



NSF/NIJ Industry-University Cooperative Research Program



Wednesday Feb 15, 2023 @ 6:00 pm - 8:00 pm in the Rosen Shingle Creek Resort  
Panzacola G-2 - Orlando, Florida

### List of CARFS-funded Research Posters

#### Florida International University

1. Chantrell Frazier, Vidia A. Gokool, Howard K. Holness, DeEtta K. Mills, and Kenneth G. Furton. **Multivariate Regression Modelling for Sex/Gender Prediction Using Volatile Organic Compounds from Hand Odor Profiles via HS-SPME-GCMS.**
2. Roberta Gorziza, Nicole Valdes, Marylin Tinoco, Jose Almirall. **The Detection of  $\Delta^9$ -Tetrahydrocannabinol (THC) in Oral Fluid Using the Fast Blue BB (FBBB) Test.**
3. Nicole Valdes, Roberta Gorziza, Jose Almirall. **The Quantitative Analysis of  $\Delta^9$ -tetrahydrocannabinol ( $\Delta^9$ -THC) in Cannabis Plants Using the Fast Blue BB Colorimetric Test.**
4. Ping Jiang and Jose Almirall. **Chemical Characterization of Glass Micro-balloons and Micro-beads Used in Dynamite.**
5. Abhishek Bhattarai, Maryna Veksler, Hadi Sahin, Ahmet Kurt, Kemal Akkaya. **Crypto Wallet Artifact Detection Triage Tool for Android Phones.**
6. Patrick Roman, Abuzar Kabir, Julian Mendel, Kirk Grates, Spiros Manolakos. **Vacuum assisted trace collection of explosives & drugs using sol-gel sorbent coated swabs.**
7. Patrick Roman, Kirk Grates, Tomas Baca. **Miniature Cylindrical Ion Trap (CIT) Mass Spectrometer Chips for Forensic and Counter Terrorism Applications.**
8. Tomas Baca, Patrick Roman. **Micro Gas Chromatography Silicon Chips for in situ Explosive and Narcotics Identification.**
9. Alexis Rizzolo, Jeffrey Wells, and DeEtta Mills. **Utilizing the Carrion Fly Microbiome for the Detection of a Human Corpse.**
10. Amber MacInnis, Jeffrey Wells. **Forensic entomology when the evidence is “no insect.” Best carrion fly species for predicting maximum postmortem interval in the United Arab Emirates.**
11. Maurell A. Dsouza and Jeffrey Wells. **DNA-Based Identification of the Forensically Important Sarcophagidae of the United Arab Emirates.**
12. Mario O. Vendrell-Dones; Emily Hernandez; Bruce McCord. **The Application of Surface-Enhanced Raman Spectroscopy (SERS) for the Detection of Synthetic Cathinones.**
13. Sevde Dogruer Erkok; Emily Hernandez; Bruce McCord. **Comparing Density Functional Theory (DFT) Calculations and Surface-Enhanced Raman Spectroscopy (SERS) Results to Differentiate Structurally Similar Fentanyl Analogs.**
14. Emma R. Calabrese and Lauryn E. DeGreeff. **Suppression of Vapor Transport due to Adsorption to Containment Materials.**
15. Katherine Castro and Lauryn DeGreeff. **Survey of Contamination in the Lifetime of Canine Training Aids.**
16. Kaylyn A. Keith and Anthony P. DeCaprio. **Comparison of LC-QqQ-MS and DART-QqQ-MS for the Detection of Single Dose of Drugs in Hair.**

**Sam Houston State University**

17. Ya-Chih (Jessica) Cheng and Rachel Houston. **Development of a Next Generation Sequencing Panel Targeting Cannabinoid Synthase Genes to distinguish between marijuana and hemp.**
18. Rachel Houston and Jennifer Snedeker. **Evaluation of DNA Extraction Methods for Bone Samples for Use with Downstream Investigative and Genome-wide SNP Genotyping.**
19. Lucio Avellaneda; Damani Johnson; Rachel Houston; Sheree Hughes; Tim Kalafut. **Evaluation of ForenSeq MaintstAY Kit for Mixed Forensic DNA Sample.**

**Texas A&M University**

20. Alyssa Teixeira. **The Effect of Motor Oil on the Attraction of Forensically Important Diptera in Toco, Trinidad.**
21. Aaron Tarone and Jeffery Tomberlin. **Necrobiome Research at Texas A&M University.**
22. Macy Strain, Adrienne Brundage, Kevin Conway, Ryan Mohammed. **The Impact of Sunscreen on the Attractancy of Forensically Important Flies.**

**Boston University**

23. Allison Vanderfeen and Adam B. Hall. **Evaluating Chemical Attribute Signatures of Gasoline Using DART-MS and Chemometrics.**