

## **CURRICULUM VITAE: Robert W. Allen**

Business Address: Human Identity Testing Laboratory



Center for Health Sciences  
Oklahoma State University  
1111 W. 17<sup>th</sup>  
Tulsa, OK 74107-1898

Department of Forensic Sciences  
Center for Health Sciences  
Oklahoma State University  
1111 W. 17<sup>th</sup>  
Tulsa, OK 74107-1898

Date of Birth: February 21, 1950

Place of Birth: Tulsa, OK

Marital Status: Married, two children

### **EDUCATION**

Graduate: September 1972-July 1977; Dept. of Biological Sciences, Purdue University, West Lafayette, IN.

Degree received: Ph.D. in Cell Biology

Undergraduate: September 1968-May 1972; Dept. of Life Sciences, University of Tulsa, Tulsa OK.

Degree received: B.S. in Zoology

### **MEMBERSHIPS, CERTIFICATION, AND AWARDS (past 10 years)**

2011-Present: Member of the Editorial board: Research and Reports in Forensic Medical Science.

2011-Present: Member FEPAC Commission, American Academy of Forensic Sciences.

2009- Phi Beta Kappa, Alumnus of the year, University of Tulsa, Tulsa, OK

2009- Inducted into Phi Beta Kappa, University of Tulsa, Tulsa, OK

2004-Present: Fellow, American Academy of Forensic Sciences.

### **WORK EXPERIENCE AND TRAINING**

August 2005-Present: Professor of Forensic Science and Chairman  
School of Forensic Sciences  
Center for Health Sciences  
Oklahoma State University  
1111 West 17<sup>th</sup> St.

Tulsa, OK 74107

- June 2001-August 2005: Associate Professor and Associate Director  
Department of Forensic Sciences  
Center for Health Sciences  
Oklahoma State University  
1111 West 17<sup>th</sup>  
Tulsa, OK 74107
- August 2004-Present: Director, Human Identity Laboratory  
Center for Health Sciences  
Oklahoma State University  
1111 West 17<sup>th</sup>  
Tulsa, OK 74107
- August 2001- June 2004: Associate Professor of Biochemistry and Microbiology,  
Associate Director, Forensic Sciences Program  
Center for Health Sciences, Oklahoma State University  
1111 W. 17th Street  
Tulsa, OK 74107
- August 2001-July 2008: Director, Parentage Testing Program and Technical Leader  
Kern County Crime Laboratory  
1215 Truxton Ave.  
Bakersfield, CA 93301
- August 1999-Present: Director, Parentage Testing Program and Technical Leader  
Genetic Technologies, Inc.  
PO Box 242  
Glencoe, MO 63038
- June 1992- June 2004: Director, Laboratories for DNA and HLA Typing  
H.A. Chapman Institute of Medical Genetics  
Schusterman Health Sciences Center  
4502 E. 41<sup>st</sup> Street  
Tulsa, OK 74135
- June 1992-June 2004: Director, Human Identity Laboratory  
H.A. Chapman Institute of Medical Genetics  
Tulsa, OK
- August 1977-Dec. 1980: Postdoctoral Fellow  
Scripps Clinic and Res. Foundation  
10666 N. Torrey Pines Rd.  
La Jolla, CA 92037

**MEMBERSHIPS, CERTIFICATION, AND AWARDS**

2014 – Recipient of National Institutes of Justice Research grant “Transcriptome degradation analysis for sample age estimation. 1/1//15 – 12/31/16, Amount awarded: \$241,000

2013 – Editor in Chief, Journal of Forensic Invetigation.

2011-Present: Member FEPAC Commission, American Academy of Forensic Sciences.

2009- Phi Beta Kappa, Alumnus of the year, University of Tulsa, Tulsa, OK

2004-Present: Fellow, American Academy of Forensic Sciences.

2002-2003: Chairman, Accreditation Program Unit, American Association of Blood Banks, Bethesda, MD

2001-Present: Member, International Society of Forensic Genetics, Munster, FRG

2000-2010: Editorial Board, Transfusion, American Association of Blood Banks Bethesda, MD

1996-2000: Chairman, Parentage Testing Subcommittee, American Association of Blood Banks.

1995-2010: Member, Parentage Testing Ancillary Committee, College of American Pathologists.

### **PRESENTATIONS (last 5 years)**

February 2009: [Quantitation of total and male chromosomal DNA using multiplex PCR and capillary electrophoresis.](#) Co-presented with Dr. Jun Fu at the annual meeting of the American Academy of Forensic Sciences, Denver, CO.

March 2009: Quantitation and characterization of DNA in forensic samples using the Q-TAT assay. Presented at the Forensic DNA Analysis Workshop, sponsored by Promega Corp. and held at the Oklahoma State Bureau of Investigation, Edmond, OK

March 2009: AFLP analysis as a molecular tool for the attribution of DNA isolated from pathogenic organisms. Presented at the Forensic DNA Analysis Workshop, sponsored by Promega Corp. and held at the Oklahoma State Bureau of Investigation, Edmond, OK

March 2009: The graduate program in forensic sciences at Oklahoma State University, Center for Health Sciences. Presented to the Professionals in Science Club at Northeast State University, Tahlequah, OK.

March 2010: The evolution and current state of DNA analysis for forensic investigation. Presented to the Oklahoma Association of Private Investigators.

July 2010: La importancia de las pruebas de parentesco para la identificación en la ciencia forense. (The importance of parentage testing for identification in forensic science). Presented at the 1st Congreso Iberoamericano de Ciencias Forenses (1st Iberoamerican Congress of Forensic Sciences), Mexico City, Mexico.

January 2011: DESARROLLO DE LAS TECNOLOGIAS DE ANALISIS DE ADN PARA LA INVESTIGACION DE CRIMENES RELACIONADOS CON LA AGRICULTURA (Development of DNA technologies for the investigation of agricultural biocrimes.) Presented at the University of Panama, Chiriqui campus.

January 2011: Invited Speaker: La identificación de los restos usando ADN tecnología. (Identification of remains using DNA technology). Presented at the Autonomous University of Chiriqui, David, Panama.

May 2011: Invited Speaker: Forensic DNA Analysis, Parts I and II. Presented to the Government Analyst Laboratory. Colombo, Sri Lanka

May 2011: Invited Speaker: Assessment of the quantity and quality of DNA in evidentiary samples using the Q-TAT multiplex assay. Presented at the Annual Meeting of the Midwest Forensic Resource Center, St. Louis, MO

June 2011: Invited Speaker Forensic science education. Presented at the DNA Symposium sponsored by the Midwest Forensic Resource Center. Ames, IA

November 2011 – Analisis bioestadístico de casos complejos en identificación humana e investigación de la filiación. November 8-11, 2011. Workshop for forensic DNA Analysts working in Colombia, sponsored by the Institute for Legal Medicine, Bogota, Colombia.

May 2012 - Invited speaker, Annual Meeting, Midwest Forensic Science Resource Center (MFRC), “Degradation in chromosomal DNA assessed using PCR amplification and capillary electrophoresis.

April 2013 – Invited speaker, 2<sup>nd</sup> Annual Wuxi Tai Lake DNA Forum, Wuxi, China, “Current trends in DNA analysis methods and in forensic science education.”

April 2013 – Invited speaker, School of Forensic Medicine, Sun-Yat Sen University, Guangzhou, China, “Capabilities for DNA analysis; the experience of the Human Identity Laboratory at Oklahoma State University.”

April 2013 – Invited speaker, Shanghai Police Department, Shanghai, China, “Research in the Forensic Biology section in the School of Forensic Sciences.”

April 2013 – Invited speaker, Fudan University School of Forensic Medicine, Shanghai, China, “Research in the Forensic Biology section in the School of Forensic Sciences.”

April 2013 – Invited speaker, St. Francis Medical Genetics Program, “DNA Quality; a very important key to success in STR typing.”

August 2014 – Invited speaker. University Hospital, OSU, Grand Rounds: “Next Generation DNA sequencing and its role in patient management.”

November 2011

## **REFERENCES**

Dr. James A. Hoch  
Scripps Clinic and Research Foundation  
10666 N. Torrey Pines Rd.  
La Jolla, CA

Dr. Niels Morling  
Dept. of Forensic Genetics  
Institute of Forensic Medicine  
University of Copenhagen  
Frederik V's Vej 11  
DK-2100 Copenhagen  
Denmark

Dr. Daniel Garner, CEO  
Houston Forensic Science Center  
1200 Travis  
Houston, TX 77002 (713) 929-6760

## **PUBLICATIONS.**

19. Allen R.W., Wallhermfecht M. and Miller W.V. (1989) The application of RFLP mapping to parentage testing. *Transfusion* 30:552-564.
20. Allen R.W. (1989) Characteristics of some DNA probes useful for identity testing. *DNA for parentage testing: Current State of the Art* (Dykes and Polesky, eds), American Assoc. of Blood Banks, Arlington, VA.
21. Allen R.W. (1989) DNA probes and their use in diagnosis and identification. In: *Recombinant DNA technology and Applications* (Ho C, Prokop A., and Bajpai R., eds) McGraw Hill, N.Y., N.Y.
22. Allen R.W., Hoover B.A., Santiago L., and Miller J. (1990) Compatibility of several HVR-type probes with Pvu II restriction endonuclease and advantages of Pvu II over other commonly used enzymes. *Adv. Forensic Hemogenet.* 3:83-87.
23. Krane D., Allen R.W., Sawyer S.A., Petrov D., and Hartl D.L., (1993) Genetic differences at four DNA typing loci in Finnish, Italian, and mixed Caucasian populations. *Proc. Natl. Acad. Sci. (USA)* 89:10583-10587.

24. Chimera J.A., Allen R.W., Eisenberg A., Endean D., Farkas D.H., et al. (1992) Inter-laboratory assessment of the D1S80 AMFLP locus in paternity testing. Proceedings of the 3rd International Symposium on Human Identification, Promega Corp. Madison, WI P199-204.
25. Cagliotti S., and Allen R.W. (1994) A review of molecular methods for tissue typing. AABB Newsbriefs 16:16-17.
26. Allen R.W. and Sanford-Sharp C.E. (1994) Single base substitutions give rise to a five-banded DNA profile at the D10S28 locus. Transfusion 34:412-414.
27. Allen R.W. (1995) Annual Report Summary (Data submitted for 1994). AABB Parentage Testing Standards Committee, American Association of Blood Banks, Bethesda, MD.
28. Allen R.W. (1997) Annual Report Summary (Data submitted for 1995 and 1996), Parentage Testing Standards Committee, American Association of Blood Banks, Bethesda, MD.
29. Cagliotti S., and Allen R.W. (1996) Molecular methods available for tissue typing. Tissue and Cell Report 3:27-28.
30. Allen R.W. (1995) Overview of DNA analysis methods. In: Molecular methods for diagnosis and research. (Allen R.W. and Aubuchon J., eds) American Assoc. of Blood Banks, Bethesda, MD p1-24.
31. Harrison C., Allen R.W., Morris J., Polesky H., Roby R., and Walker R.H. (1996) Current practices in the use of RFLP analysis in parentage testing. In: Proceedings of the International Symposium for Human Identification. Promega Corp, Madison, WI.
32. Harrison C., Allen, R.W., Morris J., Polesky H., Roby R., and Walker R.H. (1996) Current practices in the use of PCR analysis in parentage testing. In: Proceedings of the International Symposium for Human Identification. Promega Corp., Madison, WI.
33. Allen, R.W. Prenatal blood grouping using the polymerase chain reaction, In: Applications of molecular biology to blood transfusion medicine. (Ed. George Garratty) AABB Press, American Association of Blood Banks, Bethesda, MD, c1997, p103-120.
34. Allen R.W. (1998) Annual Report Summary (Data submitted for 1997), Parentage Testing Standards Committee, American Association of Blood Banks, Bethesda, MD.
35. Allen, R.W. (1998) Parentage testing in the United States: The role of the American Association of Blood Banks. In: Profiles in DNA. (Isobel MacIver ed.), Promega Corp., Madison, WI, Volume 2, Number 2, p7-8.
36. Polesky H.F., Allen, R.W., Eisenberg A.J., Harrison C.R., Roby, R., and Walker R.H. (1998) Scoring systems for DNA test results from parentage testing proficiency program. Progress in Forensic Genetics 7: 546-548.

37. Harrison, C.R., Allen, R.W., Eisenberg A.J., Polesky H.F., Roby R., and Walker R.H. (1998) PCR systems used by laboratories participating in the AABB/CAP parentage testing proficiency program. *Progress in Forensic Genetics* 7: 544-545.
38. Allen R.W. (1999) Annual Report Summary (Data submitted for 1998), Parentage Testing Standards Committee, American Association of Blood Banks, Bethesda, MD.
39. Allen, R.W., Traver, M. and Pritchard, J.K. (2000) DNA analysis in a paternity case involving a triploid fetus. *Transfusion* 40:240-244..
40. Allen R.W. (2000) Annual Report Summary (Data submitted for 1999), Parentage Testing Standards Committee, American Association of Blood Banks, Bethesda, MD.
41. Allen, R.W., Harrison, C.R., Eisenberg A.J., Roby, R.K., Walker R.H., Wenk R.E., and Polesky H.F. (2000) Grading of quantitative data in the CAP/AABB parentage testing program. *Progress in Forensic Hemogenetics* 8:602-605.
42. Polesky H.F., Allen R.W. Eisenberg A.J., Harrison C.R., Roby R.K., Walker R.H., and Wenk R.E. (2000) Paper problems to evaluate parentage laboratory proficiency. *Progress in Forensic Hemogenetics* 8:606-608.
43. Polesky H.F., Allen R.W., Eisenberg A.J., Harrison C.R., Roby R.K., Walker R.H., and Wenk R.E. (2000) Systems reported by laboratories participating in the AABB/CAP parentage testing program 1993-1998. *Progress in Forensic Hemogenetics* 8:609-611.
45. Allen, R.W. (2000) Application of molecular biology to parentage testing and forensic medicine. *Molecular Biology in Blood Transfusion. Proceedings of the 24th International Symposium on Blood Transfusion, Groningen, Holland, (Eds. C.TH. Smit Sibinga and H.G. Klein), Kluwer Academic Publishers, Dordrecht, The Netherlands, 35:35-54.*
46. Allen, R.W. and Pritchard J. (2000) Novel statistical interpretation in a paternity case involving separate mutations in two children at the D5S110-VNTR locus. *J. Assoc. Genetic Tech.* 26:57-61.
47. Allen R.W., Ward S.A., and Harris R. (2001) Prenatal genotyping for the RhD blood group antigen: Considerations in developing an accurate test. *Genetic Testing* 4:377-381.
48. Allen R.W. (2001) Annual Report Summary (Data submitted for 2000), Parentage Testing Standards Committee, American Association of Blood Banks, Bethesda, MD.
49. Allen R.W., Pritchard J., Harman J., and Chandler S., (2000) Phenotypic differences at the HUMvWA locus amplified with different STR kits. (Letter to the Editor), *J. Forensic Sciences* 5:1166-1167.
50. Morling N., Allen R.W., Carracedo A, Geada H., Guidot F., Hallenberg C., Martin W., Mayr W., Olaisen B., Pascali V., and Schneider P.M. (2002) Paternity testing commission

of the International Society of Forensic Genetics: Recommendations on genetic investigations in paternity cases. *For. Sci. International* 3447:1-10.

51. Gorlin J., Mount M.K., Allen R.W., and Pritchard J.K. (2002)(Abstract) Will the real father please stand up?: Case report of a difficult to resolve pair of reportedly unrelated alleged fathers. *Transfusion* 42 (Supplement): 42S.

52. Allen, R.W., Eisenberg A., Harrison C., Walker R.H., Young C.T., Zeagler D.L., Roby R., and Polesky H.F. (2003) Grading of qualitative and quantitative responses in the PI proficiency survey of the College of American Pathologists for mailings in 1997-2000. *Progress in Forensic Genet.* 1239: 825-829.

53. Edwards, M. and Allen R.W. (2004) Characteristics of mutations at the D5S818 locus studied using a tightly linked marker. *Transfusion* 44:83-90.

54. Allen R.W., Roby R.K., Harrison C., Eisenberg A.J., and Polesky H.F. (2004) Proficiency testing programs for DNA typing laboratories offered by the College of American Pathologists. *Prog. In Forensic Genet. (International Congress Series, 1261)* 10:121-124.

55. Allen R.W., Harman K., and Sieker A. (2004) eDNA: Networking software tailored for identity testing laboratories. *Prog. In Forensic Genet. (International Congress Series, 1261)* 10:118-120.

56. Edwards M., and Allen R.W. (2004) Characteristics of D5S818 mutations revealed through study of a flanking marker. *Prog. In Forensic Genet. (International Congress Series, 1261)* 10:118-120.

57. Harrison, C., Allen R.W., Eisenberg A.J., Polesky H.F., Roby R., Young C. Te, Walker R., and Zeagler D. (2004) Phenotype versus genotype reporting for DNA polymorphisms. *Prog. In Forensic Genet. (International Congress Series, 1261)* 10:526-528.

58. Allen, R.W. and Pritchard, J.K. (2004) Resolution of a serum sample mixup through the use of STR DNA typing. *Transfusion* 44: 1750-1754.

59. Allen, R.W. (2005) Just how big is DNA based identification? (Editorial) *Journal of the Assoc. of Genetic Technologists* 31:14.

60. Allen, R.W. (2005) How much DNA is too much? (Editorial) *Journal of the Assoc. of Genetic Technologists* 31: 170.

61. Allen, R.W. and Fuller, V.M. (2006) Quantitation of human genomic DNA through amplification of the amelogenin locus. *J. For. Sci.* 51:76-81.

62. Allen, R.W., Fu, J., Reid, T.M., and Baird M. (2007) Considerations for the interpretation of STR results in cases of questioned half sibship. *Transfusion* 47:515-519.



63. Allen R.W., Pogemiller J., Joslin J., Gulick, M., and Pritchard, J.K. (2008) Identification through typing of DNA recovered from touch transfer evidence: Parameters affecting yield of recovered human DNA. *J. Forensic Identification* 58:33-41.
64. Allen, R.W. and Wagner, J. (2008) Changes in forensic science education and training in response to changes in the nature of the law-science interface. *Tulsa Law Review*, University of Tulsa, School of Law, Tulsa, Oklahoma.
65. Allen R.W., Pritchard J.K., Ku D.H., and Harman K. (2008) The importance of peer review in maintaining the quality of accreditation for the evolving field of family relatedness testing. *Transfusion* 48:1517-1519.
66. Smith B.G., Lee B., Budowle B., and Allen R.W., Population Data for 15 STR Loci (Identifiler® kit) in a Filipino Population (2009). *Journal of Legal Medicine* 11:159-161.
67. Allen, R.W. Identification through DNA analysis in criminal and family relatedness investigations. In: *Molecular Diagnostics: Techniques and Applications for the Clinical Laboratory* (Eds. Grody W.W., Nakamura R.M., Kiechle F.L., and Strom C.) Elsevier, San Diego, CA), p381-398, c2010.
68. Wilson J., Fuller V., Benson G., Juroski D., Duvall E., Fu J., Pritchard J., and Allen R. (2010) Molecular assay for screening and quantitating DNA in biological evidence: The modified Q-TAT assay. *Journal of Forensic Science*, 55:1050-1057.
69. Allen R.W. and Harrison, C. Parentage Testing. In: *Modern Blood Banking and Transfusion Practices*. (Edited by Harmening D.M.) 6<sup>th</sup> Edition, F.A. Davis, Philadelphia, PA, Chapter 43, 2012, p495-508.
70. Allen R.W. and Fuller V. (2011) Method for simultaneously determining in a single multiplex reaction, gender of donors and quantities of genomic DNA and ratios thereof, presence and extent of DNA degradation, and PCR inhibition within a human DNA sample. U.S. Patent 11/960,113 (RCE), awarded 11/29/11.
71. Worthen, C., Fu J., Pritchard J., and Allen R.W. Evaluation of haplotypes to enhance the power of STR test kits in cases of questioned family relationships. In: *Profiles in DNA*, Promega Corporation Web site. <http://www.promega.com/resources/articles/profiles-in-dna/2012/haplotypes-in-family-relationship-testing/> Updated 2012.
72. Rogers, S.M., Payton, M., Allen, R.W., Melcher, U., Carver, J., and Fletcher, J. A single nucleotide polymorphism genotyping method for Wheat streak mosaic virus *Journal: Investigative Genetics*, <http://www.investigativegenetics.com/content/3/1/10> 2012
73. Weinbrecht, K., Taylor, A., Beauman C.N. and Allen Robert W. Exploration of amplified fragment length polymorphism analysis as an effective tool for discriminating pathogenic strains of bacteria. *Res. and Reports in Med. Foren. Sci.*, 2012;2:1-9..
74. Allen R.W. , Opportunities and Resource Utilization in Delivering Graduate Education

in the Forensic Sciences. *Forensic Science Policy & Management: An International Journal* 2012;4:165-168.

75. Allen R.W. and Polesky H.F. Parentage and Family Relationship Testing. In: *Molecular Pathology in Clinical Practice*, 2nd Edition, Debra G.B. Leonard, MD, PhD, Editor, Springer Publishing, N.Y., N.Y. In press.

76. Allen R.W. Parentage Testing and Kinship Analysis  
*Encyclopedia of Forensic Sciences (Second Edition)*, Editors-in-Chief: Jay A. Siegel and Pekka J. Saukko, Waltham, 2013, Pages 287–294.

77. Allen R.W. Methods in Parentage Testing. In: *Clinical Laboratory Blood Banking and Transfusion Medicine Practices*, (Eds:Johns G, Zundel W., Gockel-Blessing E., Denesluk L.) Prentice Hall, c2015, Chapter 19.

78 Smith, B., Vandegrift E., Fuller V., and Allen R.W. Detection and quantitation of DNA degradation in forensic samples: Q-TAT as both a quantitation and characterization tool in the forensic laboratory. *J. Forensic Sci.*, In press.