Sam Houston State University

Department of Forensic Science

Scientific Publications

Rev. 7/18
Academic Year 2017-2018


Kyleen Elwick, Carrie Mayes, Xiangpei Zeng, Jonathan King, Bruce Budowle and Sheree Hughes-Stamm. **Assessment of Five Common DNA Extraction Methods for the Analysis of Human Remains using the Ion Ion S5™ and MiSeq FGx™ Systems.** Proceedings from the Gordon Research Conference (Jun 2018).


Carrie Mayes, Sarah Seashols-Williams and Sheree Hughes-Stamm. **Little Stains, Lots of Problems.** Proceedings from the Qiagen Investigator Forum (May 2018).


Esiri Tasker, Sheree Hughes-Stamm and Bobby LaRue. **SwabSaver® Evaluation: Room-temperature Storage of "Touch" DNA Recovered from Assault Rifle Magazines.** Proceedings from the Qiagen Investigator Forum (May 2018).


Kyleen Elwick, Carrie Mayes, Xiangpei Zeng, Jonathan King, Bruce Budowle and Sheree Hughes-Stamm. **Evaluation of Five Common DNA Extraction Methods for Analysis of Human Remain Samples on Massively Parallel Sequencing Success.** Proceedings from the Human Identification Solutions, Rome, Italy (May 2018).


Michelle Harrel, David Gangitano and Sheree Hughes-Stamm. **The Effects of Extra PCR Cycles When Amplifying Skeletal Samples with the GlobalFlier PCR


Sun Yi Li, Jorn Yu and Ilona Petrikovics. Trace Level Extraction of the Cyanide Biomarker, 2-amino-2-thiazoline-4-carboxylic Acid (ATCA), from Biological Samples by Applying Magnetic Nanomaterials in Dispersive Solid Phase Extraction. Proceedings from the U. S. Army Medical Defense Bioscience Review (Apr 2018).


Elizabeth Chesna, Ana Blanco, Gabriella Cansino-Jones, Peyton Gandy, Jessica Wells, Danielle Boisvert, Todd Armstrong, Sheree Hughes-Stamm and David Gangitano. *Variation in Genes Affecting Dopamine Turnover, Oxytocin, and Serotonin in Inmate and Student Populations.* Proceedings from the American Academy of Forensic Sciences (Feb 2018).


Kari Graham, Ryan Gutierrez, Kyleen Elwick, Sheree Hughes-Stamm and Bobby LaRue. *A Novel Workflow for Identifying Phenotypic Polymorphisms in*
Detoxification Enzymes Associated with Drug Metabolism. Proceedings from the American Academy of Forensic Sciences (Feb 2018).


Tiffany Franklin, Lauren Perry Wei-Chuan Shih and Jorn Yu. Detection of Phytocannabinoids from Buccal Swabs by Headspace Solid Phase Microextraction - Gas Chromatography/Mass Spectrometry. Analytical Methods, 10, 942-946 (Feb 2018).

Tonya Parnell, Katie Tanner, Stacie Gray, Haeli Kennedy and Joan Bytheway. The Human Cadaver Decomposition Island (CDI) and the Vegetation Regrowth
**Interval. Proceedings from the American Academy of Forensic Sciences.**
Proceedings from the American Academy of Forensic Sciences (Feb 2018).


Daniel Wescott, Dawnie Steadman, Nichole Miller, Kelly Sauerwein, Chaunesey Clemmons, Devora Gleiber, Chloe McDaneld, Lauren Meckel and Joan Bytheway. *Validation of the Total Body Score/Accumulated Degree-Day Model at Three Human Decomposition Facilities.* Journal of Forensic Anthropology, 1, 3 (Jan 2018).

Jessica Winborn, Donovan Haines and Sarah Kerrigan. *Phase 1 Metabolism of Desomorphine.* Proceedings from the Society of Forensic Toxicologists (Jan 2018)


Madeleine Swortwood, Baltasar Lucendo-Villarin, Panagiotis Filis, Marilyn Huestis, Jose Mesequer-Ripolles, Kate Cameron, John Iredale, Peter O'Shaughnesy, Paul Fowler and David Hay. *Modelling Foetal Exposure to Maternal Smoking Using Hepatoblasts from Pluripotent Stem Cells.* Archives of Toxicology, 91(11), 3633-3643 (Nov 2017).


Kyleen Elwick, Xiangpei Zeng, Jonathan King, Bruce Budowle and Sheree Hughes-Stamm. *Comparative Tolerance of Two Massively Parallel Sequencing


Academic Year 2016-2017


Elizabeth Chesna, Gabriella Cansino, Peyton Gandy, Jessica Wells, Danielle Boisvert, Todd Armstrong, Sheree Hughes-Stamm and David Gangitano. Application of

Esiri Tasker, Bobby LaRue, Charity Beherec, David Gangitano and Sheree Hughes-Stamm. *Analysis of DNA from Post-blast Pipe Bomb Fragments for Identification and Determination of Ancestry*. Proceedings from the Association of Forensic DNA Analysts and Administrators (Jul 2017).


Alejandra Figueroa, David Gangitano, Jaime Solano and Leonardo Anabalon. *Botanical DNA Evidence in a Case of Illegal Drug Trafficking: The Use of High-Resolution Melting with the Internal Transcribed Spacer Approach in the


Joan Bytheway, Nichole Miller, Dawnie Steadman, Kelly Sauerwein, Daniel Wescott, Chaunesey Clemmon, Devora Gleiber, Chloe McDaneld and Lauren Meckel. Validation of the Total Body Score/Accumulated Degree Days Equation at 100, 300, 500, and 1,000 ADD on 30 Human Subjects with a Known Postmortem Interval from Three Human Decomposition Facilities. Proceedings of the American Academy of Forensic Sciences (Feb 2017).


Rachel Houston, Sheree Hughes-Stamm and David Gangitano. *Development and Validation of a New 13-loci STR Multiplex System for Cannabis sativa*


Sierra Smith, Kevin Derr and Joan Bytheway. **Differentiating Between Sharp Force Trauma Defects and Insect Invasion of the Skin of Human Cadavers Throughout the Decomposition Process in a Terrestrial and Fluvial Environment.** Proceedings of the American Academy of Forensic Sciences (Feb 2017).

Amanda Wheeler, Natalia Czado, David Gangitano, Meredith Turnbough and Sheree Hughes-Stamm. **Comparison of DNA Yield and STR Success Rate from Different Tissues in Embalmed Bodies.** International Journal of Legal Medicine, 131(1), 61-66 (Jan 2017).

Karl Scheidweiler, Maria Andersson, Madeleine Swortwood, Cristina Sempio and Marilyn Huestis. **Long Term Stability of Cannabinoids in Oral Fluid After Controlled Cannabis Administration.** Drug Testing and Analysis, 9(1), 143-147 (Jan 2017).

Madeleine Swortwood, Matthew Newmeyer, Osama Abulseoud, Maria Andersson, Allan Barnes, Karl Scheidweiler and Marilyn A. Huestis. **On-site Oral Fluid Δ9-tetrahydrocannabinoll (THC) Screening After Controlled Smoked, Vaporized, and Oral Cannabis Administration.** Forensic Toxicology, 35, 133-145 (Jan 2017).


Esirioghene Tasker, Kyleen Elwick, Bobby LaRue, Charity Beherec, Rachel Houston, David Gangitano and Sheree Hughes-Stamm. **HID & MPS for Post-blast Bomb Fragments and Highly Inhibited Samples.** Summit Forum of Forensic Technology and Applications/China Association for Forensic Science and Technology (Nov 2016), Foshan, Guangzhou, China.


Matthew Newmeyer, Madeleine Swortwood, Osama Abulseoud and Marilyn Huestis. **Subjective and Physiological Effects following Controlled Smoked, Vaporized, and Oral Cannabis Administrations to Frequent and Occasional Cannabis Smokers.** Proceedings of the Society of Forensic Toxicologists (Oct 2016).

Amy Sorensen, Kyleen Elwick, David Gangitano and Sheree Hughes-Stamm.  


Kyleen Elwick, Charity Beherec, David Gangitano and Sheree Hughes-Stamm.  
*Comparative Tolerance of Short Tandem Repeat and Massively Parallel Sequencing Chemistries to Inhibited Samples.* Proceedings of the International Symposium on Human Identification (Sept 2016).

Rachel Houston, Matthew Birck, Sheree Hughes-Stamm and David Gangitano.  
Academic Year 2015-2016


Esirioghene Tasker, Charity Beherec, Rachel Houston and Sheree Hughes-Stamm. *Bodies, Bones and Bombs; Human Identification.* Proceedings of the Human Identification Solutions (HIDS) Conference (May 2016), Barcelona, Spain


Gretchen Dabbs, Joan Bytheway and Melissa Connor. **Comparing Decomposition Assessments from Digital Images to In Situ Observations.** Proceedings of the American Academy of Forensic Sciences (Feb 2016).


Jessica Winborn, James Sweet and Jorn Chi-Chung Yu. **Differentiation of Seized Marijuana Samples Using Automated Headspace/ Solid-Phase Microextraction Coupled to Gas Chromatograph/Mass Spectrometer/Flame Ionization Detector (HS/SPME-GC/MS/FID) and Principal Component Analysis (PCA).** Proceedings of the American Academy of Forensic Sciences (Feb 2016).


Joseph Insana and Patrick Buzzini. **Do the Bulk Area and the Exterior Surface of Modern Container Glass Exhibit Differences in Refractive Index (RI) Measurements?** Proceedings of the American Academy of Forensic Sciences (Feb 2016).


Lindsay Glicksberg, Kelsie Bryand and Sarah Kerrigan. **Fragmentation Pathways and Structural Characterization of Synthetic Cathinones Using Electrospray Ionization (ESI) and High Resolution Mass Spectrometry.** Proceedings of the American Academy of Forensic Sciences (Feb 2016).


Joseph Insana and Patrick Buzzini. The Differences Between Refractive Index Measurements of the External Surface and Bulk Area of Container Glass. The Microscope, 64(2), 51-60 (Second Quarter 2016).


Sheree Hughes-Stamm, Frauke Warnke and Angela van Daal. An Alternate Method for Extracting DNA from Environmentally Challenged Teeth for Improved DNA Analysis. Legal Medicine, 18, 31–36 (Jan 2016).

Joan Bytheway, Melissa Connor, Gretchen Dabbs, Cheryl Johnston and Michelle Sunkel. The Ethics and Best Practices of Human Decomposition Facilities in the United


Amy Sorensen, Clare Berry, David Bruce, Michelle Gahan, Sheree Hughes-Stamm and Dennis McNevin. Direct-to-PCR Tissue Preservation for DNA Profiling. International Society for Forensic Genetics, Krakow, Poland (Sept 2015)


Improved Preservation and Purification Methods for DNA in Decomposing Human Tissue Samples; A DVI Application. Proceedings of the American Academy of Forensic Sciences (Feb 2015).


Interobserver Reliability of the Total Body Score System for Quantifying Human Decomposition. Proceedings from the American Academy of Forensic Sciences (Feb 2015).


**Academic Year 2013-2014**


Ming Li, Jing Lu, Ji Qi, Fusheng Zhao, Jianbo Zeng, Jorn Chi-Chung Yu and Wei-Chuan Shih. *Stamping Surface-enhanced Raman spectroscopy for Label-free, Multiplexed, Molecular Sensing and Imaging*. Journal of Biomedical Optics, 19(5), 050501-050503 (May 2014).


Kaitlin Main, Stacie Gray, Kevin Derr and Joan Bytheway. Differences in Skeletal Pathology as Seen in an Individual with Quadriplegia Secondary to Duchenne Muscular Dystrophy. Proceedings of the American Academy of Forensic Sciences (Feb 2014).


Rebecca McCullough, Yongyi, Jiang and Warren Samms. Differentiation of Regioisomeric Alpha-methyltryptamine (AMT; 3- (2-aminopropyl) indole) and 5-IT (5-(2-aminopropyl) indole). Proceedings of the American Academy of Forensic Sciences (Feb 2014).


Tracy Gastineau, Justin Schwane and Elizabeth Todd. **Two Month Stability and Distribution and Study of the Benzodiazepine Phenazepam.** Proceedings of the American Academy of Forensic Sciences (Feb 2014).


Sheree Hughes-Stamm, Mark Barash, Kelly Grisedale and Angela van Daal. **Initial Evaluation of a 96-plex GoldenGate® Genotyping SNP Assay with Suboptimal and Whole Genome Amplified Samples.** Journal of Forensic Investigation, 1(1), 8-16 (Sept 2013).
Academic Year 2012-2013


Patricia Contreras, Stephen Houck, William Davis and Jorn Chi-Chung Yu. **Pyrolysis Products of Linear Alkylbenzenes - Implications in Fire Debris Analysis.** Journal of Forensic Sciences, 58(1), 210-216 (Jan 2013).

Academic Year 2011-2012


Ilona Petrikovics, David Thompson, Gary Rockwood, Brian Logue, Sarah Martin, Prashanth Jayanna and Jorn Chi-Chung Yu. **Organ-distribution of the Metabolite 2-aminothiazoline-4-carboxylic acid in a Rat Model Following Cyanide Exposure.** Biomarkers, 16(8), 686-690 (Dec 2011).


Academic Year 2010-2011


Mallory Foster, Jorn Chi-Chung Yu and Darrell Stein. The Use of Infrared Imaging to Facilitate Fired Cartridge Case and Bullet Comparisons. Proceedings of the American Academy of Forensic Sciences (Feb 2011).

Sarah Martin, Jessica Nasr, Jorn Chi-Chung Yu and Ilona Petrikovics. Study of L-2-Aminothiazoline-4-Carboxylic Acid as a Biomarker for Cyanide Poisoning by LC-MS/MS Analysis. Proceedings of the American Academy of Forensic Sciences (Feb 2011).


Natalie Lindgren, Jeffrey Kelly, Alan Archambeault, Sybil Bucheli and Joan Bytheway. Exclusion of Forensically Important Flies Due to Burying Behavior by the Red Imported Fire Ant (Solenopsis invicta) in Southeast Texas. Forensic Science International, 204(1-3), e1-3 (Jan 2011).


Academic Year 2009-2010


Nicole Paes and David Gangitano. *Application of mini-STRs to Low Copy Number DNA Samples.* Proceedings of the American Academy of Forensic Sciences (Feb 2010).


Katelyn Stafford, Randy Jackson, Jorn Chi-Chung Yu and Ilona Petrikovics. *Analytical Method Development for Determining the Biomarker, 2- Aminothiazoline-4-Carboxylic Acid (ATCA), in Mice Liver after Cyanide Exposure.* Proceedings of the American Chemical Society Southwest Regional Meeting (Nov 2009).


Academic Year 2008-2009


Academic Year 2007-2008


Ramiro Salas, Adam Main, David Gangitano and Mariella De Biasi. Decreased Withdrawal Symptoms but Normal Tolerance to Nicotine in Mice Null for the Alpha 7 Nicotinic Acetylcholine Receptor Subunit. Neuropsychopharmacology, 53(7), 863-869 (Dec 2007).


