

# YFSF POSTER SESSIONS



## Wednesday

### Anthropology

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- 11:30 a.m. - 1:00 p.m. Y1 **WITHDRAWN**
- 11:30 a.m. - 1:00 p.m. Y2 **The Persistence of Tool Marks on Bones After Burial**  
*Cydnee A. Wolfe\**

### Engineering Sciences

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- 11:30 a.m. - 1:00 p.m. Y3 **A Multi-Instrumental Comparison of Trace Elements in Industrial Glasses**  
*Jamie L. Weaver, PhD\**; *Nicholas E. Sharp, PhD\**; *Ruthmara Corzo, PhD*; *Eric B. Steel*
- 11:30 a.m. - 1:00 p.m. Y4 **An Analysis of Upconverting Nanoparticles for Latent Fingerprint Detection**  
*Hannah K. Weppner\**; *Sierra R. Rasmussen, BS*; *Jon Kellar, PhD*; *William Cross, PhD*

### Pathology/Biology

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- 11:30 a.m. - 1:00 p.m. Y5 **A Hemorrhage of the Cerebellum and Brainstem Due to Cervical Epidural Steroid Injection: A Case Report and Review of the Literature**  
*Connie Bao\**
- 11:30 a.m. - 1:00 p.m. Y6 **Using Cell-Free DNA to Improve Short Tandem Repeat (STR) Analysis of Sweat Samples**  
*Nathan R. McFadden\**

## Thursday

### Criminalistics

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- 11:30 a.m. - 1:00 p.m. Y7 **The Detection of Undeclared Substances and Heavy Metals in Alternative Medicines by Chemical Analysis**  
*Nicole Almeter, BS\**; *Jonathan Orr*; *Karen S. Scott, PhD*; *Shanan S. Tobe, PhD*; *Heather L. Harris, JD*
- 11:30 a.m. - 1:00 p.m. Y8 **The Analysis of Fentanyl Analogs by Gas Chromatography/Solid State Infrared Spectroscopy (GC/IR)**  
*Emily Prisaznik, MS\**; *Thomas A. Brettell, PhD*
- 11:30 a.m. - 1:00 p.m. Y9 **Are Intra-Alveolar Hemorrhage and Aspiration of Bacterial Colonies Pathognomonic in Asphyxia by Suffocation in Infancy?**  
*Cara A. Mitrano\**; *L.J. Dragovic, MD*; *Andrew Hanosh, MD*; *Bernardino Pacris, MD*; *Ruben Ortiz-Reyes, MD*; *Kanubhai P. Virani, MD*
- 11:30 a.m. - 1:00 p.m. Y10 **A Comparison of Periodic Acid-Schiff Staining With Lugol's Iodine for the Detection of Vaginal Fluid in Dried Material**  
*Melissa Rogers\**; *Lawrence Quarino, PhD*
- 11:30 a.m. - 1:00 p.m. Y11 **The Analysis of Fentanyl and Its Analogs and Metabolites in Postmortem Blood Using Biocompatible Solid-Phase Microextraction (BioSPME) and Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS)**  
*Gabriella Smith, BS\**; *Thomas A. Brettell, PhD*; *Chandler Marie Grant, MS*; *Marianne E. Staretz, PhD*; *Thomas H. Pritchett, MS*



## YFSF POSTER SESSIONS

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### General

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- 11:30 a.m. - 1:00 p.m. Y12 **Optimization of a Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS) Method for the Separation and Identification of Synthetic Cannabinoids on Prison Mail Samples**  
*Alyssa Hurd, BA\*; Stephanie J. Wetzel, PhD*
- 11:30 a.m. - 1:00 p.m. Y13 **The Effects of Household Cleaners and Paints on the Detection of Bloodstains Over Time**  
*Katelin Vietri, BA\*; Maria Cruz Blas; Kimberly S. Kobojek, MS*

### Toxicology

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- 11:30 a.m. - 1:00 p.m. Y14 **Analysis of Drugs Used in Crimes Using Solid Phase Extraction (SPE) and Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)**  
*Kimberly E. LaGatta, BS\*; Vadoud Niri, PhD; Shokouh Haddadi, PhD*

## Friday

### Criminalistics

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- 11:30 a.m. - 1:00 p.m. Y15 **Fingerprints and Ancestry: Is It All in the Details?**  
*Jessica R. Ford\**
- 11:30 a.m. - 1:00 p.m. Y16 **The Accuracy of Ammunition With the Addition of Luminescent Markers**  
*Jared E. McAtee\**
- 11:30 a.m. - 1:00 p.m. Y17 **A Comparison of Sol-Gel Adsorption Phases and Their Extraction Efficiencies of Explosives Using Closed Headspace Sampling Coupled With Capillary Microextraction of Volatiles (CMV)**  
*Amy Salyards\*; Michelle N. Torres, BS; Kelsey Patterson; Jose R. Almirall, PhD*
- 11:30 a.m. - 1:00 p.m. Y18 **A New Assay for 1,3-Dimethylamylamine: An Emerging Drug of Abuse**  
*Sandra M. Pieczonka\**
- 11:30 a.m. - 1:00 p.m. Y19 **The Prevalence of Male DNA Under a Female's Fingernails**  
*Alexis Baxter, BS\*; Janine Kishbaugh, MS*
- 11:30 a.m. - 1:00 p.m. Y20 **The Detection of Male DNA Using Y-Chromosomal Short Tandem Repeats (Y-STRs) in Post-Coital Samples of Vasectomized Males**  
*Sarah Lighthart, BS\*; Janine Kishbaugh, MS*
- 11:30 a.m. - 1:00 p.m. Y21 **The Implementation of a Method for Rapid Direct Polymerase Chain Reaction (PCR)**  
*Mallory Baud, BS\*; Georgiana C. Gibson-Daw, PhD; Bruce R. McCord, PhD*

### General

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- 11:30 a.m. - 1:00 p.m. Y22 **The Effect of Demographic Factors and Mortality-Related Health Conditions on Postmortem Biometric Data**  
*Samantha Upton, BA\*; Anielle Duncan, BA\*; Elizabeth Albee, BA; Kelly Sauerwein, PhD; Dawnie W. Steadman, PhD*