13906 Paradise Valley Dr. ♦ Houston, TX 77069 ♦ (832) 472-8568 ♦ dag006@shsu.edu

#### Summary \_

Fluent, English/Spanish Bilingual, Forensic Geneticist with extensive experience in molecular biology and biochemistry. Post-doctoral research in Neuroscience and Neurourology. Strong background in forensic biology, automated STR analysis, SNPs and mtDNA sequencing, massive parallel sequencing, biostatistics, data mining and population genetics, crime scene investigation, forensic instrumental analysis, forensic plant science and pharmacogenomics.

#### Education \_\_\_\_

• Ph.D. in Toxicology and Forensic Medicine (2004). School of Medicine. University of Buenos Aires, Argentina

Thesis: "DNA Microsatellites Polymorphism in Buenos Aires Population and its Application to Genetic Identification on Criminal Cases"

• B.Sc., Chemistry (1992). University of Buenos Aires, Argentina

### Professional Experience \_\_\_\_\_

Sam Houston State University, Huntsville, TX College of Criminal Justice Department of Forensic Science Associate Professor (tenured) Assistant Professor tenure-track	April 2013 - Present August 2007- March 2013
<ul> <li>Courses: Techniques for Crime Scene Investigation, Forensic In Forensic Biology, Advanced Forensic DNA, Statistical Genetics, Etl Graduate Seminar in Forensic Sciences, Introduction to Forensic Sci Techniques for Crime Scene Investigation, Non-human Forensics an</li> <li>Research interests: Forensic genetics, Forensic plant science, and</li> </ul>	hics and Quality Assurance in Forensic Science, iences, Behavioral Genetics, Advanced nd Pharmacogenomics.
Baylor College of Medicine-Houston TX	
Scott Department of Urology Adjunct Assistant Professor	January 2008 - January 2009
Research Associate	September 2006 – August 2007
<ul> <li>Post-doctoral Associate</li> <li>Research: "Plasticity of bladder sensory and efferent functions upper sensory and effective functions upper sensory and effective</li></ul>	April – August 2006 under pathological conditions"
	I I I I I I I I I I I I I I I I I I I
Baylor College of Medicine-Houston TX Department of Neuroscience <i>Post-doctoral Associate</i>	January 2003 - April 2006

1993-2003

1996-2003

• Research: "Nicotine addiction, anxiety and gender in mice"

Federal Police/Atomic Energy Commission-Buenos Aires, Argentina

#### Scientific Police Department-Chemical Laboratory Division Atomic Energy Commission-Nuclear Biochemistry Division Forensic Biology Scientist

- Crime scene investigation: collection of specimens
- DNA extraction and quantification
- Automated STR and mtDNA sequencing analysis (ABI 377 & 310)

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# David A. Gangitano —

<ul> <li>Responsible of casework reports</li> <li>Forensic DNA/Serology Expert witness</li> </ul>	
<ul> <li>Principal Investigator of Forensic Biology Development and Research</li> </ul>	
<ul> <li>Scientific Police Department-Chemical Laboratory Division Forensic Chemist/Crime lab technical director (1999-2003)</li> <li>Biological fluids identification</li> <li>Hair analysis</li> <li>Reconstruction of blood groups and isoenzymes analysis</li> <li>Controlled Substances</li> <li>Arson analysis</li> <li>Paint evidence analysis</li> <li>Crime scene investigation</li> </ul>	1993-1996
Teaching/Training Experience	
<ul> <li>Sam Houston State University, Huntsville TX Department of Forensic Science Associate Professor</li> <li>Creduate Current Techniques for Crime Science Investigation, Forensis Instrumental</li> </ul>	2007- Present
<i>Graduate Courses:</i> Techniques for Crime Scene Investigation, Forensic Instrumental Forensic Biology, Advanced Forensic DNA, Statistical Genetics, Ethics and Q Science, Graduate Seminar in Forensic Sciences, Behavioral Genetics, Advanced Investigation, Non-human Forensics. <i>Undergraduate Courses:</i> Introduction to Forensic Sciences.	Quality Assurance in Forensic Techniques for Crime Scene
Online Undergraduate Courses: Introduction to Forensic Sciences, Techniques for Cri	me Scene Investigation.
<ul> <li>Baylor College of Medicine, Houston TX Scott Department of Urology <i>Research Associate</i> Research training for Urology residents</li> </ul>	2006-2007
<ul> <li>University of Buenos Aires, Argentina Ciclo Básico Común <i>Teaching Assistant</i> Lectured General Chemistry in classes up to 200 students.</li> </ul>	1986-2003
<ul> <li>University of Buenos Aires, Argentina School of Natural Sciences - Department of Chemistry <i>Teaching Assistant</i> Lectured Inorganic Chemistry and Laboratory in classes up to 50 students</li> </ul>	1987-1991
Training	
<ul> <li>Next generation sequencing for HID (workshop) International Symposium of Human identification, Phoenix AZ</li> </ul>	2014
<ul> <li>ANOVA methods applied to behavioral tests         Baylor College of Medicine, Houston TX         Department of Molecular &amp; Human Genetics     </li> </ul>	2005
<ul> <li>Behavioral tests in mice Baylor College of Medicine, Houston TX</li> </ul>	2003
<ul> <li>Department of Molecular &amp; Human Genetics</li> <li>Statistics and Data Mining Dept. of Computer Sciences, School of Natural Sciences. University of Buenos Aires, Argentina</li> </ul>	2001

٠	PCR- STR Systems and Mitochondrial DNA Analysis. FBI Training Center. Atomic Energy Commission.	1997
	Buenos Aires, Argentina	
•	PCR – Based Technologies in Forensic Science Seminar. FBI Training Center. Atomic Energy Commission. Buenos Aires, Argentina	1996
•	<b>Polymerase Chain Reaction. Principles and Applications.</b> Dr. A. Lanari Medical Research Institute. School of Medicine. University of Buenos Aires, Argentina	1994
•	Genetic engineering applications to diagnosis of hereditary diseases and paternity. Genetics and Molecular Biology Dept. School of Biochemistry. University of Buenos Aires, Argentina	1992

### **Grants Awarded**

- SHSU Enhanced Research Grant 2017-2018 (\$15,000). "Influence of Regulation of Oxytocin on Social Behavior". David Gangitano (PI), Elizabeth Chesna (Co-PI).
- National Institute of Justice 2014 (\$725,000). "Enhanced Sample Preparation and Data Interpretation Strategies for Massively Parallel Sequencing for Human Identification in Missing Persons and DVI Casework". PI: Sheree Hughes-Stamm, Co.PI: Bruce Budowle, Co-Inv: David Gangitano.
- National Institute of Justice 2015-2017 Graduate Research Fellowship Program in Science, Technology, Engineering, and Mathematics (\$138,000). "Development of a comprehensive genetic tool for identification of Cannabis sativa samples for forensic and intelligence purposes." Rachel Houston (PhD student), David Gangitano (advisor).
- SHSU Enhanced Research Grant 2014-2015 (\$10,000). "Biological and environmental factors related to stalking". Danielle Boisvert (PI), Todd Armstrong (Co-PI), Matt Nobles (Co-PI), Brian Boutwell (Co-PI), David Gangitano (Co-PI), Sheree Hughes-Stamm (Co-PI).
- National Institute of Justice 2014 (\$170,000). "Preservation and High Throughput Methods for Human Tissue Samples in Tropical Climates: An Improved DVI Approach". Sheree Hughes-Stamm, PhD (PI); David Gangitano, PhD (CoPI).
- SHSU Enhanced Research Grant 2013-2014 (\$15,000). "Discrimination of Pollen Sources Using *Pinus* STR Profiling"
- Texas Education Agency Grant-2011-2012 (\$300,000). Development of Forensic Science online certification training course for high school teachers.
- NIJ/FSF Student Research Grant- 2011-2012. (\$7000) "A molecular approach: Species composition of the maggot mass in human cadavers in the pineywoods ecoregion of southeastern Texas". Ashleigh Faris BS, Sibyl Bucheli, PhD, and David Gangitano, PhD.
- NIJ/FSF Student Research Grant-2009-2010. (\$3,700) "Pollen DNA: A New Tool for Forensic Investigations". Jennifer Sycalik, B.S.; David Gangitano, Ph.D.

#### **Scientific Presentations**

- "Development and validation of a new 13-loci STR multiplex system for Cannabis sativa genetic identification" (poster). Rachel Houston, BS\*, Sheree Hughes-Stamm, PhD, David Gangitano, PhD. International Symposium on Human Identification. Minneapolis MN, September 2017
- "Relationship of Oxytocin and the Serotonin Transporter Single Nucleotide Polymorphisms and Antisocial Behavior" (oral presentation). Elizabeth Chesna, BS, Charity Beherec, MS, Gabriella Cansino, MS, Peyton Gandy, MS, Jessica Wells, MS, Danielle Boisvert, PhD, Todd Armstrong, PhD, Sheree Hughes-Stamm, PhD, and David Gangitano, PhD. Proceedings of the American Academy of Forensic Sciences. New Orleans, February 2017.
- "Development and validation of a new 13-loci STR multiplex system for Cannabis sativa genetic identification" (oral presentation). Rachel Houston, BS\*, Sheree Hughes-Stamm, PhD, David Gangitano, PhD. Proceedings of the American Academy of Forensic Sciences. New Orleans, February 2017.
- "Application of Massive Parallel Sequencing in Forensic Psychiatry and Behavioral Science Using Custom Panels including Markers Potentially Linked to Human Behavioral Traits". Elizabeth Chesna, Charity Beherec, Richard Lewis, Jessica Wells, Sheree Hughes-Stamm, Todd Armstrong, Danielle Boisvert, David Gangitano. International Symposium on Human Identification. Minneapolis MN, September 2016.
- "Developmental Validation of a new 13-loci STR multiplex method for Cannabis sativa DNA profiling". Rachel Houston B.S.\*, Matthew Birck Ph.D, Sheree Hughes-Stamm Ph.D, David Gangitano Ph.D. International Symposium on Human Identification. Minneapolis MN, September 2016.
- "Identification and persistence of Pinus pollen DNA on cotton fabrics: A forensic application." (Oral presentation). Schield C\*, Campelli C, Sycalik J, Randle C, Hughes-Stamm S, Gangitano D. Association of Forensic DNA Analysts and Administrators meeting. Austin TX, Summer 2016.
- "Evaluation of a 13-loci STR multiplex System for Cannabis sativa genetic Identification" (Oral presentation). Rachel Houston, Sheree Hughes-Stamm, David Gangitano. Proceedings of the American Academy of Forensic Sciences. Las Vegas, February 2016.
- "Genetic Study of Single Nucleotide Polymorphisms (SNPs) in the Oxytocin Receptor (OXTR)". Elizabeth Chesna, Gabriella Cansino, Peyton Gandy, Jessica Wells, Danielle Boisvert, Todd Armstrong, and David Gangitano. Proceedings of the American Academy of Forensic Sciences. Las Vegas, February 2016.
- "Criminal Behavior and Single Nucleotide Polymorphism in Genes Related to Monoamine Regulation". Gabriella Cansino B.S.\*, Peyton Gandy M.S., Jessica Motl M.S., Todd Armstrong Ph.D., Matthew Nobles Ph.D., Brian Boutwell Ph.D., David Gangitano Ph.D. American Academy of Forensic Sciences meeting. Orlando FL, February 2015.
- "Evaluation of a 13-loci STR multiplex System for Cannabis sativa genetic Identification" (Oral presentation). Rachel Houston, Sheree Hughes-Stamm, David Gangitano. Association of Forensic DNA Analysts and Administrators meeting. Dallas TX, Summer 2015.
- "Evaluation of a 13-loci STR multiplex System for Cannabis sativa genetic Identification". Rachel Houston, Sheree Hughes-Stamm, David Gangitano. International Symposium on Human Identification. Grapevine TX, October 2015.
- "Improved Preservation and Purification Methods for DNA in Decomposing Human Tissue Samples; A DVI Application Amy Sorensen, MS\*; Elizabeth Rahman, BS; David Gangitano, PhD; Sheree Hughes-Stamm, PhD. International Symposium on Human Identification. Grapevine TX, October 2015.

- "Room Temperature DNA Preservation and Rapid Purification of Decomposing Human Tissue Samples; An Alternative DVI Approach" - Amy Sorensen MSc, David Gangitano PhD, Sheree Hughes-Stamm PhD.\* Symposium of Australian and New Zealand Forensic Science Society. Adelaide, Australia. August 2014.
- "Room Temperature DNA Preservation and High Throughput Methods for Decomposing Human Tissue Samples; An Alternative DVI Approach" - Amy Sorensen MSc, David Gangitano PhD, Sheree Hughes-Stamm PhD.\* Association of Forensic DNA Analysts and Administrators meeting. Houston TX, Summer 2014.
- "Development and evaluation of a rapid PCR method for the PowerPlex®16 HS system for forensic identification". James White MSc, Sheree Hughes-Stamm PhD, David Gangitano PhD.\* International Sympoisum on Human Identification. Phoenix AZ, October 2014.
- "Room Temperature DNA Preservation and Rapid Purification of Decomposing Human Tissue Samples; An Alternative DVI Approach" - Amy Sorensen MSc, David Gangitano PhD, Sheree Hughes-Stamm PhD.\* International Symposium on Human Identification. Phoenix AZ, October 2014.
- Genetic Study of DNA Polymorphisms in Androgen Receptor, Serotonin Transporter and Monoamine-oxidase Genes in an Inmate Sample". Peyton Gandy BS\*, Mary Symonds MS, Shahida Flores MS, Todd Armstrong PhD, Matthew Nobles PhD, Brian Boutwell PhD, David Gangitano PhD. American Academy of Forensic Sciences meeting. Seattle, February 2014.
- "Forensic Botany: Molecular Identification of Pinus Pollen Grains in Surface Soil". Cassandra Schield B.S.\*, Cassandra Campelli M.S., Jennifer Sycalik M.S., Bruce Budowle Ph.D, Craig Echt Ph.D, David Gangitano Ph.D. American Academy of Forensic Sciences meeting. Seattle, February 2014.
- "Development and evaluation of a rapid PCR method for the PowerPlex®S5 system for forensic DNA profiling". James White B.S.\*, Sarah Bahlmann M.S.F.S., Sheree Hughes-Stamm Ph.D., David Gangitano Ph.D. American Academy of Forensic Sciences meeting. Seattle, February 2014.
- "Development and evaluation of a rapid PCR method for the PowerPlex®S5 system for forensic DNA profiling". Sarah Bahlmann M.S.F.S., Sheree Hughes-Stamm Ph.D.\*, David Gangitano Ph.D. International Symposium of Human Identification (Promega), Atlanta 2013
- "A Molecular Approach: Species composition of the maggot mass in human cadavers in the Pineywoods ecoregion of southeastern Texas II". Sarah Bahlmann, BS Ashleigh M. Faris, MS, Sibyl R. Bucheli, PhD., David A. Gangitano, PhD. American Academy of Forensic Sciences meeting. Washington DC 2013.
- Using *Pinus* STR Profiling to Discriminate Pollen Sources at the Regional Level: A Potential Tool for Forensic Investigations. Cassandra Campelli, B.S., Jennifer Sycalik, B.S., Christopher Randle, Ph.D., Craig Echt, Ph.D., Bruce Budowle, Ph.D., David Gangitano, Ph.D. American Academy of Forensic Sciences meeting. Washington DC 2013.
- "Comparison of Genetic Markers and Developmental Validation of the Multicopy LINE-1 Marker for Use in a Sensitive Real-time Quantification Method". Jackie Kenline, and David Gangitano, PhD. American Academy of Forensic Sciences meeting, Atlanta, February 2012
- "A molecular approach: Species composition of the maggot mass in human cadavers in the pineywoods ecoregion of southeastern Texas". Ashleigh Faris BS, Sibyl Bucheli, PhD, and David Gangitano, PhD. American Academy of Forensic Sciences meeting, Atlanta 2012
- "Population Study for Three Closely Linked X-Chromosome STR Markers in an Argentinean Population". Brittney C. Gonzalez, BS, Pablo A. Noseda BS, and David A. Gangitano, PhD. American Academy of Forensic Sciences meeting, February 2011, Chicago.

- "Collection of Touch DNA by a Handheld Vacuum Device". Shahida K. Flores, BS, and David A. Gangitano, PhD. American Academy of Forensic Sciences meeting, February 2011, Chicago.
- "Application of a Vacuum-Filter Device for Differential Sperm Separation". Kristina A. Scott, BS; and David A. Gangitano, PhD. American Academy of Forensic Sciences meeting, February 2011, Chicago.
- "SNPs as Predictors of Eye/Hair Color". 21st International Symposium on Human Identification (Promega). October 11-14, 2010. San Antonio, TX. (oral presentation)
- "Application of mini-STRs to Low-Copy Number DNA Samples". Nicole Paes, David Gangitano. American Academy of Forensic Sciences meeting. Seattle. February 2010.
- "Pollen DNA: A New Tool for Forensic Investigations". Jennifer Sycalik, David Gangitano. American Academy of Forensic Sciences meeting. Seattle. February 2010.
- "Comparative Study on Stability of DNA in Vitreous Humor, Cartilage, Tendons, and Nails for use as Alternative Sample Tissues in the Identification of Decomposed Cadavers". Mario Galioto, David Gangitano. American Academy of Forensic Sciences meeting. Seattle. February 2010.
- "Study on SNPs relating to ethnicity and hair/eye pigmentation in a population of Huntsville, TX". Breanna Mead, David Gangitano. American Academy of Forensic Sciences meeting. Seattle. February 2010.
- "Molecular Palynology Study in Central East Texas: A New Approach to Linking Crime Scenes". Jamie Jouett B.S. and David Gangitano Ph.D. American Academy of Forensic Sciences meeting. Denver. February 2009.
- "Validation of the AMPFISTR MiniFiler PCR amplification kit and its Application to Identify Human Remains From a 1992 Helicopter Crash at the San Diego Police Department Crime Laboratory". Coral Luce B.S., Shawn Montpetit M.S. David Gangitano, Ph.D. and Patrick O'Donnell Ph.D. American Academy of Forensic Sciences meeting. Washington DC. February 2008.

### **Refereed Publications**

- Amy S. Holmes, MS; Rachel Houston, BS; Kyleen Elwick, BA; David Gangitano, PhD; Sheree Hughes-Stamm, PhD "Evaluation of four commercial quantitative real-time PCR kits with inhibited and degraded samples". Int. J. Legal Med (in press)
- Todd A. Armstrong, Danielle Boisvert, Shahida Flores, Mary Symonds, <u>David Gangitano</u>. Heart rate, serotonin transporter linked polymorphic region (5-HTTLPR) genotype, and violence in an incarcerated sample. Journal of Criminal Justice. Volume 51, July–August 2017, Pages 1–8
- Esiri Tasker, Bobby LaRue, Charity Beherec, <u>David Gangitano</u>, Sheree Hughes-Stamm. Analysis of DNA from post-blast pipe bomb fragments for identification and determination of ancestry. Forensic Science International: Genetics 28 (2017) 195–202
- Houston R, Birck M, Hughes-Stamm S, <u>Gangitano D</u>. Developmental and internal validation of a novel 13 loci STR multiplex method for Cannabis sativa DNA profiling. Leg Med (Tokyo). 2017 May;26:33-40.
- ♦ Jessica Wells, Todd Armstrong, Danielle Boisvert, Richard Lewis, <u>David Gangitano</u>, Sheree Hughes-Stamm. Stress, genes, and generalizability across gender: Effects of MAOA and stress sensitivity on crime and delinquency. Criminology (in press). doi:10.1111/1745-9125.12147
- Amy Sorensen, Elizabeth Rahman, Cassandra Canela, <u>David Gangitano</u>, Sheree Hughes-Stamm. *Preservation and Rapid Purification of DNA from Decomposing Human Tissue Samples*. Forensic Sci Int Genet. 2016 Nov;25:182-190.

- Wheeler A, Czado N, <u>Gangitano D</u>, Turnbough M, Hughes-Stamm S. Comparison of DNA yield and STR success rates from different tissues in embalmed bodies. Int J Legal Med. 2017 Jan;131(1):61-66.
- Rachel Houston, Matthew Birck, Sheree Hughes-Stamm, <u>David Gangitano</u>. Evaluation of a 13-loci STR multiplex system for Cannabis sativa genetic identification. Int J Legal Med. 2016 May;130(3):635-47.
- Cassandra Schield, Cassandra Campelli, Jennifer Sycalik, Christopher Randle, Sheree Hughes-Stamm, <u>David Gangitano</u>. *Identification and persistence of Pinus pollen DNA on cotton fabrics: A forensic application*. Sci Justice. 2016 Jan;56(1):29-34.
- ♦ Jessica Wells, Todd Armstrong, Brian Boutwell, Danielle Boisvert, Shahida Flores, Mary Symonds, <u>David Gangitano</u>. Molecular genetic underpinnings of self-control: 5-HTTLPR and self-control in a sample of inmates. Journal of Criminal Justice. Volume 43, Issue 5. (September-October 2015): 386-396
- White J., Hughes-Stamm S., <u>Gangitano D</u>. Development and validation of a rapid PCR method for the PowerPlex® 16 HS system for forensic DNA identification. Int J Legal Med. 2015 Jul;129(4):715-23
- Armstrong TA, Boutwell B, Flores S, Symonds M, Keller S, <u>Gangitano D</u>. Monoamine Oxidase-A Genotype, Childhood Adversity, and Criminal Behavior in an Incarcerated Sample. Psychiatr Genet. 2014 Aug;24(4):164-71.
- Sarah Bahlmann, Sheree Hughes-Stamm, <u>David Gangitano</u>. Development and evaluation of a rapid PCR method for the PowerPlex®S5 system for forensic DNA profiling. Leg Med (Tokyo). 2014 Jul;16(4):227-33.
- Noseda P, Hernandez M, Gonzalez B, Hughes-Stamm S, <u>Gangitano D</u>. Genetic Study of Three Closely Linked X chromosome STR Markers in an Argentinian Population. J Forensic Investigation. 2013;1(2): 4.
- Noseda PA, Kenline J, Manning M, and <u>Gangitano DA</u>. Population Data for DXS6800, DXS101, and DXS8377 Loci from Buenos Aires (Argentina). J Forensic Leg Med. 2013 Jul;20(5):522-4
- Munoz A, <u>Gangitano DA</u>, Smith CP, Boone TB, Somogyi GT. Removal of urothelium affects bladder contractility and release of ATP but not release of NO in rat urinary bladder. BMC Urol. 2010 May 24;10:10.
- Bucheli SR, Bytheway JA, <u>Gangitano DA</u>. Necrophagous Caterpillars Provide Human mtDNA Evidence. J Forensic Sci. 2010 Jul;55(4):1130-2.
- Luce C, Montpetit S, <u>Gangitano D</u>, O'Donnell P. Validation of the AMPFISTR MiniFiler PCR amplification kit for use in forensic casework. J Forensic Sci. 2009 Sep;54(5):1046-54.
- ♦ <u>Gangitano D</u>, Salas R, Teng Y, Perez E, De Biasi M. Progesterone modulation of alpha5 nAChR subunits influences anxiety-related behavior during estrus cycle. Genes Brain Behav. 2009 Jun;8(4):398-406.
- R. Salas, A. Main, <u>D. A. Gangitano</u>, H. Soreq, M. De Biasi. Chronic nicotine relieves anxiety-like behavior in transgenic mice carrying the human acetylcholinesterase-R gene. Mol Pharmacol. 2008 Dec;74(6):1641-8.
- Smith CP, <u>Gangitano DA</u>, Munoz A, Salas NA, Boone TB, Aoki KR, Francis J, Somogyi GT. Botulinum toxin type A normalizes alterations in urothelial ATP and NO release induced by chronic spinal cord injury. Neurochem Int. 2008 May;52(6):1068-75.
- R. Salas, A. Main, <u>D. A. Gangitano</u>, M. De Biasi. Decreased withdrawal symptoms but normal tolerance to nicotine in mice null for the alpha 7 nicotinic acetylcholine receptor subunit. Neuropharmacology. 2007 Dec;53(7):863-9.
- N. Salas, G. T. Somogyi, J. N. Rocha, <u>D. A. Gangitano</u>, T. B. Boone, and C. P. Smith. *Receptor* activated bladder and spinal ATP release in neurally intact and chronic spinal cord injured rats. Neurochem Int. 2007 Jan;50(2):345-50.
- M. Viaggi, M. A. Dagrosa, C. Belli, I. Larripa, <u>D. A. Gangitano</u>, R. Cabrini, M. A. Pisarev, G. J. Juvenal. *A new animal model for human undifferentiated thyroid carcinoma*. Thyroid. 2003; 13(6):529-36.

◆ <u>D. A. Gangitano</u>, M. G. Garófalo, G. J. Juvenal, B. Budowle, R. A. Padula. *Typing of the locus DYS19 from DNA derived from fingernail clippings using PCR Concert*<sup>™</sup> Rapid purification System. J. Forensic Sci. 2002; 47(1): 175-177.

#### For the Record Communications\_

- M. G. Garofalo, <u>D. A. Gangitano</u>, G. J. Juvenal, B. Budowle, J. A. Lorente, R. A. Padula. Six Y-Chromosome STR Frequencies in a population from Argentina. J. Forensic Sci. 48(2). 2003
- ♦ <u>D. A. Gangitano</u>, M. G. Garófalo, G. J. Juvenal, B. Budowle, J. A. Lorente, R. A. Padula. STR data for the PowerPlex @ 16 loci in Buenos Aires (Argentina). J. Forensic Sci. 47(2):418. 2002.
- <u>D. A. Gangitano</u>, M. G. Garófalo, G. J. Juvenal, B. Budowle, R. A. Padula. *Distribution of HumHPRTB and HumF13A01 Alleles in Buenos Aires Population (Argentina)*. J. Forensic Sci. 46(2):138. 2001.
- D. A. Gangitano, G. J. Juvenal, J. A. Lorente, B. Budowle, R. A. Padula. Population Data on Eight STR loci in Buenos Aires (Argentina). J. Forensic Sci. 46:183. 2001
- R.A. Padula, <u>D. A. Gangitano</u>, G. J. Juvenal, B. Budowle. *Allele frequency in the population of Buenos Aires (Argentina) using PM-DQA1*. J. Forensic Sci. 44:1320. 1999.

#### Reviews

 Noseda P, <u>Gangitano D</u>, Juvenal J. DNA Analysis and Forensic Genetics (Review). Ciencia e Investigacion (Argentina). 2011. 61 (1-3):59-68

#### Doctoral dissertation examiner \_

- Mark Barash. "Identification of single nucleotide polymorphisms (SNPs) involved in the determination of craniofacial morphology". Faculty of Health Sciences & Medicine. Bond University. Queensland. Australia. May 2014.
- Charmain Vanessa Castel. "Inference of biogeographical ancestry and pigmentation phenotype using single nucleotide polymorphisms". Centre for Forensic Science. University of Technology. Sydney. Australia. May 2014
- ♦ Kelly Grisedale. "Development of improved methods for low template DNA analysis". Faculty of Health Sciences & Medicine. Bond University. Queensland. Australia. December 2013

### Doctoral Dissertation Mentoring (3) \_

- "Development of a comprehensive genetic tool for identification of Cannabis sativa samples for forensic and intelligence purposes." Rachel Houston (PhD student), David Gangitano (advisor).
- ♦ "Influence of Regulation of Oxytocin on Social Behavior". Elizabeth Chesna (PhD student), David Gangitano (advisor).
- "Design of a molecular tool for forensic identificaction and determination of biogeographical origin of opium poppy". Madeline Roman (PhD student), David Gangitano (advisor).

### Graduate Student Mentoring (38)

- "Genetic analysis of oxytocin and serotonin related SNPs and behavior assessment in two U.S. populations". Ana Blanco, BS. Spring 2017.
- "Analysis of Single Nucleotide Polymorphisms in Genes Affecting Dopamine Turnover in a Sample of Caucasian Males". Charity Beherec, BS. Spring 2016.

- "Developmental Validation of a Chloroplast DNA Quantification System for Cannabis sativa Using Synthetic DNA as Reference Standards". Haleigh Agot, BS. Spring 2016.
- "Genetic study of single nucleotide polymorphisms (SNPs) within genes of oxytocin (OXT) and serotonin transporter (5-HTT) in a Caucasian male student population". Elizabeth Chesna, BS. Spring 2016.
- "Genetic Study of SNP Polymorphisms in the Oxytocin Receptor Gene". Gabriella Cansino B.S. Fall 2014.
- "Evaluation of a 13-loci STR Multiplex System for Cannabis sativa Genetic Identification". Rachel Houston B.S. Fall 2014.
- "Forensic Botany: Molecular Identification of Pinus Pollen Grains in Surface Soil". Cassandra Schield, BS. Fall 2013.
- "Development and Evaluation of a Rapid Protocol for the PowerPlex 16 HS System for Forensic Identification". James White, BS. Fall 2013.
- "SNPs and Criminal behavior: Dopamine, Serotonin and Oxytocin". Peyton Gandy, BS. Fall 2013.
- "Discrimination of Pollen Sources Using Pinus STR Profiling" Cassandra Campelli, BS. Fall 2012
- "A molecular approach: Species composition of the maggot mass in human cadavers in the pineywoods ecoregion of southeastern Texas II" Brittany Disiere, BS. Fall 2012.
- "Optimization and Validation of a Rapid PCR Method for the PowerPlex® S5 System for Forensic DNA Profiling" Sarah Bahlmann, BS. Fall 2012.
- "Using SNPs to Determine the Association Between MAOA, MAOB, COMT, and DBH Genotypes and Aggressive Behavior" Jessica Motl, BS. Spring 2012
- "Association Between Aggressive Behavior and the Androgen Receptor, Monoamine Oxidase A, and Serotonin Transporter Polymorphisms". Mary Simonds, BS. Spring 2012
- "Allele and Frequency Data of DXS10079, DXS10075, and DXS10074 Markers in an Argentinean Population". Michael Hernandez, BS. Spring 2012
- "Allele and Frequency Data of DXS6800, DXS8377, and DXS101 Markers in Buenos Aires (Argentina)". Jackie Kenline, BS. Spring 2012
- "A molecular approach: Species composition of the maggot mass in human cadavers in the pineywoods ecoregion of southeastern Texas". Ashleigh Faris, BS, Sibyl Bucheli, PhD. Spring 2012
- "Validation of DNA Extraction from Tissue Samples for Forensic Casework on the Automated QIASymphony SP Platform". Mounir Moudouni, M.S. Spring 2012
- "Population Study for Three Closely Linked X-Chromosome STR Markers in Argentina". Brittney C. Gonzalez, BS, Pablo A. Noseda, BS. Spring 2011
- "Population Study for Three Unlinked X-Chromosome STR Markers in Argentina". Samantha Manning, BS, Pablo A. Noseda, BS. Spring 2011
- "Phenotype Informative SNPs as Predictor of Pigmentation Features". Kelly Anders BS. Spring 2011
- "Application of a Vacuum-Filter Device for Differential Sperm Separation". Kristina A. Scott, BS. Spring 2011

- "Genetic Analysis of a Short Tandem Repeat in the Androgen Receptor Gene and a Variable Number Tandem Repeat in the Monoamine Oxidase A Gene for a Male Inmate Population in Texas". Shahida K. Flores, BS. Spring 2011
- "Development of a 10 Multiplex System of Pigmentation-Prediction SNP Markers for Forensic Casework". Jordan Weber-Williams, BS. Spring 2011
- "Collection of Touch DNA by a Handheld Vacuum Device". Shahida K. Flores, BS. Fall 2010
- "Application of mini-STRs to Low-Copy Number DNA Samples". Nicole Paes, BS. Spring 2010
- "Pollen DNA: A New Tool for Forensic Investigations". Jennifer Sycalik, BS. Spring 2010
- "Comparative Study on Stability of DNA in Vitreous Humor, Cartilage, Tendons, and Nails for use as Alternative Sample Tissues in the Identification of Decomposed Cadavers". Mario Galioto, BS. Spring 2010
- "Study on SNPs relating to ethnicity and hair/eye pigmentation in a population of Huntsville, TX". Breanna Mead, BS. Spring 2010
- "Developing a Sensitive Real-Time PCR Method for Quantitation of DNA in Low Copy Number Forensic Samples". Lauren Bouse, BS. Spring 2010
- "Who is Chas Turner? (Onderdonk historical case)". Jessica McClure, BS, Jorn Yu, PhD. Spring 2010
- "Pollen DNA: A New Tool for Forensic Investigations". Jamie Jouett, BS. Spring 2009
- ◆ "Application of AmpFℓSTR® MiniFiler<sup>TM</sup> to Low-Copy Number". Kristen Cossota. Spring 2009
- "Application of Single Nucleotide Polymorphisms (SNPs) in Forensic Casework Involving Highly Degraded Samples". Chelsy Wingate, BS. Spring 2009
- "Molecular Characterization of Forensically Significant Insects with Applied Molecular Identification of Skeletal Remains in Southern Texas". Angela Johnson, BS. Spring 2008
- ◆ "Developmental Validation of –A extensions by AmpFlSTR® IdentiFiler™ PCR Amplification Kit". Adriana Perez, BS. Spring 2008
- "Validation of the AmpFISTR® MiniFiler<sup>TM</sup> PCR Amplification Kit for Use in Forensic Casework". Coral Luce, BS. Spring 2008
- "Validation of the MiniFiler Kit: Stability studies using UV and other environmental factors". Hayley Beaston, BS. Spring 2008

### Scientific Associations

- Association of Forensic DNA Analysts and Administrators. Member since 2014
- American Academy of Forensic Sciences. Associate Member since 2011
- Society for Neuroscience. Member 2003-2005.
- Iberoamerican Working Group on DNA Analysis (GITAD): Founding member (1998) and Directive Commission member 2001-2002.

#### References \_

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- ◆ Jose A. Lorente, Professor, Department of Legal Medicine. University of Granada. Av. Madrid 11 – 18012 Granada, Spain. email <u>jlorente@ugr.es</u> Tel +34-958-24-3546
- ♦ Bruce Budowle, Executive Director, Institute of Investigative Genetics. Health Science Center. University of North Texas. Address: 3500 Camp Bowie Blvd. Fort Worth, TX 76107. email: <u>Bruce.Budowle@unthsc.edu</u> Tel 817-735-2429
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