimizing Trace DNA Recovery: A Comparative Evaluation of Swab Types on Various Substrates</b><br>Mara Dominguez, BA*; Anna Franzoni, MSc; Nicole Novroski, PhD; Fabio Oldoni, PhD             |
| 11:30 am—1:00 pm | <b>Y97</b>  | <b>Characterization of Microsatellite Markers for Forensic Identification of <i>Gypsophila</i></b><br>Laila Mansour*; Nathan Lents, PhD  |
| 11:30 am—1:00 pm | <b>Y98</b>  | <b>The Correlation of the Dimensions of Hands and Feet With Height in an Indigenous Population of the Tribal District of Himachal Pradesh, India</b><br>Yatiraj Singi, MD*; Dipen Dabhi, MD        |
| 11:30 am—1:00 pm | <b>Y99</b>  | <b>Ear Lobe Crease as a Coronary Artery Disease Risk Stratification Tool in Autopsies of Asian Populations</b><br>Minjung Hong, MD*; Seong Ho Yoo, MD, PhD   |
| 11:30 am—1:00 pm | <b>Y100</b> | <b>Dermestid (Flesh-Eating) Beetle Effect on Skeletal Remains Study</b><br>Gabriella Ramm*; Kristy Henson, PhD   |
| 11:30 am—1:00 pm | <b>Y101</b> | <b>Sick as a Dog: A Case of a Missing Face</b><br>Maura Thurber, MHS*; Alexis Kollasch-McGarvey, MD; Eric Bracken, MS;; Dennis Firchau, MD; Robert Weis, MD; Melissa Blessing, DO                  |
| 11:30 am—1:00 pm | <b>Y102</b> | <b>Forensic Differentiation of Canine Hair</b><br>Allison Kelley*; Kristin Mossé, MSFS   |
| 11:30 am—1:00 pm | <b>Y103</b> | <b>Taphonomic Processes Etch Bones: An Experimental Look at Plant Root Etching on Bovine Bones</b><br>Emily Caudill, BS*; Shannon Hodge, PhD; Thomas Holland, PhD                                  |
| 11:30 am—1:00 pm | <b>Y104</b> | <b>Surveillance Shopping of Unregulated Dual Chamber E-Cigarette Devices Assessing Accessibility and Consumer Risk</b><br>Kevin Lester*; Michelle Peace, PhD; Alaina Holt, PhD; Justin Poklis, BAS |