CURRICULUM VITAE

**Date:** January 11, 2019

**Name of Lab:** *Present*

Visiting Post-doctoral Associate, Florida International University

Affiliated Faculty, [College of Natural Sciences and Oceanography](https://www.researchgate.net/institution/Nova_Southeastern_University/department/College_of_Natural_Sciences_and_Oceanography), Nova Southeastern University

Adjunct, Dept. of Justice and Human Services, Nova Southeastern University

*Former* Broward County Sheriff's Office Crime Laboratory (45 years)

**Name**: George T. Duncan **Job Title:** Criminalist Unit Manager,

DNA Specialist, Retired

**Discipline(s):** Forensic DNA Analysis/Population Genetics/Genomics/Microbiome

**Education:**

**Institution Date Completed Major** **Degree Completed**

Florida Int'l. University 1996 Biology Ph.D.

Florida Atlantic University 1983 Chemistry M.S.

University of Miami 1970 ACS Chemistry B.S.

**Professional Affiliations**:

American Academy of Forensic Sciences, member since 1974, now Emeritus

American Chemical Society, member since 1970 (Past president- South Florida Subsection) now Emeritus

Association of Forensic DNA Examiners and Administrators (AAFDA), since 2004 inactive

American Society of Genetics, member since 1998 lapsed

American Association for the Advancement of Science, since 1992

American Society of Human Genetics, member 1994 - 2010

Technical Working Group on DNA Analysis Methods (TWGDAM), 1989-2001

Forensic Science Society (Great Britain), member since 1991 lapsed

**Professional Certifications:**

American Board of Criminalistics, Diplomate, Molecular Biology, 2015 to present, now Emeritus

American Board of Criminalistics, Fellow, Molecular Biology, 2005 - 2015

American Board of Criminalistics, Diplomate, General Criminalistics, since 1997

Licensed technologist in Clinical Chemistry and Immunohematology (Department of Rehabilitative Services, since 1971 (Presently Inactive Status)

**Employment History:**

(1) **Job Title**: Visiting Post-doctoral Associate in the Department of Chemistry and Biochemistry in the School of Integrated Science and Humanity in the College of Arts, Sciences & Education at Florida International University, December 10, 2018 through May 10, 2019, **Principal Duties**: Supervise PhD and MS students, assist with research projects and write grants.

(1) **Job Title**: Biology and Chemistry Affiliated Faculty (2018-present) **Employer:** Nova Southeastern University, **Principal Duties**: Teach courses in Biology. Courses include core courses of Introductory Biology as well as Genetics. Courses included: Genetics 3600 lecture and laboratory.

(2) **Job Title**: Biology and Chemistry Adjunct Professor (2004-2018) **Employer:** Nova Southeastern University, **Principal Duties**: Teach courses in Biology and Chemistry. Courses include core courses of Introductory Biology as well as Genetics. Courses included: Genetics 3600 lecture and laboratory, Cellular and Molecular Biology (BIOL 4340), Chemistry 1100.

(2)  **Job Title**: Criminalist I, II, III Criminalist Unit Manager (1972-October 2017) **Employer**: Broward Sheriff's Office **Principal Duties**: Supervisor of DNA Unit (twelve employees). Analysis and identification of biological stains using classical serological techniques, comparison of stains using RFLP/DNA and PCR/STR typing.

(3)  **Job Title**: Technician (1970-1972) **Employer:** Dade County Public Safety Department Crime Laboratory **Principal Duties**: Police Officer and Crime scene technician (on the road). Trained in all aspects of Criminalistics including; drug analysis, crime scene investigation, firearms, blood alcohol analysis, trace evidence processing and started training in serological methods.

(4)  **Job Title**: Criminalist Intern (1969 – 1970) **Employer**: Dade County Crime Laboratory

**Principal Duties**: Analysis of drug cases.

(5) **Job Title**: Courtesy Professor Appointment (Chemistry Dept.)(Member of the Graduate Faculty, Biology Department)(1996-2010) Adjunct Professor, **Employer**: Florida Int’l. University, **Principal Duties**: Teach courses in Biology, Forensics (1996-present) and participate in Graduate MS and PhD student research as a committee member or assist Dr. Bruce McCord in supervision of students.

(6)  **Job Title**: Adjunct Chemistry Instructor (1985-2003) **Employer**: Broward Community College

**Principal Duties**: Teach courses in Chemistry. Courses include core courses of Introductory Chemistry as well as an Introduction to Chemistry and Biochemistry course designed for nursing and health sciences students. Courses included: Chemistry 1033, 1040, 1041, 1045, 1046 and 1046e General Biology BSC 1005.

(7)  **Job Title**: Courtesy/Adjunct Professor **Employer**: Florida Int’l. University, **Principal Duties**: Teach courses in Biology and Forensics. Courses including: PCB 6935, Advanced Topics in Genetics-Chromosome Structure and Repeat DNA, January, 1999; January, 2000 Forensic Biology, September, 1999; January, 2001, Advanced Topics in Genetics-The Mitochondrion.

**Publications:**

Bright JAet al. Internal validation of STRmix™ - A multi laboratory response to PCAST

*Forensic Sci Int Genet*. 2018 Jan 8;34:11-24. [Epub ahead of print]

Inci, F et al. (2018). A Novel On‐Chip Method for Differential Extraction of Sperm in Forensic Cases. *Advanced Science*, 1800121, Stanford University

Submitted for publication: Jarrad T. Hampton-Marcell, Kyle Roebuck, Candace Young, Neil Gottel, Lauren Cralle, George Duncan, Jose V. Lopez, Jack A. Gilbert, Microbial Signatures as Trace Evidence in Residential Burglaries, March 2018

Chris Comar, George Duncan, Kevin W.P. Miller. FlipTube™ technology promotes clean manipulation of forensic samples on automated robotic workstations. *Forensic Science International: Genetics Supplement Series 6 (2017) e15 – e17.*

[Joana Antunes](https://www.researchgate.net/profile/Joana_Antunes8), [Deborah S.B.S. Silva](https://www.researchgate.net/profile/Deborah_Silva), [Kuppareddi Balamurugan](https://www.researchgate.net/researcher/39327458_Kuppareddi_Balamurugan), [George Duncan](https://www.researchgate.net/profile/George_Duncan2), [Clarice S Alho](https://www.researchgate.net/researcher/14205896_Clarice_S_Alho), [Bruce McCord](https://www.researchgate.net/researcher/2079546042_Bruce_McCord). [Forensic discrimination of vaginal epithelia by DNA methylation analysis through pyrosequencing](https://www.researchgate.net/publication/303086076_Forensic_discrimination_of_vaginal_epithelia_by_DNA_methylation_analysis_through_pyrosequencing?ev=prf_pub) , *Electrophoresis*, 2016, http://dx.doi.org/10.1002/elps.201600037

Antunes, Joana, Deborah SBS Silva, Kuppareddi Balamurugan, George Duncan, Clarice S. Alho, and Bruce McCord. High-resolution melt analysis of DNA methylation to discriminate semen in biological stains. *Analytical biochemistry* 494 (2016): 40-45.

Silva, Deborah SBS, Joana Antunes, Kuppareddi Balamurugan, George Duncan, Clarice S. Alho, and Bruce McCord. Developmental validation studies of epigenetic DNA methylation markers for the detection of blood, semen and saliva samples.*Forensic Science International: Genetics* 23 (2016): 55-63.

Antunes J, Silva DS, Balamurugan K, Duncan G, Alho CS, McCord B., [High-resolution melt analysis of DNA methylation to discriminate semen in biological stains.](http://www.ncbi.nlm.nih.gov/pubmed/26470939)*Anal Biochem. 2016 Feb 1;494:40-5. doi: 10.1016/j.ab.2015.10.002. Epub 2015 Oct 22.*

Soares Bispo Santos Silva D, Antunes J, Balamurugan K, Duncan G, SampaioAlho C, McCord B., [Evaluation of DNA methylation markers and their potential to predict human aging.](http://www.ncbi.nlm.nih.gov/pubmed/26010003)

*Electrophoresis*. 2015 Aug;36(15):1775-80. doi: 10.1002/elps.201500137. Epub 2015 Jul 14.

Antunes J, Balamurugan K, Duncan G, McCord B., [Tissue-Specific DNA Methylation Patterns in Forensic Samples Detected by Pyrosequencing®.](http://www.ncbi.nlm.nih.gov/pubmed/26103913)*Methods Mol Biol. 2015;1315:397-409. doi: 10.1007/978-1-4939-2715-9\_27*.

Book Chapter; Antunes, Joana, Kuppareddi Balamurugan, George Duncan, and Bruce McCord. Tissue-Specific DNA Methylation Patterns in Forensic Samples Detected by Pyrosequencing®.*Pyrosequencing: Methods and Protocols* (2015): 397-409.

Kuppareddi Balamurugan, Robin Bombardi, George Duncan, Bruce McCord: “Identification of spermatozoa by tissue-specific differential DNA methylation using bisulfite modification and pyrosequencing” *Electrophoresis 2014, 35, 3079–3086.*

Pomeroy RS, Balamurugan K, Wong H, Duncan G, “High Resolution Melt Analysis of the Minisatellite D1S80: A Potential Forensic Screening Tool” *Journal Electrophoresis, 2014 Nov;35(21-22):3020-7.*

[Thompson RE](http://www.ncbi.nlm.nih.gov/pubmed/?term=Thompson%20RE%5BAuthor%5D&cauthor=true&cauthor_uid=25182468)1, [Duncan G](http://www.ncbi.nlm.nih.gov/pubmed/?term=Duncan%20G%5BAuthor%5D&cauthor=true&cauthor_uid=25182468), [McCord BR](http://www.ncbi.nlm.nih.gov/pubmed/?term=McCord%20BR%5BAuthor%5D&cauthor=true&cauthor_uid=25182468), [J Forensic Sci.](http://www.ncbi.nlm.nih.gov/pubmed/?term=An+investigation+of+PCR+inhibition+using+Plexor+based+quantitative+PCR+and+short+tandem+repeat+amplification)An investigation of PCR inhibition using Plexor(®) -based quantitative PCR and short tandem repeat amplification. 2014 Nov;59(6):1517-29.

Madi T, Balamurugan K, Bombardi R, Duncan G, McCord B. The determination of tissue-specific DNA methylation patterns in forensic biofluids using bisulfite modification and pyrosequencing. Electrophoresis. 2012 Jul;33(12):1736-45.

Balamurugan K, Tracey ML, Heine U, Maha GC, Duncan GT. Mutation at the human D1S80minisatellite locus, ScientificWorld Journal. 2012; 2012:917235. Epub 2012 May 3.

Balamurugan K, [Duncan G](http://www.ncbi.nlm.nih.gov/pubmed?term=Duncan%20G%5BAuthor%5D&cauthor=true&cauthor_uid=22285642)., YchromosomeSTRallelic and haplotypediversity in a Rwandapopulation from EastCentralAfrica., Leg Med(Tokyo)2012 Mar;14(2):105-9. Epub 2012 Jan 28.

# [Balamurugan K](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Balamurugan%20K%22%5BAuthor%5D), [Kanthimathi S](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Kanthimathi%20S%22%5BAuthor%5D), [Vijaya M](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Vijaya%20M%22%5BAuthor%5D), [Suhasini G](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Suhasini%20G%22%5BAuthor%5D), [Duncan G](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Duncan%20G%22%5BAuthor%5D), [Tracey M](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Tracey%20M%22%5BAuthor%5D), [Budowle B](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Budowle%20B%22%5BAuthor%5D). Geneticvariation of 15autosomalmicrosatelliteloci in a Tamilpopulation from TamilNadu, SouthernIndia. [Leg Med (Tokyo).](http://www.ncbi.nlm.nih.gov/pubmed?term=Genetic%20variation%20of%2015%20autosomal%20microsatellite%20loci%20in%20a%20Tamil%20population%20from%20Tamil%20Nadu%2C%20Southern%20India##) 2010 Nov;12(6):320-3. Epub 2010 Sep 1.

Balamurugan K, Pomeroy R, Duncan G, Tracey M., Investigating SNPs flanking the D1S80 locus in a Tamil population from India., [Hum Biol.](http://www.ncbi.nlm.nih.gov/pubmed?term=Investigating%20SNPs%20flanking%20the%20D1S80%20locus%20in%20a%20Tamil%20population%20from%20India.##) 2010 Apr;82(2):221-6.

Kuppareddi Balamurugan, G. Suhasini, M. Vijaya, S. Kanthimathi, Nicole Mullins, Martin Tracey, George Duncan, Y chromosome STR allelic and haplotype diversity in five ethnic Tamil populations from Tamil Nadu, India, [Leg Med (Tokyo).](http://www.ncbi.nlm.nih.gov/pubmed?term=Y%20chromosome%20STR%20allelic%20and%20haplotype%20diversity%20in%20five%20ethnic%20Tamil%20populations%20from%20Tamil%20Nadu%2C%20India##) 2010 Sep;12(5):265-9. Epub 2010 Jul 10.

Heather E. LaSalle, George Duncan, Bruce McCord, An Analysis of Single and Multi-Copy Methods for DNA Analysis by Real-Time Polymerase Chain Reaction, (2010) Forensic Sci Int Genet. 2011 Jun;5(3):185-93. Epub 2010 Apr 24.

Robert Pomeroy, George Duncan, Bulbin Reeder, ElenOrtenberg, Melba Ketchum, Hannah Wasiluk, and Dennis Reeder (2009) A Low Cost, High-Throughput, Automated, SNP Assay for Forensic Human DNA Applications, Anal Biochem. 2009 Dec 1;395(1):61-7. Epub 2009 Jul 3..

Rene J. Herrera, Leslie R. Adrien, Luis M. Ruiz, Nahir Y. Sanabria, George Duncan (2004) D1S80 A Single-Locus Discrimination Among African Populations*,* Human Biology, Feb., 2004, vol. 76, no. 1, 87-108.

Duncan, G.T., Tracey, M.L. Stauffer, E.(2003). Forensic Science: An Introduction to Scientific and Investigative Techniques, Edited by S.H. James and J.J. Nordby, chapter entitled: Techniques of DNA Analysis, CRC Press, Boca Raton, 221-250.

Kuppareddi Balamurugan, N. Prabakaran, M.Sc., George Duncan,BruceBudowle, Mohammad Tahir, and Martin Tracey (2001): Allele frequencies of 13 STR loci and D1S80 locus in a Tamil population from Madras, India. J Forensic Sci. 2001 Nov;46(6):1515-7.

Brown, R.J., Rowold, D., Herrera, R.J., Tahir, M., Barna, C., Duncan, G.T. (2000): Distribution of the HLA-DQA1 and Polymarker alleles in the Basque population of Spain, Forensic Sci Int 108:145-151

Tahir, M.A, Herrera, R.J., Khan, A.A., Kashyap,V.K., Duncan,G., Barna, C., Budowle,B., Rowold,D.J., Amjad,M., Sinha,S. (2000) Distribution of HLA-DQA1, CSFF1PO, vWA, THO1, tpox, D16S539, D7S820, D13S317, AND D5S818 alleles in East Bengali and West Punjabi populations from indo-pak subcontinent, J Forensic Sci:45(6):1320-1323.

Balamurugan, K., Abdel-Rehman, H., Duncan, G.T., Budowle, B., Anderson, S., Macechko, J., Tahir, T., (1998): Distribution of D1S80 alleles in the Jordanian population. Int. J Legal Med. 111:276-277.

Duncan, G.T., Balamurugan, K., Budowle, B., Smerick, J., and Tracey, M. (1996): Microvariation at the human locus D1S80. Int. J Legal Med. 110:150-154.

Duncan, G.T., (1996): Collection and Analysis of DNA Evidence. The Texas Prosecutor, The Official Journal of the Texas District & County Attorneys Association. 26:13-15.

Duncan, G.T., Tracey, M.L. (1996). Introduction to Forensic Sciences, 2nd Edition, chapter entitled: Serology and DNA typing. CRC Press, Boca Raton, 233-293.

Duncan, G.T., Balamurugan, K., Budowle, B., and Tracey, M. (1996): *Hin*f I/*Tsp*509 I and *Bso*F I polymorphisms in the flanking regions of the human VNTR locus D1S80. Genetic Analysis: Biomolecular Engineering, 13: 119-121.

Duncan, G.T., Thomas, E., Gallo, J.C., Baird, L.S., Garrison, J., Herrera, R.J. (1996): Human phylogenetic relationships according to the D1S80 locus. Genetica, 98:277-287.

Novick, G.E., Novick, C.C., Yunis, J., Yunis, E., Martinez, K., Duncan, G., Troup, G.M., Deininger, P.L., Stoneking, M., Batzer, M.A. and Herrera, R.J. (1995) Polymorphic human specific Alu insertions as markers for human identification. Electrophoresis 16:1596‑1601.

Sovinski, S. M., Baird, L. S., Budowle, B., Caruso, J. F., Cheema, D. P. S., Duncan, G. T., Hamby, P. P., Masibay, A. S., Sharma, V. K., and Tahir, M. A. (1996). Development of a deoxyribonucleic acid (DNA) restriction fragment length polymorphism (RFLP) database for Punjabis in East Punjab, India. Forensic Sci. Int. 79, 187-198.

Novick, G.E., Menendez, C.M., Novick, C.C., Duncan, G.T., Yunis, J., Yunis, E., Deininger, P.L., Batzer, M.A., Herrera, R.J. (1994): The Use of Polymorphic Alu Insertions as a New Methodological Alternative in Human Paternity Testing and Child Identification. International Pediatrics 9, 60-68.

Duncan, G. T., Noppinger, K., Carey, J., Tracey, M. (1993): Comparison of VNTR Allele Frequencies and Inclusion Probabilities Over Six Populations. Genetica, 88, 51-57.

Noppinger, K., Duncan, G. T., Ferraro, D., Watson, S., Ban, J. (1992): Evaluation of DNA Probe Removal from Nylon Membrane. BioTechniques 13, 572-575.

Watson, S.M., Ban J.D., Duncan, G.T., Noppinger, K.E., Saxner, D.J. (1992): Restriction fragment length polymorphism analysis of zoo animals using Hae III and four single-locus probes. Appl. &Theoret. Electrophor. 3, 109-114.

Duncan, G.T., Seiden, H., Vallee, L., Ferraro, D, (1986) Effects of Superglue, Other Fingerprint Developing Agents and Luminol on Bloodstain Analysis, American Association of Official Analytical Chemists (AOAC) 69: 677-680.

Seiden, H., Duncan, G.T., (1983) Presumptive Screening Test for Seminal Acid Phosphatase Using Sodium Thymolphthalein Monophosphate, American Association of Official Analytical Chemists (AOAC), 66: 207-209.

# Seminar Presentations:

Green Mountain DNA Conference, Next Generation Sequencing applied to Forensics, **July 28-August 1, 2014, Ron Fourney,** Bruce McCord, George Duncan, Jennifer Delong, Florida International University and the Broward Sheriff’s Office.

Green Mountain DNA Conference, Setting a bottom, **July 29-31, 2013,** Bruce McCord, George Duncan, Jennifer Delong Florida International University and the Broward Sheriff’s Office.

Green Mountain DNA Conference, Epigenetic Markers:A forensic tool for the determination of biofluids present at sexual assaults and other crime scenes, August 1, 2012

8th Annual CFS: Promega 2011 – DNA Technical Education Workshop entitled: “Future DNA Forensics”. “CurrentState of Mixtures in Forensics”, Nov 1 – 2, 2011.

NIJ Workshop; Advanced DNA Typing Population Genetics, taught with Dr. Martin Tracey in Minneapolis, MNJuly 17-19, 2009

NIJ Workshop; Advanced DNA Typing Population Genetics, taught with Dr. Martin Tracey at North Miami Beach, August 2-7, 2010

Green Mountain DNA Conference, Post-Amp Purification, the good, bad, and ugly, July 24, 2010

Casework Genetics Symposium, Forensic SNP Symposium, Update on Mixture Interpretation in the United States, March 23, 2010

NIJ Workshop; Advanced DNA Typing Population Genetics, taught with Dr. Martin Tracey at FIUJuly 13-17, 2009

MAFS (Midwestern Association of Forensic Scientists), presented a 5 hour seminar dealing with mixture de-convolution with Dr. Bruce McCord, FIU. Sept. 29 – Oct. 1, 2008

SATC center presentation at HollywoodMemorialHospital, 7-6-2007

Association of Forensic Analysts and Administrators. Topic; ABI Lim system, August 2 -3, 2007

Association of Forensic Analysts and Administrators. Topic; ABI Lim system, July 28, 2006

Forensic Molecular Biology; Presented a four hour course given at the Fourth Annual Advanced DNA Technology Workshop in Hawks Key, Florida, May 23, 2005, Sponsored by Bode Technology Group

Forensic Molecular Biology; Presented a four hour course given at the Second Annual Advanced DNA Technology Workshop in San Diego, California, April25, 2005, Sponsored by Bode Technology Group

FDIAI Educational Training Conference, November 3, 2004. Presentation DNA and CODIS Update.Florida Division of the International Association for Identification

Nova Southeastern University, Keynote Speaker, Student Research Symposium, April 2, 2004.

PE Biosystems User's Group Meeting, Chicago, February 18, 2003. Presentation on identifiler, ab 3100 and robotic systems for a group at the American Academy of Forensic Sciences.

Florida Prosecuting Attorneys Association, 1999-2003. Presentations for prosecuting attorneys dealing with DNA analysis. This involved two trips to Orlando for these presentations. The others were here in Broward County.

American Genetic Association, May 19-20, 2001. Poster presentation before evolutionary biologists and population geneticists dealing with the evolutionary variation of the D1S80 locus.

PCR Applications III, Crime Lab Council, May 1998, Presentation Entitled: Microsatellite Considerations.

Organized with Dr. Ron Fourney and Dr. Steven Lee, The Science of Forensic STR Analysis and Data Interpretation Workshop, AmericanAcademy of Forensic Sciences, February, 1998.

Duncan, G.T., Tracey, M., Kuhn, D.N., Garrison, J., Baird, L.S., Sixth International Symposium on Human Identification, (1995), Detection of D1S80 (pMCT 118) Microvariant Polymorphisms by Single-Strand Conformation Polymorphism Analysis. Published in Manuscripts and Abstracts, Promega, Corporation.

**Member as Advisor-Student Committees (Master’s Degrees and Phd’s) at F.I.U. and Nova:**

2018- Cristin Fitzpatrick, MS Nova Oceanographic Institute, Completed 2018

2018- Quentin Gauthier PhD (FIU) ongoing

2018- Meghan Roig PhD (FIU) ongoing

2018- Georgiana Gibson-Daw PhD (FIU) Completed 2018

2018-Joana Antunes PhD (FIU) Completed

2018- Rosa Cromartie PhD (FIU) ongoing

2016- Rene Potens, MS Nova Oceanographic Institute, Completed 2016

2016- Christine Prowser, PhD Nova Oceanographic Institute, Completed

2016- Shelby Craig, MS Nova Oceanographic Institute, Completed

2014- Kim Finnegan, MS Nova Oceanographic completed now lab manager, Shivji Laboratory, Nova Guy Harvey Institute

2014- Teagen Gray, MS Nova Oceanographic completed now Salk Institute

2009-Lilly Moreno PhD (FIU) completed 2016

2008-Tania Madi MS (FIU) completed now Source Molecular Inc., Miami, Florida

2008-Robert Lowry PhD (FIU) completed now asst. prof. Indian River State College

2008-Maurice Aboud MS(FIU)completed

2008-2014 Christine Prowser PhD candidate (Nova Southeastern University) completed

2007-Ana Nunez MS (FIU) (completed)

2007-Matt Buettner PhD (FIU)dropped out

2006- Kerry Opel PhD (FIU) (completed) now asst. prof. Upper Iowa College

2006- Vince Richards PhD (Nova Oceanographic)completed post-doc Cornell, now asst. prof. Clemson University

2005-2009 Jason Somarelli PhD (FIU) presently post-doc at Duke University

2005- Tanya Simms PhD (FIU) completed

2008- Tenzin Gayden PhD (FIU)completed

2004-2006- Tenzin Gayden MS (completed)(FIU)

2003- Christina la Paglia(completed) (FIU)

2003- Claudia Recinos (completed) (FIU)

2003- Rachel Chow (completed)(FIU)

2003- Arif Kalantar (completed)(FIU)

2001-2003 Hellen Thompson (completed)(FIU)

2001- Desiree Diaz (FIU)(on-hold) dropped out

2001- Julie Wan Young (FIU) dropped out

1999-2001 Beth Julian (completed)(FIU)

1999-2002 Leslie Adrian (completed)(FIU)

2000-2002 Linsay Weis MS (completed)(FIU)

## Reviewer of Journal Articles:

2015 to present reviewer for; Journal of Forensic and Legal Medicine

2009 to present reviewer for; The Journal of Forensic Sciences

2009 to present reviewer for; Forensic Science International-Genetics.

2009 to present reviewer for; The Journal Electrophoresis.

2004 to 2010 reviewer for American Genetic Association

May, 2003 National Institute of Justice Grant Reviewer under the direction of; Lois Tully US DOJ. Reviewed over 10 grants for funding by NIJ for the year 2003-2004.

May, 2003 Reviewed; "DNA Typing Analysis" in the second edition of the "Encyclopedia of Molecular Cell Biology and Molecular Medicine". The author of the article, Chantal J. Frégeau, Rémy A. Aubin, Bruce Budowle and Ron M. Fourney

March, 2001- Review of manuscript: 4833 Partial Cytochrome b Sequences for Six Hymenoptera of the Eastern United States for the Journal of Heredity.

**Member of Professional Committees:**

US Department of Justice NIJ TWG, 2005 to 2017 (meets once a year to choose research topics) Nonstandard Laboratory Processing Subgroup

Member of University wide; Institutional Biosafety Committee Florida International University since 2005 to present

NIJ-DNA Grant Review committee, May, 2011

NIJ-DNA Grant Review committee, April, 2010

NIJ-DNA Grant Review committee, April, 2009

NIJ-DNA Grant Review committee, October, 2008

NIJ-DNA Grant Review committee, April, 2008

NIJ-DNA Grant Review committee, May 2, 2007

NIJ-DNA Grant Review committee, May, 2006

NIJ-DNA Grant Review committee, April 31 – May 2nd, 2005

**Other Training:**

Certificate of Attendance, Green Mountain DNA Conference, July, 2015 - 2018

Illumina Corporation Training – Forensic NGS (mtDNA) Methodology, January 20 – 21, 2015

25th International Symposium on Human Identification, Promega, October, 2014

Certificate of Attendance, Green Mountain DNA Conference, August, 2014

Illumina Corporation Training – Microbial NGS Methodology, July 14 – 15, 2014

Illumina Corporation Training – December 9 – 13, 2013 Next Generation Sequencing, La Jolla, Ca.

Certificate of Attendance, Green Mountain DNA Conference, July, 2013

Certificate of Attendance, Green Mountain DNA Conference, July, 2012

Certificate of Attendance, Green Mountain DNA Conference, July, 2011

ASCLD/LAB Assessor Training - May 9-13, 2011 - Sterling, VA

Certificate of Completion, National Institute of Justice, Mixture Interpretation Principles, Protocols, Practice Seminar Series, April 26 and 27, 2011, Instructors were Dr. Michael Coble, Dr. Robin Cotton, Dr. Catherine Grgicak, and Dr. Charlotte Word

Certificate of Completion, Working Ethics for BSO Civilians, Broward Sheriff’s Office, December 15th, 2010

Certificate of Completion, Bloodborne Pathogens for Civilians, Broward Sheriff’s Office, December 15th, 2010

Certificate of Completion, AmpfℓSTR MiniFiler, Validation and Laboratory Training, Applied Biosystems, 8-16-2010 thru 8-19-2010

Certificate of Attendance, GreenMountain DNA Conference, July 26 - 28, 2010

Certificate of Completion, Casework Genetics, Future Forensic SNP Symposium, March 22nd – 24th, 2010. A seminar on Illumina SNP technology

Certificate of Completion, Applied Biosystems, Future Trends in Forensic DNA Technology Seminar Series, July 24, 2010

U.S. Department of Justice FBI Certificate of Completion, Annual Review of DNA Data Accepted at NDIS, 1-28-2010

Certificate of Completion, AmpfℓSTR YFiler, Validation and Laboratory Training, Applied Biosystems, 1-4-2010

Certificate of Completion, Applied Biosystems, Future Trends in Forensic DNA Technology Seminar Series, 9-10-2009

Blood borne Pathogens December 8, 2009. Broward Sheriff’s Office

Parentage and Mixture Statistics; 20th International Symposium on Human Identification; Instructor: Dr. John Planz, Univ. of NorthTexas, HealthScienceCenter, October, 2009

7500 Real-Time PCR System Quantifiler Kits & Standard Operator Training, Appied Biosystems, 2-10-2009

20th International Symposium on Human Identification, Promega, October, 2009

Certificate of Attendance IBC Basics: An Introduction to the NIH Guidelines and the Oversight of Recombinant DNA Research, Cambridge MA, Sept. 22, 2009

Certificate of Attendance, Institutional Review Board (IRB) 101, Cambridge MA, Sept. 21, 2009

Midwestern Association of Forensic Scientist, Certificate of Training, DNA Statistics in Court at the 37th Annual MAFS Meeting in Des Moines, Iowa, Sept. 30, 2008, presented by George Carmody

Midwestern Association of Forensic Scientist, Certificate of Training, Body fluid identification at the 37th Annual MAFS Meeting in Des Moines, Iowa, Sept. 30, 2008, presented by Karl Reich

Midwest Chemical Safety Certificate of Attendance Safety Refresher Seminar, 11-13 February 2008

U.S. Department of Justice FBI Certificate of Completion, Annual Review of DNA Data Accepted at NDIS, 2-19-2008

Certificate of Achievement, DNA Interpretation, 5 hours, Give by Dr. Bruce Mccord, FIU, 9 November, 2007

Association of Forensic Analysts and Administrators. January 25 - 26, 2007

DNA Auditors Training, FBI, Rich Guerreri, Fort Lauderdale, Florida. Feb 9, 10 2006.

Blood borne Pathogens December 6, 2005. Broward Sheriff’s Office

GeneMapper ID training, Michelle Shepard, Applied Biosystems 5-11-05 – 5-13-05

Auditor Training, 1 hr, 14 October, 2004, in house.

ISO Overview (2hrs), 14 October, 2004, in house.

Parentage and Mixture Statistics; 15th International Symposium on Human Identification; Instructors: Dr. Arthur Eisenberg and Dr. John Planz, Univ. of North Texas, Health Science Center

Florida Crime Laboratory Council, ISO 17025 Conversion from ASCLD-LAB Workshop, Largo Florida, June 27-30 2004.

Genomes & Evolution 2004. This international meeting was held at State College, Pennsylvania (USA), on the University Park Campus of The Pennsylvania State University, June 17-20, 2004

ASCLD-LAB Training Course, Bud Keaton, Jacksonville, Florida, , February 2-4, 2004

Making Sense of Popstats Workshop, Instructors: Dr. Arthur Eisenberg and Dr. John Planz, Univ. of NorthTexas, HealthScienceCenter, September 29, 2003.

14th International Symposium on Human Identification, Promega, September 29 – October 2, 2003

Second Annual Advanced DNA Technology Workshop, May 12-15, 2003, Sponsored by Bode Technology Group

Effective Laboratory Safety and Chemical Hygiene Program Management, April 1-3, 2003,

Midwest Chemical Safety, Introduction to the BSO Crime Laboratory & CSU Safety Plan, October 21-22, 2003, Dr. Harry Elston.

13th International Symposium on Human Identification, Promega, 10/02

3nd Annual DNA Grantees Meeting, WashingtonD.C., 06/02

First Annual Advanced DNA Technology Workshop, BODE Technology Group, Duck Key, FL May 20 -23, 2002.

Florida Department of Law Enforcement, DNA Sample Submission Training, August 16, 2001.

Luminex Consortium Training, FIU Miami, FL 07/01

Florida DNA Training Session VI 2001 STR Odyssey, Florida Crime Laboratory Council, Clearwater, FL, 05/01

Leadership Under the Law, BSO Training, 10/01

How to Avoid Liability from E-Mail and the Internet, BSO Training, 02/01

Florida DNA Training Session VI:DNA 2001, 05/01

CODIS Training Session, FDLE DNA Database, Tallahassee, FL, 06/00

Advanced AmpfℓSTR DNA Interpretation & Troubleshooting, PE Biosystems, 05/00

Florida DNA Training Session V DNA 2000, Crime Lab Council & PE Biosystems, 05/00

Population Genetics Workshop, Crime Lab Council, Dr. George Carmody, 02/99

Advanced AmpFlSTR& ABI Prism 310 Genetic Analyzer, PE Biosystems, 12/98

Violence in the Workplace, Broward Sheriff's Training, 08/98

PCR Applications I, II and III Crime Lab Council, May 1996-1998

The Science of Forensic STR Analysis and Data Interpretation, AAFS, 05/98

Human Diversity, BrowardCommunity College, 1994

Sexual Harassment, Industry Services Training, 08/93

Business Writing for Results, Fred Pryor Seminars, 08/93

Human Relations, BrowardCommunity College, 06/93

Gender Awareness in the Workplace, BrowardCommunity College, 04/93

How to Handle Difficult People, National Seminars Group, 04/93

Developing and Maintaining a Sound Organization, BrowardCommunity College, 1993

Performance Appraisal, Broward Sheriff's Office (Motorola), 02/92

Civilian In service Training, Broward Sheriff's Office, 11/91

The Time Management Program, Per. and Prof. Dev. Center, 03/91

DNA Typing Methods, Dr. Bob Shaler, Lifecodes Corporation, 1989

Forensic DNA Analysis (RFLP First Course), FBI FSRTC Unit, Quantico, VA 1989

Extraction of DNA, Dr. Artie Eisenberg, Lifecodes Corporation, 1988

Monoclonal Antibodies and Elisa, Pam Newell, Dade County Metro Police Institute, 11/86

Blood and Body Fluid Evidence, Dade County Metro Police Institute, 11/86

Identification of Stains by Allotyping Techniques, AGTC Inc., Dr. Moses Shanfeld, 1985

Seminal Stain Analysis, SERI Research Institute, Brian Wraxall (in Miami) 1982

Instructor Techniques Course, Broward Community College, 1979

Basic Serology Workshop, Michigan State Police Forensic Laboratory, 1978

Forensic Microscopy of Hair, FBI Academy, Quantico, VA, 1977

Principals of Genetics, Dr. Richard Warren, Miami Police Institute, 1977

Flight Characteristics and Stain Pattern Identification of Human Blood, Herb McDonald 1974

Basic Serology Workshop, Michigan State Police Forensic Laboratory, 1974

Electrophoresis, Millipore Company, 1972

Basic Serology, Metropolitan Police Laboratory, Given by Brian Culliford, Metropolitan Laboratory, 1972

Police Photography Seminar, Eastman Kodak Company, 1970

X-ray Diffraction in Spectrophotometry, Phillips Electronic Instruments, 1970

**References**

Dr. Ron Fourney 613-993-5761

Royal Canadian Mounted Police

Central Forensic Laboratory

P.O. Box 8885

1200 Vanier Parkway

Ottawa, Ontario K1G 3M8, Canada

Jack Ballantyne, Ph.D.

Professor

Department of Chemistry

University of Central Florida

PO Box 162366

Orlando FL 32816-2366

[Jack.Ballantyne@ucf.edu](mailto:Jack.Ballantyne@ucf.edu)

Voice: (407) 823 0163

Dr. Robert S Pomeroy - ‘Skip’

rpomeroy@ucsd.edu

University of California San Diego (UCSD)

Department of Chemistry and Biochemistry

9500 Gilman Drive

La JollaCA, 92093-0303

Phone # on campus - 858 822-5736

[rpomeroy@ucsd.edu](mailto:rpomeroy@ucsd.edu)

Dr. Bruce McCord

Professor

Florida International University

11200 SW 8th Street

Department of Chemistry and Biochemistry

CP 313 office

College of Arts and Sciences

University Park

Miami, Florida 33199

office 305-348-7543

mccordb@fiu.edu

www.fiu.edu/~mccordb