Anna Siobhan Duggar, MS, D-ABC

Loyola University New Orleans Department of Chemistry, Forensic Chemistry Program

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Education

John Jay College of Criminal Justice, City University of New York, New York, NY

Master of Science in Forensic Science, received June 2000.

Thesis topic: "Identification of Initial and Secondary Stains in Overlapping Bloodspatter Patterns"

Emory University, Atlanta, GA 30322

Bachelor of Arts in Ecology and English, received May 1996

Thesis topic: "Letting Health Slip Through Our Filters: the Challenges of Waterborne Disease Outbreaks in Municipal Drinking Water Supplies"

Benjamin Franklin High School, New Orleans, LA 70122

Diploma received May 1992. Honors graduate; National Merit Scholar

Professional Experience

Loyola University, Department of Chemistry (New Orleans, LA)

Director of the Forensic Chemistry Program, August 2010 to present.

Responsible for course instruction; coordination of internship program and independent undergraduate research; and pursuing FEPAC accreditation for existing Forensic Chemistry program.

Tulane University, Tulane Interdisciplinary Experiences (TIDES) (New Orleans, LA)

Adjunct Instructor from August 2004 to present. Co-designed and taught the introductory, interdisciplinary "Detecting Crimes" course to classes of approximately 20 freshman students.

New Orleans Police Department, Crime Laboratory

Director of the Crime Lab from January 2007 to June 2010.

Responsible for the oversight and policies of the NOPD Crime Lab, including but not limited to: supervision of 45 to 55 employees in disciplines ranging from crime scene to drug chemistry; management of grant overtime; management of \$3 million FEMA equipment replacement budget; development of written training protocols; primary liaison with District Attorney's Office, federal agencies, and private law enforcement support agencies. Integral in architectural design of Category B temporary laboratory space and design of proposed permanent facility. Civilian reserve status, June 2010 to June 2011.

St. Tammany Parish Sheriff's Office, Crime Laboratory, Trace/Crime Scene

Forensic Scientist from June 2006 to January 2007.

Founding member of the Trace Evidence Unit, including the use of light microscopy and scanning electron microscopy to identify hair, fibers, gunshot residue, and other particulate evidence. Responsibilities include the creation and implementation of written policies and procedures, training materials, and instrumental manuals. Additional duties in latent print development and comparison services (including AFIS entry and evaluation of AFIS responses) and provision of auxiliary assistance on crime scenes. Responsible for issuing reports on findings and providing expert testimony in courts of law.

New Orleans Police Department, Crime Laboratory, Forensic Light Unit (FLU)/Criminalistics

Criminalist I assigned to FLU and Criminalistics from April 2004 to June 2006; Training and Education Coordinator from November 2004 to June 2006; Police Technical Specialist assigned to FLU and Criminalistics from July 2003 to April 2004.

Supervisor of the Forensic Light Unit. Performed laboratory analysis of submitted evidence and crime scenes for the presence of latent fingerprints, trace evidence, and body fluids. Procedures included use of alternate light sources, chemical enhancement of latent prints, identification of body fluids, photography, and crime scene analysis. Criminalist-level training in hair and fiber

comparison techniques. Responsible for issuing reports on findings and providing expert testimony in courts of law.

As Training and Education Coordinator, trained all incoming crime scene technicians in techniques ranging from fingerprint development to photodocumentation. Planned and implemented written tests and practical demonstrations of learned skills. Lectured to new recruits at New Orleans Police Academy on evidence handling and packaging techniques. Post-Hurricane Katrina, responsible for pricing, receiving bids, and making recommendations for

purchase for all replacement lab supplies (including consumable supplies, equipment, and instrumentation) in the following disciplines: crime scene, latent print development, bloodspatter pattern analysis, and much of the supplies for trace analysis and serology.

Loyola University, Department of Chemistry (New Orleans, LA)

Adjunct Instructor and Internship Coordinator from August 2005 to present.

Responsible for course design and implementation of lab-based course "Introduction to Forensic Methods" to classes of approximately ten undergraduate students. Responsible for coordinating schedules and research projects for up to five undergraduate interns at NOPD Crime Lab.

Tulane University, University College, Criminal Justice (New Orleans, LA)

Adjunct Instructor from August 2004 to December 2005. Responsible for course design and implementation of "Forensics and Criminal Justice" to classes of approximately 10 undergraduate students. Overall instructor rating of 4.6 out of 5.0, Fall 2004; 5.0 out of 5.0, Spring 2005.

- New Orleans Police Department, Crime Laboratory, Crime Scene (New Orleans, LA)
 - Crime Scene Technician on First Platoon from May 2003 to July 2003; Criminalist I assigned to Second, First, and Third Platoons, December 2005 to June 2006. Responsible for preserving and processing criminal incident scenes across Orleans Parish using a variety of procedures, including fingerprint development/examination, forensic photography, and crime scene sketching.
- University of West Florida, Division of Criminal Justice and Legal Studies (Pensacola, FL) Adjunct Professor from May 2002 to May 2003. Responsible for planning and teaching three semesters of "Introduction to Forensic Science" to classes of over 30 students. Researched topics in the field of bloodspatter pattern analysis.
- Florida Department of Law Enforcement, Pensacola Regional Operations Center (Pensacola, FL) Crime Lab Analyst (Trainee) from October 2000 to July 2002. Training included academic studies and supervised casework in the processing of physical evidence for latent prints, the comparison of latent prints to known inked impressions, and the use of AFIS technology. Also prepared for the provision of expert testimony in courts of law.
- Office of the Chief Medical Examiner, Department of Forensic Biology (New York, NY) Criminalist II from August to October 2000; Criminalist I from February to August 2000. Duties in serology, DNA extraction and quantification. As a member of Scientific Assessment and Training Team, dealt with analysis and collection of biological and other evidence at crime scenes.
- Office of the Chief Medical Examiner, Department of Forensic Biology (New York, NY) Consultant / Research Assistant from October 1999 to February 2000. Performed labwork for immunohistochemical research on cause/manner of death.
- Office of the Chief Medical Examiner, Department of Forensic Biology (New York, NY) Intern from January 1999 to June 1999. Performed literature searches and independent research continuing a study by forensic biology staff on overlapping footprints in blood.

Other Qualifications

Certifications and Specialized Training

Diplomate, American Board of Criminalistics.

Successfully completed multiple units of USDHS/FEMA Incident Command System training (2007). Successfully completed "Advanced Polarized Light Microscopy: Glass" at the McCrone Institute, Chicago, IL, August 2009 (40 hours).

Successfully completed "Scanning Electron Microscopy" at the McCrone Institute, Chicago, IL, November, 2006 (40 hours).

Successfully completed "Basic Hair and Fiber Microscopy" at the McCrone Institute, Chicago, IL, October 2004 (40 hours).

Certified as an instructor through the Federal Bureau of Investigation's Instructor Development Course, Lafayette, LA, October 2003. (40 hours)

Graduate, Basic Crime Scene Technician School, New Orleans Police Department, New Orleans, LA, June through August, 2003. (200 hours)

Successfully completed "The Palm Print Symposium" at Florida Department of Law Enforcement, Orlando, FL, February 2002. (24 hours)

Certified for ink-to-ink fingerprint comparisons through FDLE training course, "The Science of Fingerprints," Pensacola, FL, December 2000-January 2001. (260 hours.)

Successfully completed "Courtroom Testimony Techniques" course at Florida Department of Law Enforcement, Tampa, FL, December 2000. (16 hours)

Successfully completed the "Bloodspatter Workshop" given by the Office of Chief Medical Examiner of New York City, hosted at New York State Police Forensic Investigation Center, Albany, NY, January 2000. (40 hours)

Memberships and Affiliations

Member, American Academy of Forensic Sciences

Active Member, International Association for Identification

Active Member, Southern Association of Forensic Scientists

Member, McCrone Research Institute Alumni Association

Former Member, Accountability Strategic Planning and IntegRation of Evidence Systems (ASPIRES)

Former Member, Orleans Parish Integrated System and Information Sharing (OPISIS) Project, Evidence Management Subcommittee

Expert Witness Qualifications

Bloodspatter Pattern Analysis, Criminal District Court of Orleans Parish, Section L, August 2011

Development of Latent Prints, Criminal District Court of Orleans Parish, Section L, August 2011

Latent Fingerprints, United States District Court, Eastern District of Louisiana, September 2010

Gunshot Residue, Criminal District Court of Orleans Parish, Section F, March 2010

Development of Latent Prints, Criminal District Court of Orleans Parish, Section L, Jan 2010

Latent Prints, Criminal District Court of Orleans Parish, Section H, Dec 2009

Chemical Enhancement of Blood, District Court of Orleans Parish, Section H, Dec 2009

Bloodspatter Pattern Analysis, District Court of Orleans Parish, Section H, Dec 2009

Latent Prints, Criminal District Court of Orleans Parish, Section K, Dec 2009

Blood Testing, Criminal District Court of Orleans Parish, Section K, Dec 2009

Serology, Criminal District Court of Orleans Parish, Section K, Dec 2009

Chemical Enhancement of Bloodstains, Criminal District Court of Orleans Parish, Section G, July 2009

Bloodspatter Pattern Analysis, Criminal District Court of Orleans Parish, Section G, July 2009

Latent Prints, Criminal District Court of Orleans Parish, Section G, July 2009

Development of Latent Prints, Criminal District Court of Orleans Parish, Section E, June 2009

Development of Latent Prints, Criminal District Court of Orleans Parish, Section I, April 2009

Bloodstain Testing, Criminal District Court of Orleans Parish, Section K, March 2009

Chemical Development of Latent Prints, Criminal District Court of Orleans Parish, Section K, March 2009

Blood Testing and Enhancement, Criminal District Court of Orleans Parish, April 2008

Criminalistics, Criminal District Court of Orleans Parish, Feb 2008

Serology, Criminal District Court of Orleans Parish, Section C, Jan 2007

Serology and DNA Preparation, Criminal District Court of Orleans Parish, Section K, Dec 2006

Latent Print Development/Comparison, Criminal District Court of Orleans Parish, Section K, Dec 2006

Bloodspatter Pattern Analysis, Criminal District Court of Orleans Parish, Section K, Dec 2006

Trace Analysis, Criminal District Court of Orleans Parish, Section K, Dec 2006

Lifting and Development of Latent Prints, United States District Court, Eastern District of Louisiana, 2005

Development, Preservation, & Comparison of Prints, Criminal District Court of Orleans, Section H, 2005

Comparison of Latent Prints, Criminal District Court of St. Tammany Parish, 2005

Criminalistics, United States District Court, Eastern District of Louisiana, 2005

Latent Fingerprints, United States District Court, Eastern District of Louisiana, 2005

Lifting and Development of Latent Prints, United States District Court, Eastern District of Louisiana, 2005

Crime Scene Processing, Criminal District Court of Orleans Parish, Section B, 2004

Latent Fingerprints, Criminal District Court of Orleans Parish, Section B, 2004

Fiber Analysis, Criminal District Court of Orleans Parish, Section B, 2004

Criminalistics, Criminal District Court of Orleans Parish, Section G, 2004

Latent Fingerprints, Criminal District Court of Orleans Parish, Section G, 2004

Gunshot Residue, Criminal District Court of Orleans Parish, Section G, 2004

Bloodspatter Pattern Analysis, Criminal District Court of Orleans Parish, Section G, 2004

Latent Fingerprints, Criminal District Court of Orleans Parish, Section J, 2004

Latent Fingerprints, Criminal District Court of Orleans Parish, Section L, 2004

Publications and Presentations

- Anna S. Duggar, MS; Robert C. Shaler, PhD; and Peter R. DeForest, PhD. Identification of initial and secondary stains in overlapping bloodspatter patterns. Presentation made and abstract published in Proceedings of the Annual Meeting of the American Academy of Forensic Sciences, Seattle, February 2001.
- Anna S. Duggar, MS; Rose Duryea, MA. "An evaluation of the trigonometric model for point of origin prediction in bloodspatter pattern analysis." Poster presentation made and abstract published in Proceedings of the Annual Meeting of the American Academy of Forensic Sciences, New Orleans, February 2005.
- Anna S. Duggar, MS; Rose Duryea, MA. "Fulfilling the role of the forensic scientist: the New Orleans Police Department as a case study and argument for greater emphasis on actualized science." Presentation made and abstract published in Proceedings of the Annual Meeting of the American Academy of Forensic Sciences, New Orleans, February 2005.

Teaching and Presentations

Instructor, Fundamentals of Forensics, Orleans Parish District Attorney's Office, New Orleans, LA, June 2010. (2 hours)

Instructor, Homicide Investigation, New Orleans Police Department, New Orleans, LA, June 2010. (2 hours).

Presenter, Understanding Evidence Collection (and the Truth about DNA), Child Abuse Resource Education Session, New Orleans Child Abuse Center, March 2010. (2 hours)

Instructor, District Investigative Unit Training, New Orleans Police Department, March 2010. (2 hours).

Guest Lecturer, Forensic Science and the New Orleans Police Department Crime Lab, Department of Chemistry, Loyola University, September 2009.

Presenter, Use of the Forensic Laboratory in Investigations, Association of Inspectors General Certification Institutes, New Orleans, LA, August 2009. (2 hours)

Instructor, The Identification, Preservation, and Collection of Evidence, New Orleans Police Department Academy, New Orleans, LA. (4 hours) Taught in March 2010, September 2009, March 2009, January 2009, September 2008, February 2008, June 2007, November 2005, March 2005, Jan 2005, Sept 2004.

Instructor, Joint New Orleans Police Department/New Orleans District Attorney's Office Training for Sergeants, New Orleans, LA, May 2007 (4 sessions, each 4 hours)

Presenter, Bring Your Own Slides, American Academy of Forensic Sciences annual meeting, Seattle, WA, February 2006.

Instructor, The Identification, Preservation, and Collection of Evidence, St. Tammany Parish Sheriff's Office Crime Lab, September 2006. (4 hours)

Instructor, Basic Crime Scene Technician School, New Orleans Police Department, New Orleans, LA, November-December 2005. (160 hours)

Instructor, Basic Crime Scene Technician School, New Orleans Police Department, New Orleans, LA, November-December 2004. (160 hours)

Presenter, American Academy of Forensic Sciences annual meeting, New Orleans, LA, February 2005.

Instructor, In-Service Training on Identification, Preservation, and Collection of Evidence, Tulane University Police Department, New Orleans, LA, July 2004 (4 hours, 2 sessions)

Instructor, Forensics in the Classroom by Court TV, New Orleans Math and Science High School, New Orleans, LA, May 2004 (4 hours)

Instructor, Bloodspatter Pattern Evidence Preservation and Collection, Federal Bureau of Investigation, Evidence Response Team, New Orleans, LA, March 2004. (8 hours)

Instructor, Latents Workshop, Forensics for the Investigator, Florida Department of Law Enforcement, Pensacola, FL, October 2001.

Guest Lecturer, University of West Florida, Division of Criminal Justice and Legal Studies, Introduction to Forensics, Professor McGill, September 2001.

Presenter, American Academy of Forensic Sciences meeting, Seattle, WA, February 2001.

Assistant Instructor, Bloodspatter Workshop (2 sessions, each 40 hours), Office of Chief Medical Examiner, New York, NY, April 2000.

Conferences and Continuing Education

Attendee, American Academy of Forensic Sciences annual meeting, Chicago, IL, February 2011, including FEPAC On-Site Evaluator Training Session

Attendee, American Academy of Forensic Science annual meeting, Seattle, WA, February 2010.

Attendee, American Academy of Forensic Sciences annual meeting, Denver, CO, February 2009.

Attendee, International Association of Forensic Sciences triennial meeting, New Orleans, LA, July 2008. including ISO Without Tears Workshop (7 hours)

Attendee, American Academy of Forensic Sciences annual meeting, Washington, DC, February 2008.

Attendee, American Academy of Forensic Sciences annual meeting, San Antonio, TX, February 2007.

Participant, FBI Post-Bomb Blast Reconstruction School, New Orleans and Slidell, LA, September 2006 (40

Attendee, Courtroom Testimony Class, St. Tammany Office of the District Attorney, Covington, LA, July 2006 (2 hours)

Attendee, Louisiana Association of Forensic Sciences monthly meeting, Covington, LA, 2006.

Attendee, International Association for Identification 90th Educational Conference, Dallas, TX, August 2005, including workshops:

Recovery of Fingerprint Evidence from Human Skin (8 hours)

Techniques of Electrostatic Dust Lifting at the Crime Scene (4 hours)

Impact Pattern Recognition (4 hours)

Participant, Metal Detection Crime Scene Forensic Evidence Course, New Orleans Police Department, New Orleans, LA, August 2004. (2 hours)

Attendee, American Academy of Forensic Sciences annual meeting, Dallas, TX, February 2004.

Participant, Hazardous Materials at the Crime Scene, New Orleans Police Department/Federal Bureau of Investigation, New Orleans, LA, November 2003. (8 hours)

Participant, SPEX Crimescope and RUVIS training session, New Orleans Police Department, New Orleans, LA, September 2003. (8 hours)

Participant, Applied Biosystems Advances in DNA Technology workshop, New Orleans, LA, September 2003. (8 hours)

Attendee, American Academy of Forensic Sciences annual meeting, Atlanta, GA, February 2002.

Attendee, International Association for Identification 86th Educational Conference, Miami, FL, July 2001,

including workshops

Tape Processing (4 hours)

Fast Fourier Transform (4 hours)

Superglue Fuming (3 hours)

Basic Dye Staining Workshop (2 hours)

Swipes, Wipes, and Other Transfer Impressions (2 hours)

Dye Staining in Conjunction with Cyanoacrylate Fuming and Alternate Light Sources (2 hours)

Processing Blood Evidence for Latent Prints (2 hours) Attendee, Northeastern Association of Forensic Sciences meetings:

Newport, RI, September 1998

Cape Cod, MA, October 1999

Attendee, Southern Association of Forensic Scientist meetings:

Atlanta, GA, April 1999, including workshop: Mitochondrial DNA Analysis

Myrtle Beach, SC, September 1999, including workshop: Forensic Science, Testimony, & Ethics

Gatlinburg, TN, April 2000, including workshops:

Digital Photography (3.5 hours) Color Analysis for Trace Evidence (3.5 hours)

Microtomy for Trace Evidence (7 hours)

Perpetrator for "Crimes in Progress" course, Fulton County Sheriff's Academy, 1996 and 1997

Honors and Awards

Recipient, Commendation, Orleans Parish District Attorney Leon A. Cannizzaro, December 2009

Recipient, Letter of Commendation, New Orleans Police Department, March 2007.

Recipient, Commendation, United States Attorney, Eastern District of Louisiana, March 2005.

Recipient, Letter of Commendation, New Orleans Police Department, December 2004.

Recognized as one of Gambit Weekly's "Forty Under Forty," 2003.

Emory Scholar (one of 25 in class, selected from 1,100 applicants for scholarship)

Dean's List, Emory University, 7 of 8 undergraduate semesters

Member, honor guard for Emory's school mascot, William J. Dooley

References available upon request.