

RESUME OF RONALD L. SINGER

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EDUCATION

TULANE UNIVERSITY:

B.S., 1967. Major, Biology ; Minor, Chemistry

LOUISIANA STATE UNIVERSITY:

Medical School, one year (1967 - 1968).
Training in recombinant DNA technology, 1988 - 1989.

LOYOLA UNIVERSITY OF NEW ORLEANS:

M.S., 1978. Major, Biological Sciences. Title of Master's
thesis: Giemsa Banding in Chromosomes of the Genus
Lilium.

NORTH LOUISIANA CRIMINALISTICS LABORATORY / LABORATORY OF FORENSIC SCIENCE:

Bloodstain Pattern Interpretation Workshop, May, 1988;
taught by H.L. MacDonell.

BUREAU OF ALCOHOL, TOBACCO AND FIREARMS:

Training in operation of the NIBIN (National Integrated Ballistic
Information Network) system, June 2001

PERKIN-ELMER CORPORATION:

Specialized training in Atomic Absorption spectrophotometry,
March, 1971.
Special workshop in gas chromatography, February, 1970.

GELMAN SCIENTIFIC CORPORATION:

Workshop in thin layer chromatography, February, 1973.

DRUG ENFORCEMENT ADMINISTRATION:

Special School for Forensic Chemists, September, 1973.

FEDERAL BUREAU OF INVESTIGATION, FBI Academy:

Symposium on Crime Laboratory Development, yearly, 1976 -
1987; 1989 - 2000; 2002, 2007.
Bloodstain Pattern Analysis Class, July, 2002 (taught at the Northeast Illinois Public

FEDERAL BUREAU OF INVESTIGATION, Continued:

Safety Training Academy, Glenview, Illinois)
International Symposium on the Forensic Aspects of Footwear and Tire Impression
Evidence, June, 1994
Gunpowder and Primer Residue Course, June, 1977.
Introduction to Criminalistics Course, December, 1974.
Conference on Polymers, September, 1974.

GLOCK, INCORPORATED:

Armorer's Course, Glock Models 17 and 19 9mmP. caliber
semiautomatic pistols, June, 1990.

REMINGTON ARMS COMPANY:

Field Service Course, Remington Model 870 Shotgun, June,
1990.

AMERICAN ACADEMY OF FORENSIC SCIENCES:

Crime Scene Reconstruction Workshop, given at the 43rd. Annual Meeting, February,
1991, Anaheim, CA.
Proficiency Testing Workshop, given at the 41st. Annual Meeting, February, 1989, Las
Vegas, NV. (Co-chairman of Event).

STURM, RUGER & COMPANY:

Armorer's Course, Ruger P-series pistols, and Ruger Mini-14 rifles, May 1993.

BERETTA U.S.A. CORPORATION:

Armorer's Course, Model 92 series pistols, September 1995.

EXPERIENCE

PRESENT:

TARRANT COUNTY MEDICAL EXAMINER'S OFFICE CRIMINALISTICS

LABORATORIES, Fort Worth, Texas

Crime Laboratory Director, June 1989 - Present. Responsible for the establishment and operation of a full service ASCLD/LAB accredited (since 1999) Criminalistics/Medical Examiner's Laboratory, including the following laboratories: Firearms/Toolmarks, Forensic Biology (including full service DNA), Trace Analyses, Forensic Chemistry (1990 – 1999), Forensic Anthropology (1992 – 2007), Intoxylizer (started program, supervised 1995 - 1999), Histology (1996 - 1999) and Latent Fingerprints. Duties include specifying and purchasing of all equipment for the laboratory, the hiring, training, and supervision of ten forensic scientists, the establishment of all operating protocols and procedures, the approval of all reports issued by the laboratory, the preparation of statistical reports, budget proposals, and the general operation of the laboratory. Also participate in the analyses conducted in the laboratory, and present the results obtained in Court as an expert witness. Areas of expertise include: firearms and

toolmarks; fingerprint development; arson, impression evidence, and other trace analyses; blood spatter interpretations; and crime scene investigations. Have testified in both Civil and Criminal Courts throughout North Central and South Texas as well as courts in Oklahoma, Colorado, Missouri, Kansas, Georgia, Mississippi and Louisiana. For more specific details, see RONALD L. SINGER, CONSULTING FORENSIC SCIENTIST, and JEFFERSON PARISH SHERIFF'S OFFICE, below.

RONALD L. SINGER, CONSULTING FORENSIC SCIENTIST, Fort Worth, Texas

Private Consultant, June 1989 - Present. Private consulting service offering consultation, examinations, and course work in forensic science matters. Specialties include the examination or reexamination of evidence in cases involving firearms, toolmarks, shoeprints, trace analyses, tiretracks, etc.; the interpretation of scientific reports; blood spatter interpretations; the reconstruction and/or reexamination of crime scenes; the evaluation of credentials and experience of experts, crime scene investigators, etc.; and the presentation of findings and opinions in Court as an expert witness. Courses taught include crime scene reconstruction, blood spatter interpretation and general criminalistics.

UNIVERSITY OF TEXAS AT ARLINGTON, Arlington, Texas

Member, College of Science Advisory Council, 2003 – Present

NATIONAL INSTITUTE OF JUSTICE, Washington, D.C.

Peer Reviewer, 2005 – Present. Evaluate the strengths and weaknesses of research proposals submitted to the National Institute of Justice for possible funding. Have served as both a Lead Reviewer and Secondary Reviewer.

TARRANT COUNTY COLLEGE, Fort Worth, Texas

Instructor, 1993 - 2001. Member of the Faculty (Part Time) of the Biology Department. Teach Biology and Criminal Justice Courses. S.C.O.O.P. Outstanding Service Award, 1994 - 1995.

NATIONAL SHOOTING SPORTS FOUNDATION, Riverside, Connecticut

Safety Advisor, Shooting, Hunting and Outdoor Trade Show, 1981 - 2002. Part of a team that is responsible for ensuring the safety of all weapons brought into this annual product show for the firearms trade. It is the largest show of its kind in America.

UNIVERSITY OF NORTH TEXAS/ HEALTH SCIENCES CENTER, Fort Worth, Texas

Instructor, 1990 - 2008. Member of the Clinical Faculty of the Department of Pathology.

WEATHERFORD COLLEGE, Weatherford, Texas

Instructor, 1992 - 1999. Member of the Faculty (Part Time) of the Criminal Justice Department. Taught Criminal Investigation, Crime Scene Investigation, Criminalistics, etc.

TEXAS CHRISTIAN UNIVERSITY, Fort Worth, Texas

Instructor, 1989 - 1998. Member of the Faculty (Occasional) of the Sociology Department, College of Arts and Sciences. Taught Criminal Justice courses, including Crime Scene Investigation, Criminalistics, various other law enforcement courses.

FORT WORTH MUSEUM OF SCIENCE AND NATURAL HISTORY, Fort Worth, Texas

Advisor, " Whodunit? The Science of Solving Crime", 1989 – 1994; "CSI – the Experience", 2006 - Present. Served (and continue to serve) as an advisor to the museum staff in the concept and design of two exhibits on Forensic Science. Was responsible for the design of the crime scene, the compilation of "crime scene investigator's notes", as well as other aspects of the first exhibit, which has traveled to numerous cities nationwide since opening. Serve as Lead Technical Advisor on the current exhibit.

NOVEMBER 1972 - MAY 1989:

S&W FORENSIC SERVICES, New Orleans, Louisiana

Private Consultant, September, 1988 - May, 1989. See Ronald L. Singer, Consulting Forensic Scientist, above.

LOYOLA UNIVERSITY, New Orleans, Louisiana

Instructor, Criminal Justice Program of City College, 1978 - 1989. Courses taught included Criminalistics, Personal Identification, Crime Scene Investigation, various mid- and upper- level management courses, and various biology courses.

WILLIAM CAREY COLLEGE SCHOOL OF NURSING, New Orleans, Louisiana

Instructor, 1988 - 1989. Taught Anatomy and Physiology to Nursing Students.

DELGADO COMMUNITY COLLEGE, New Orleans, Louisiana

Instructor, 1988 - 1989. Taught Human Anatomy and Medical Terminology.

JEFFERSON PARISH SHERIFF'S OFFICE, CRIMINALISTICS LABORATORY, Metairie, Louisiana

Director, October, 1977 - August, 1988 (duties also included those of Criminalist - see summary below).

Acting Director, October, 1976 - September, 1977.

Criminalist, November 1972 - September, 1976.

Summary of Duties - Was responsible for all phases of administration of a full service criminalistics laboratory; including the hiring, training, and supervision of a total staff of eight, preparation of statistical reports and budget proposals, and purchase of supplies and equipment for the laboratory. In addition to duties as Director, was responsible for the microscopic and chemical analyses of physical evidence, including the examination and comparison of firearms

and materials fired therefrom; toolmark comparisons; analysis of gunpowder and explosive residues; the chemical treatment of materials for the presence of latent fingerprints; analysis of unknown substances, primarily drugs, in solid form, as residues in syringes, liquids pharmaceutical preparations, plant matter, etc.; analysis of low boiling point hydrocarbons in the investigation of suspected arson cases; the analysis and calculation of ethanol content of blood samples (held Louisiana Department of Public Safety Permit number 74); and the analysis of trace amounts of physical evidence in hit and run cases, burglaries, etc. Course of analyses included the use of comparison and compound microscopes, as well as classical chemical separation techniques; thin layer, gas, pyrolysis-gas, and column chromatography; electrophoresis; ultraviolet, infrared, fluorescence, and atomic absorption spectrophotometry; emission spectroscopy; and other laboratory instrumentation. Was also frequently called to lend expert assistance regarding the collection and preservation of physical evidence at major crime scenes. Position also included presentations in court as an expert witness; have qualified as an expert and rendered expert opinions in courts of the 17th, 22nd, 23rd, 24th, 25th, 29th, and 32nd Judicial Districts of Louisiana, as well as Orleans Parish District Court (Criminal and Civil), United States Federal District Court (Criminal and Civil), and many City and Parish Courts of Southeastern Louisiana.

JUNE 1968 - JULY 1972:

STANDARD FRUIT AND STEAMSHIP COMPANY, New Orleans, Louisiana

Superintendent, Central Analytical Laboratory, March, 1970 - June, 1972.

Assistant Biochemist, June, 1968 - March, 1970.

Summary of Duties - As Superintendent, supervised and participated in the organic and inorganic analyses of plant tissue, soil and water samples, and unknown residues on plant tissues. Responsible for the operation of the laboratory, the development of any methodology necessary in the course of analyses, purchasing of all supplies and equipment, and the selection, training, and supervision of four laboratory technicians. In addition to classical chemical techniques, course of analysis included the use of atomic absorption spectrophotometry.

As Assistant Biochemist, conducted independent research on the physiology and pathology of bananas and pineapples. Work involved studies on the control of various pathologic organisms, development of new products, etc. Also responsible for the supervision of two laboratory technicians.

MAJOR FUNDING OBTAINED

Wrote, received, and served as Project Manager on the following major grants:

“Medical Examiner’s Crime Laboratory DNA Enhancement Program” - \$316,681 - received from National Institute of Justice, Office of Science and Technology, 10/01/2006. Funded the purchase of DNA equipment and specialized training for the Tarrant County Medical Examiner’s

District Crime Laboratory.

“Forensic Casework DNA Backlog Reduction Program” - \$168,700 received from Department of Justice Office of Justice Programs, 10/01/2005. Funded DNA analyses for agencies within Tarrant, Denton, Parker and Johnson Counties.

“Tarrant County Medical Examiner’s Office DNA Analysis Enhancement Project” - \$64,803.00 received from National Institute of Justice, Office of Science and Technology, 01/01/2004. Funded the purchase of DNA equipment for the Tarrant County Medical Examiner’s District Crime Laboratory.

“Medical Examiner’s Crime Laboratory DNA Improvement Program, Part 2” - \$43,573 grant received from the Office of the Governor, Criminal Justice Division, State of Texas, 02/01/2001. Funded project expanded the DNA capabilities of the Tarrant County Medical Examiner’s District.

“Medical Examiner’s Crime Laboratory DNA Improvement Program, Part 1” - \$60,000 grant received from the Office of the Governor, Criminal Justice Division, State of Texas, 009/01/2001. Funded project expanded the DNA capabilities of the Tarrant County Medical Examiner’s District.

“Forensic DNA Laboratory Improvement Program” - \$150,072 grant received from National Institute of Justice, 04/29/98. Funded project established STR analytical capabilities for the Forensic Biology Laboratory of the Tarrant County Medical Examiner’s District.

“Drugfire – TCME” - \$119,160 grant received from Office of the Governor, Criminal Justice Division, State of Texas, 09/01/95; Personnel portion (Approx. \$50,000) renewed for 1996 - 1997, 1997 - 1998. Funded project established an automated firearms identification system in the Firearms Laboratory of the Tarrant County Medical Examiner’s District.

"Information System" - \$325,000 grant received from Office of the Governor, Criminal Justice Division, State of Texas, 09/01/91. Funded project established a complete Laboratory Information System in the Forensic Laboratories of the Tarrant County Medical Examiner's District.

"DNA Testing" - \$7500 grant received from Office of the Governor, Criminal Justice Division, State of Texas, 09/01/90. Funded project explored the causes of band shifting in the analysis of forensic DNA samples.

PROFESSIONAL ORGANIZATIONS

Fellow, American Academy of Forensic Sciences (Criminalistics Section): Criminalistics Section Distinguished Service Award, 1999; President, 2004 – 2005; President-Elect, 2003 –

2004; Secretary, 2001 - 2003; Vice-President, 2000 - 2001; Board of Directors, 1994 – 1997, 2005 - 2006; Forensic Sciences Foundation, Board of Trustees, 2006 – 2010 (Treasurer, 2008 – 2009); Chairman, Membership Committee, 2000 - 2001; Long Term Planning Committee, 2005 – 2009; Nominating Committee, 2005 – 2008 (Chair, 2005 – 2006); Exhibitor Liaison Committee, 1998 - Present; Meeting Program Cochairman, 1999 and 1998 Annual Meetings; Chairman, Plenary Session, 1998 and 1994 Annual Meetings; Poster Section Chairman, 1997 Annual Meeting; Section Chairman, 1988 - 1989; Section Secretary, 1987 - 1988; Program Chairman, Criminalistics Section, 1986 - 1987; Local Arrangements Chairman, 1986, 1980; Award of Merit, 1980; Section Moderator, 1992, 1991, 1990, 1986, 1983, 1982 Annual Meetings; Voting Representative to Board of Directors, American Board of Criminalistics, 1992 - 1994; Sergeant-at-Arms, 1993 Annual Meeting; Strategic Planning Committee (Discipline Assessment Task Force), 1990 - 1993; Public Relations Committee, 1992 - 1994.

President, International Association of Forensic Sciences, 2005 - 2008

Emeritus Member, American Society of Crime Laboratory Directors: Secretary, 1983 - 1986; Board of Directors, 1983 - 1986; Operations and Planning Committee, 1987 - 1988; Proficiency Advisory Committee, 1982 - 2000 (Chairman, 1991 - 2000, responsible for the production and distribution of proficiency samples in DNA analysis and Footwear analysis, 1988, 1990 - 1998); Chairman, Publications Committee, 1991.

Distinguished Member, Association of Firearm and Toolmark Examiners: Member of the Year, 1987; President, 1995 - 1996; First Vice-President, 1994 - 1995, Second Vice-President, 1993 - 1994; Board of Directors, 1986 - 1988, 1996 - 1997; Chairman, Bylaws Committee, 1987 - 2000; Chairman, Advisory Committee, 1997; Chairman, Ethics Committee, 1988; Chairman, Scientific Advancement Committee, 1988 - 1989; Chairman, Key Man of the Year Committee, 1985 - 1988; Session Moderator, 1987 Meeting.

Charter Member, Association for Crime Scene Reconstruction

Member, Forensic Science Society (England) Member through 2005

Member, Southern Association of Forensic Scientists: General Program Chairman, 1986; Meeting and Program Chairman, 1979; Criminalistics Program Chairman, 1982.

Member, Louisiana Association of Forensic Scientists: President, 1975.

Member, American Society for Testing and Materials (ASTM): Member, Committee E30.01 (Criminalistics), through 2005. Participated in the formulation of standard methods for the analyses of fire debris and the receiving and documenting of evidence in a forensic laboratory. Member, Southwestern Association of Forensic Scientists

Member, International Association for Identification

MAJOR PUBLICATIONS, SEMINARS, PRESENTATIONS, PAPERS

Major Publications:

Singer, Ronald L., Davis, Dusty E. and Max M. Houck. A Survey of Gunshot Residue Analysis Methods. *Journal of Forensic Sciences*, 1996; 41(2): 195-198.

Major Seminars:

The Impact of Confirmational Bias and the Context Effect on Report Writing in the Forensic Science Laboratory. Full day Workshop presented at the 60th Scientific meeting of the American Academy of Forensic Sciences, Washington, D.C. Co-chair of workshop; also presented a session on how reports of experts are reviewed to determine if bias is present. February, 2008.

The Role of Forensic Science in Law Enforcement. Presented several lectures to Human Rights, Law Enforcement and Prosecutorial agencies in Male, Maldives and Colombo, Sri Lanka as an invited guest of the United States Department of State, September 23 – 30, 2005.

Bloodstain Pattern Interpretation. Planned and presented two five day hands-on courses on the interpretation of blood spatter evidence; one presented November 22 - 26, 1999 to Bosnian crime scene investigators at Dobo, R.S., Bosnia-Herzegovina; the other presented November 29 - December 3, 1999 to Bosnian crime laboratory personnel at Sarajevo, Bosnia-Herzegovina.

Bosnian Management Seminar. Presented three papers (“Waco”, “Blood Spatter Analysis” and “Gunshot Residue Analyses”) and moderated team management exercises at first meeting of Bosnian and Croatian crime laboratory managers, International Law Enforcement Academy, Budapest, Hungary, July 6 - 8, 1998.

Mass Incidents. Presented “The Waco Scientific Evidence” at the First Joint Meeting of the Forensic Science Service (England) and the Forensic Science Society, Newcastle, England, April 23 - 25, 1998.

Contemporary Issues in Forensic Firearms Identification. Workshop cochairman; also presented four hour block “Gunshot Residue Analysis”, UCLA Conference Center, Los Angeles, California, August 21 - 23, 1997.

Multidisciplinary Symposium on Mass Disaster/Terrorism. Presented “The Role of the Criminalist in Mass Disaster/Terrorism” at a day-long symposium attended by 125 held at the annual meeting of the American Academy of Forensic Sciences, New York City, 1997.

Bloodstain Pattern Interpretation Workshop. Planned and presented a four day hands-on workshop including lectures and laboratories on bloodstain pattern interpretation to class of 30, El Paso, Texas, 1991.

Blood Spatter Workshop. Planned and presented a full day (8 hour) hands-on workshop on bloodstain pattern interpretation for the Tarrant County District Attorney's Office, 1994. Have also taught numerous half-day (5 hour) workshops, including those presented for the Association of Homicide Investigators of Texas, and at training sessions held at Tarrant County Sheriff's Office.

Alternative Organizational Approaches to Crime Laboratory Management. Served as a Panel Member for the "Small Laboratory" (less than 40 employees) section of this workshop held at the FBI Academy, Quantico, Virginia, September, 1992.

Forensic Science. Planned, organized, and participated in a five day series of lectures on Forensic Science to Tarrant County District Attorney's Office, Fort Worth, Texas, 1990.

Proficiency Testing & Quality Assurance. Workshop presented at 41st. Annual Meeting, American Academy of Forensic Sciences, Las Vegas, Nevada, 1989. Cochairman of event; also made presentation.

Major Presentations and Papers:

Singer, Ronald L. The NationsBank Robbery. Presented at "Evidence Withheld: Forensic Finds that Didn't Make it into the Courtroom," Smithsonian Associates, Washington, D.C., February, 2008.

Singer, Ronald L. IAFS and TIFS – International Efforts. Presented at III Mediterranean Academy of Forensic Sciences Congress, Porto, Portugal, June, 2007.

Froede, Richard C., Singer, Ronald L. and Suzanne M. Froede. The Life and Death of Harry Oakes. Presented at the 57th Annual Meeting, American Academy of Forensic Sciences, New Orleans, Louisiana, 2005.

Singer, Ronald L. And Suzanne M. Froede. Who Killed Harry Oakes? Presented at the 52nd. Annual Meeting, American Academy of Forensic Sciences, Reno, Nevada, February, 2000.

Singer, Ronald L., Max M. Houck, et. al. Testing the Proficiency of Forensic Footwear Analysts: A Survey of One Program. Poster session, presented at the International Symposium on the Forensic Aspects of Footwear and Tire Impression Evidence, FBI Academy, Quantico, Virginia, June, 1994.

Singer, Ronald L. The Evaluation of Firearms Evidence and the Inventory of the Personal Effects at the Branch Davidian Death Scene. Presented at the 46th. Annual Meeting, American Academy of Forensic Sciences, San Antonio, Texas, 1994.

Singer, Ronald L., Patricia C. Eddings, and Max M. Houck. The Jonathan Swift Phenomenon: Trace Evidence Discovered on Trace Evidence. Presented at the 45th. Annual Meeting, American Academy of Forensic Sciences, Boston, Massachusetts, 1993.

Singer, Ronald L. Comparison Studies in Shotgun Loads. Presented at the annual meeting, National Association of Medical Examiners, Fort Worth, Texas, 1993.

Singer, Ronald L., Patricia C. Eddings, and Dusty E. Davis. Evaluation of Individual Burned Gunpowder Particles by Fourier Transform Infrared Microscopy: Results of a Case Study. Presented at the 44th. Annual Meeting, American Academy of Forensic Sciences, New Orleans, Louisiana, 1992.

Singer, Ronald L. A Study of Proficiency Testing in Firearms and Toolmarks: 1975 - Present. Presented at 22nd. Annual Training Seminar, Association of Firearm and Toolmark Examiners, Houston, Texas, 1991.

Singer, Ronald L. and Dusty E. Davis. Gunshot Residues Associated With the Discharge of a Black Powder Revolver. Presented at 43rd. Annual Meeting, American Academy of Forensic Sciences, Anaheim, California, 1991.

Singer, Ronald L. Proficiency Testing in Forensic Science. Presented at 21st. Annual Training Seminar, Association of Firearm and Toolmark Examiners, Omaha, Nebraska, 1990.

Warren, Joseph E. and Ronald L. Singer. Evaluation of Three Methods of DNA Extraction from Dried Blood Stains. Presented at 42nd. Annual Meeting, American Academy of Forensic Sciences, Cincinnati, Ohio, 1990.