

Curriculum Vitae
Joy Halverson, DVM, MPVM

Professional Experience

7/2014 to present Consultant, Antech Diagnostics
12/01-6/2014 Director and Senior Scientist, Zoogen Services, 1046 Olive Drive, Suite A, Davis, CA 95616
4/96-11/01 Scientist, Celera AgGen, 1756 Picasso Avenue, Davis, CA
1/89-4/96 President, Zoogen, Inc. 1756 Picasso Ave, Davis, CA
1/87-12/88 Post-doctoral Researcher, University of California, Davis, CA
7/81-12/86 Veterinarian, veterinary hospitals in Canberra, Australia and Sacramento, CA

Education

<u>Year</u>	<u>Degree</u>	<u>Institution</u>	<u>Specialization</u>
1985	Masters	University of California, Davis, CA	Veterinary Epidemiology
1981	Doctorate	University of California, Davis, CA	Veterinary Medicine
1976	Bachelor	University of California, San Diego, CA	Biology

Professional Memberships

American Academy of Forensic Science
American Veterinary Medical Association
Association of Avian Veterinarians

Publications

Grahn RA, Kurushima JD, Billings NC, Grahn JC, Halverson JL, Hammer E, Ho CK, Kun TJ, Levy JK, Lipinski MJ, Mwenda JM, Ozpinar H, Schuster RK, Shoorijeh SJ, Tarditi CR, Waly NE, Wictum EJ, Lyons LA. Feline non-repetitive mitochondrial DNA control region database for forensic evidence. Forensic Sci Int Genet. 2011 Jan;5(1):33-42. Epub 2010 Feb 25.

Dayton M, Koskinen MT, Tom BK, Mattila AM, Johnston E, Halverson J, Fantin D, DeNise S, Budowle B, Smith DG, Kanthaswamy S. Developmental validation of short tandem repeat reagent kit for forensic DNA profiling of canine biological material. Croat Med J. 2009 Jun;50(3):268-85.

Kanthaswamy S, Tom BK, Mattila AM, Johnston E, Dayton M, Kinaga J, Erickson BJ, Halverson J, Fantin D, DeNise S, Kou A, Malladi V, Satkoski J, Budowle B, Smith DG, Koskinen MT. Canine population data generated from a multiplex STR kit for use in forensic casework. *J Forensic Sci.* 2009 Jul;54(4):829-40. Epub 2009 May 26.

Grahn RA, Kurushima JD, Billings NC, Grahn JC, Halverson JL, Hammer E, Ho CK, Kun TJ, Levy JK, Lipinski MJ, Mwenda JM, Ozpinar H, Schuster RK, Shoorijeh SJ, Tarditi CR, Waly NE, Wictum EJ, Lyons LA. Feline non-repetitive mitochondrial DNA control region database for forensic evidence. *Forensic Sci Int Genet.* 2011 Jan;5(1):33-42. Epub 2010 Feb 25.

J. Halverson and C. Basten. Forensic DNA identification of animal-derived evidence: tools for linking victims and suspects. *Croatian Medical Journal* 46(4): 598-605. August 2005.

J. Halverson and C. Basten. 2005. A PCR multiplex and database for forensic identification of dogs. *Journal of Forensic Science* (50(2): 352-63.

S. Denise, E. Johnston, J. Halverson, K. Marshall, D. Rosenfeld, S. McKenna, T. Sharp, J. Edwards. 2004. Power of exclusion for parentage verification and probability of match for identity in American Kennel Club breeds using seventeen canine microsatellite markers. *Animal Genetics*: 35(1):14-27.

C. Vila, C. Walker, A. Sundqvist, O. Flagstad, Z. Andersone, A. Casulli, I. Kojola, H. Valdman, J. Halverson, H. Ellengren. 2003. Combined use of maternal paternal and bi-parental genetic markers for the identification of wolf-dog hybrids. *Heredity* 90(1): 17-24.

J. Halverson, L. Spelman. 2002. Sex determination and its role in management. *In Komodo Dragons - Biology And Management*, Smithsonian Institution Press, 2002. pp.165-177.

D. Eason, C. Millar, A. Cree, J. Halverson, D. Lambert. 2001. A comparison of five methods for assignment of sex in the Takahe (*Aves:Porphyrio Mantelli*). *Journal of Zoology*, 253(3):281-292.

C. Millar, G. Taylor, P. Moore, J. Halverson, D. Lambert. A novel restriction fragment length polymorphism for petrels or tube-nosed birds. *Molecular Ecology* 9(11):1915-1917.

A. Carmichael, A. Fridolfsson, J. Halverson, H. Ellengren. 2000. Male-biased mutation rates revealed from z and w chromosome-linked ATP synthase alpha-subunit (ATP5a1) sequences in birds. *Journal of Molecular Evolution*, 50(5): 443-447.

G. Shutler, P. Gagnon, G. Verret, H. Kalyn, M. Korkosh, E. Johnston, J. Halverson. 1999. Removal of a PCR inhibitor and resolution of DNA STR types in mixed human-canine stains from a five year old case. *Journal of Forensic Science* 44(3) :623-626. 1999.

J. Halverson, J. Dvorak, T. Stevenson. 1995. Microsatellite sequences for canine genotyping. United States Patent Application, Registration No. 36,377.

J. Halverson, G. Sverlow. 1994. Methods and compositions for the diagnosis of flea allergies. United States Patent Application, Serial No. 08/333,952.

J. Halverson, J. Dvorak. 1993. Avian sex identification probes. United States Patent Serial No. 08/194,131.

A. Fridolfsson, H. Cheng, N. Copeland, N. Jenkins, Liu Hsiao-Ching, T. Raudsepp, T. Woodage, C. Bhanu, J. Halverson, H. Ellengren. 1998. Evolution of the avian sex chromosomes from an ancestral pair of autosomes. *Proceedings of the National Academy of Sciences of the United States Of America*, 95(14):8147-8152.

C. Millar, C. Reed, J. Halverson, D. Lambert. 1997. Captive management and molecular sexing of endangered avian species: an application to the Black Stilt (*Himantopus novaezelandiae*) and hybrids. *Biological Conservation* 82(1):81-86.

T. Fleming, J. Halverson, J. Buchanan. 1996. Use of DNA analysis to identify sex of Northern Spotted Owls (*Strix Occidentalis Caurina*). *Journal Of Raptor Research* 30(3):118-122.

C. Millar, D. Lambert, S. Anderson, J. Halverson. 1996. Molecular sexing of the communally breeding Pukeko - an important ecological tool. *Molecular Ecology*5(2):289-293.

T. Sabo, R. Kesseli, J. Halverson, I. Nisbet, et al. 1994. PCR-based method for sexing Roseate Terns (*Sterna Dougallii*). *Auk*111(4):1023-1027.

J. Halverson, J. Dvorak. 1993. Genetic control of sex determination in birds and the potential for its manipulation. *Poultry Science*72(5):890-896.

J. Dvorak, J. Halverson, P. Gulick, K. Rauen, et al. 1992. cDNA cloning of a Z-linked and W-linked gene in gallinaceous birds. *Journal Of Heredity*83(1):22-25.

Abstracts

J. Halverson, C. Basten. The impact of canine inbreeding on likelihood calculations for the significance of DNA matches in forensic investigations. International Society of Animal Genetics. Tokyo, Japan. September 2004.

J. Halverson. 2002. Canine mitochondrial haplotyping and its use in criminal investigations. Cambridge Healthtech Institutes Fifth Annual DNA Forensics Meeting, Washington, DC. June 2002.

J. Halverson, E. Johnston, L. Bickel, T. Sharp, J. Edwards. 2000. The AKC breed study: STR polymorphism at 17 loci in 91 AKC-registered breeds. International Society of Animal Genetics. Minneapolis, Minnesota, USA. July 2000.

J. Halverson, M. Malandro. 2000. The utility of mitochondrial hypervariable regions (Hv1 And Hv2) as forensic tools of feline and canine identification. Plant and Animal Genome Viii, San Diego, California. January 2000.

J. Halverson, J. Edwards. 1998. Microsatellite polymorphism in major dog breeds. International Society of Animal Genetics. Auckland, New Zealand. July 1998. Abstract in Animal Genetics 29(Suppl.1)

J. Ziegler, Weller, J. Kuiper, M. Neff, J. Halverson, S. Bates. 1996. AFLP map of the dog genome. International Society of Animal Genetics. Tours, France. July 21-25, 1996. Abstract In Animal Genetics 27(Suppl.2)

D. Fantin, M. Bozzini, C. Gaiser, J. Halverson, S. Bates, J. Ziegler. 1996. Automating canine parentage and identification. International Society of Animal Genetics. Tours, France. July 21-25, 1996. Abstract in Animal Genetics 27(Suppl.2)

Presentations

Halverson J. Lessons in Sex Chromosome Evolution from DNA Sexing. Annual meeting of the Association of Avian Veterinarians. Minneapolis, MN August 2009.

Halverson J. Tallulah and the pursuit of justice - Avian mitochondrial typing for forensic identification. Annual meeting of the Association of Avian Veterinarians. Providence, RI August 2007.

Halverson J. Avian mitochondrial typing for forensic identification. Annual meeting of the American Academy of Forensic Science. Seattle, WA February 2006.

Halverson, J. Identification of canine and feline DNA in forensic investigations. Fifth ISABS (International Society for Applied Biological Sciences) Conference in

Forensic Genetics and Molecular Anthropology. Duprovnik, Croatia. September 2005

Halverson, J. Hanging by a Hair: Forensic identification with animal hairs. Forensics and the law - seminar at DePaul University, Chicago, IL August 2005

J. Halverson. Hanging by a Hair – Animal hairs in casework. Trace evidence section of the combined meeting of the Southern Association of Forensic Scientists and the Mid-Atlantic Association of Forensic Scientists, Orlando, FL September 2004

J. Halverson, L. Lyon. Forensic identification of feline hairs – casework and a mitochondrial database. Annual meeting of the American Academy of Forensic Science, Dallas, TX February 2004

J. Halverson, A. Perroud, C. Gaiser. 2003. Forensic identification of canine hairs: is heteroplasmy significant? Promega 14th International Symposium on Human Identification. Phoenix, AZ October 2003 (Invited)

J. Halverson, N. Dvorak, A. Carrera, A. Kahn, A. Basten, C. Gaiser. Canine DNA testing and its use in criminal investigations. 2003. Bi-Annual Meeting of the European Academy of Forensic Science, Istanbul, Turkey September 2003. (Invited)

J. Halverson. 2002. Animal DNA and its application to homicide investigations. Virginia Homicide Investigators, September 30-October 2, 2002, Williamsburg, VA (Invited)

J. Halverson. 2000. DNA typing of animal-derived evidence in human crimes. Cambridge Healthtech Institute's Fourth Annual DNA Forensics , May 31-June 2, 2000. Springfield, VA (Invited).

J. Halverson. 1997. DNA testing in animals-from discovery to high-throughput application. Cambridge Healthtech Institute's Impact of Molecular Biology on Animal Health and Production Research, March 10-11, 1997. Baltimore, MD (Invited).

Continuing Education

Annual meeting of the Association of Avian Veterinarians. San Diego, CA August 2010.

Annual meeting of the Association of Avian Veterinarians. Minneapolis, MN August 2009.

Annual meeting of the Association of Avian Veterinarians. Providence, RI August 2007.

Annual meeting of the American Academy of Forensic Science. Seattle, WA February 2006.

Fifth ISABS (International Society for Applied Biological Sciences) Conference in Forensic Genetics and Molecular Anthropology. Duprovnik, Croatia. September 2005

Forensics and the law – seminar at DePaul University, Chicago, IL August 2005

Combined meeting of the Southern Association of Forensic Scientists and the Mid-Atlantic Association of Forensic Scientists, Orlando, FL September 2004

Annual meeting of the American Academy of Forensic Science, Dallas, TX February 2004

Promega 14th International Symposium on Human Identification. Phoenix, AZ October 2003.

Biannual Meeting of the European Academy of Forensic Science, Istanbul, Turkey. September 2003.

Annual Meeting of the Association of Avian Veterinarians, Pittsburgh, PA. August 2003.

Annual Meeting of the American Academy Of Forensic Science. Chicago, IL. February 2003.

Annual Meeting of the Association of Zoo Veterinarians, Milwaukee, WI. October 2002.

Annual Meeting of the Association of Avian Veterinarians, Monterey, CA. August, 2002.

DNA Forensics (5th Annual Meeting), Cambridge Healthtech Institute, Washington, DC. June 2002.

Biannual Meeting of the International Society of Animal Genetics. Minneapolis, MN, USA. July 2000.

DNA Forensics (4th Annual Meeting), Cambridge Healthtech Institute, Springfield, VA. May 2000.

Plant And Animal Genome VIII Conference, San Diego, CA. January 2000.

Plant And Animal Genome VII Conference, San Diego, CA. January 1999.

Canine Health Foundation/American Kennel Club Canine Genetic Health Conference, St. Louis, MO. November 1999.

Biannual Meeting of the International Society of Animal Genetics. Auckland, New Zealand. July 1998.

Canine Health Foundation/American Kennel Club Molecular Genetics and Canine Genetic Health Conference, St. Louis, MO. November 1997.

Canine Health Foundation/American Kennel Club National Parent Club Canine Health Conference, St. Louis, MO. October 1997.

Impact Of Molecular Biology on Animal Health and Production Research, Cambridge Healthtech Institute, Baltimore, MD. March 1997.

Biannual Meeting of the International Society of Animal Genetics. Tours, France. July 1996.

American Kennel Club Parent Club Genetics Conference, Florham Park, NJ. October 1995.

American Kennel Club Parent Club Genetics Conference, Florham Park, NJ. October 1994.

Closed Casework

State of Montana vs. Richard Covington 2009

Richard Covington was indicted for the murders of Norman Leighton and Patti Hubbert. The victims were found bound and gagged; a single dog hair was found on the towel used to gag Leighton. The hair was similar in appearance to dog hairs on the suspect's clothing and from his dog. The mitochondrial type of the dog hair matched the suspect's dog and was rare, occurring only once in a database of 307 dogs. Richard Covington was convicted.

State of Missouri v. Henry Polk 2009

Henry Polk was indicted for the murder of his employer. The victim's car keys had been removed from his pocket; tapelifts of the turned-out pockets recovered a single cat hair. The cat hair had a rare mitochondrial profile that was found in related cats owned by the suspect's girlfriend. The finding was confirmed by another laboratory and a survey of cats in the community confirmed the rarity of the profile. This case was the first use of feline mitochondrial typing in a criminal proceeding. Henry Polk was convicted.

State of Illinois v. Jeffrey Pelo 2008

Jeffrey Pelo, a Bloomington, Illinois police sergeant, was indicted for the rapes of four women over a two-year period. After being observed potentially stalking a woman by a fellow officer, he was identified from photos and voice recognition by some of the victims. Although Pelo did not own a cat, a cat hair was recovered from a ski mask in his home. The cat had a common mitochondrial profile that was shared by several cats owned by the victims. Other evidence in the trial included the victims' testimonies, the suggestive nature of pornography from Pelo's computer, and electronic records showing that Pelo had used police department computers to research his victims. Pelo was convicted and sentenced to life in prison.

State of Indiana v. Carlton Davis Jr, 2007

Local firefighter Carlton Davis Jr. was convicted of felony charges for promoting an animal in fighting, and various misdemeanor counts involving dog fighting. After neighbors reported that chained dogs were starving and without water, police confiscated 16 pitbull dogs, many with severe bite wounds, and additional dog carcasses. A bloodstained carpet from a wooden enclosure was recovered. Investigator Michelle Weaver believed it to be from the "pit" used to stage dog fights. Davis claimed it was a whelping box and that the bloodstains were the result of normal parturition. Some stains showed mixed STR profiles, others had a major contributor. Based on the use of Y chromosome STRS, most of the stains came principally from male dogs. The two major contributors did not match any of the confiscated dogs (investigators did not collect samples from the deceased dogs), nor were they offspring of any of the confiscated dogs. Davis was sentenced to two years in prison followed by community service and probation.

State of California v. Kenden Ige 2006

The charred bodies of two men, Haang Chin and Cheuk Cheung, were found near Barstow, California. The men had last been seen in the company of Kenden Ige, his brother and a friend. Investigators recalled a suspicious scene in rural Newberry Springs three weeks earlier in which someone had attempted to burn several items. The wallet found at the scene belonged to one of the victims. Among the partially burned items was a car floor mat with numerous dog hairs. Mitochondrial types of the dog hairs matched the three unrelated dogs owned by Ige. In addition to the dog hair evidence, Ige's DNA on cigarette butts at the Newberry Springs site and traces of the victim's DNA in Ige's car linked him to the crime. Ige was convicted of two counts of first-degree murder.

Shalanda Augillard v. Tiffany Madura and Richard Toro 2005-2008

Augillard's dog Jazz, a black Cocker Spaniel, was lost during Hurricane Katrina, rescued and fostered to Austin TX residents Madura and Toro. When Augillard located Jazz, Madura and Toro refused to give her back. A Texas judge ruled that Augillard had to prove Jazz's identity. Augillard found a dog brush in her New Orleans home and skin debris on the brush produced a full DNA profile

matching the disputed dog. The judge ruled in favor of the Austin couple when their lawyer asserted that the brush evidence was “planted”. At Dr. Halverson’s suggestion, Augillard then requested Jazz’s pedigree records from the American Kennel Club and found a maternal relative, a sibling living in South Carolina. The mitochondrial haplotype of the sibling matched that of the disputed dog. The judge ruled again in favor of the Texas couple. Augillard appealed to the Third District Texas Court of Appeals who ruled in her favor. Jazz was returned to her almost three years after her loss during Hurricane Katrina.

Operation Hadrian 2006

Peter Smith was the suspect in the December 2005 abduction and sexual assault of 7-year-old Dionne Clark-Patterson. She was taken from her bath in Willington Quay, Northumbria in Great Britain (the family lived in an older home with the bathroom in an outbuilding). The assault took place in a car and the child was released naked in a nearby street. Geoffrey Brown, a local resident, found Dionne and covered her with a child’s bathrobe from his house. Several animal hairs were recovered from the bathrobe. Peter Smith owned a dog; police hoped to link him to the crime with the dog’s hair transferred from his car to Dionne and hence to the bathrobe. Geoffrey Brown owned 2 dogs and a cat. All the hairs recovered from the bathrobe matched Brown’s pets. Peter Smith was convicted based on other evidence including Dionne’s description of his car.

State of Delaware v. Eric Henry 2005

The defendant was accused of a home burglary during which the family dog, a 7-month-old Labrador Retriever, was beaten to death with a hammer. A search of the suspect’s home produced white athletic shoes with blood spatter and stains on the soles. STR typing of the stains matched the beaten dog. The defendant filed a plea bargain just before trial.

Operation Glass 2005

Tracey Cameron and Graham Haylett were the suspects in the 1996 murder of Leonard Fulbirg, Tracey’s common law husband. Fulbirg had disappeared nine days after his release from incarceration. Six months later, his charred partial skeleton was found near a local road. A cold case investigation led by Detective Inspector Christopher Binns had identified (by microscopic examination) dog hairs adhered to the skeleton. During his incarceration, Fulbirg’s Alsatian dog Tanya had lived with Cameron along with a Yorkshire Terrier. Det. Insp. Binns believed that Cameron and Haylett murdered Fulbirg and that hairs from their household had adhered to his remains as they were disposing of the body. Binns had acquired known hairs from Tanya from a suitcase with Fulbirg’s clothes but was unable to find known hairs from the Yorkshire Terrier. Efforts to find a maternal relative to the Yorkshire Terrier were unsuccessful. Of the six hairs that were successfully haplotyped, four matched Tanya and two had a different but identical type. In March 2006, Cameron and Haylett were convicted of murder at Leeds Crown Court.

State of Delaware v. Irina Malinovskaya 2005

The defendant was charged with the murder of Irina Zlotnikov, the current girlfriend of Robert Bondar, Malinovskaya's former boyfriend. Investigators believed that Malinovskaya had stalked her former lover, visited his apartment while Zlotnikov was alone, murdered her by blunt force trauma to the head and removed items from the apartment into a rental car. Bondar owned a dog and cat and numerous animal hairs were found in the rental car. Of the 16 hairs analyzed, one produced a full STR profile matching Bondar's dog. Eight more hairs had mitochondrial haplotypes matching Bondar's dog and one feline hair had a mitochondrial haplotype matching Bondar's cat. Six more dog hairs with a different mitochondrial haplotype were also found in the car. Two trials resulted in hung juries; in a third trial Malinovskaya was convicted of evidence tampering. In June 2008 she plead no contest to manslaughter and was sentenced to five years with time served and immediate deportation to Russia upon release.

City of Eau Claire v. Evan Zimmerman 2004

Evan Zimmerman had successfully appealed his conviction for the murder of Kathleen Thompson, a former girlfriend. To retry him, police reexamined the evidence and found a single dog hair microscopically consistent with Zimmerman's dog on the underwear of the victim. The mitochondrial haplotype of the hair matched Zimmerman's dog. However, trial testimony revealed that Zimmerman and the victim had talked a few days before her murder and she disclosed to a friend that they had hugged each other. Additionally, the finding of only a single hair was not convincing given the police theory that Thompson had been murdered in Zimmerman's van and that the van was heavily contaminated with dog hair. This case is an excellent example of non-probative animal evidence; full disclosure of these facts would have resulted in the recommendation to not pursue testing of the dog hair. The prosecutor dropped charges in mid-trial. The Seventh Circuit Court of Appeals dismissed a lawsuit filed by Zimmerman against the City of Eau Claire and three of its police officers.

State of Illinois v. Cecil Sutherland, 2004

Sutherland was retried for the abduction, rape and murder of 10-year-old Amy Shultz. He had been convicted before but had appealed based on an incompetent defense. Mitochondrial typing of a human hair found on Amy was matched to Sutherland and excluded the other suspect in the case. Numerous dog hairs found on Amy's clothing matched Sutherland's dog Babe. The frequency of Babe's haplotype in QuestGen's database is 2.6% and the resulting likelihood ratio is 34.3.

State of Iowa v. Ben O'Donnell, 2003

The defendant was charged with first degree murder in the death of Tracy Ann Carson. The victim's body had been wrapped in a bolt of fabric, partially burned and then buried; spring flooding unearthed the body. Examiners noted animal hairs on the fabric. Mitochondrial haplotypes of the cat hairs, one of which was an uncommon type, could not be excluded to the suspect's three cats. DNA from

Tracy Carson was also found in O'Donnell's car. Ben O'Donnell pleaded guilty to second-degree murder.

Dog Attacks in Cook County, 2003

A woman was attacked and badly injured by two dogs in a park in Cook County, Illinois. Police searching for the dogs found a second female victim who died within a few hours. Dog A behaved threateningly toward police and was killed; tissue from the second victim was found in Dog A's stomach. Police trapped a number of dogs, including Dog B whom they strongly suspected based on the description of the surviving victim. In order to reassure the public, police needed to confirm that Dog B was the second attacker. Dr. Halverson tested the clothing of the two victims for canine DNA. Mitochondrial types from Dogs A and B, along with the types of two dogs owned by the victims, accounted for all DNA profiles found on the clothing.

State of Florida v. Brent Robert Huck, 2003

The defendant was charged with the kidnapping and murder of Misty April Morse. Dr. Halverson worked with Agent Terry Laufenberg of the Brevard County Sheriff's Office to test canine hair found on tape binding the victim's body. The mitochondrial haplotype of the hair matched that of the suspect's dog. Brent Huck was convicted on both counts.

Commonwealth of Pennsylvania v. Stephen Treiber, 2002.

The defendant was charged with arson and resulting death of his daughter. Dr. Halverson worked with Corporal Stepankow of the Millcreek Police and Federal Prosecutor Anthony Krasnek on both laboratory analysis and trial testimony. STR analysis was performed on a hair found encased in the glue of a threatening letter. The hair was included to the defendant's dog, suggesting that Treiber had fabricated the letter to convince police that the fire had been set by someone else. Stephen Treiber was convicted on all counts. His case is currently under appeal.

State of Iowa v. Andrew Rich, 2002.

The defendant was charged with the murder and robbery of John Helble. Dr. Halverson worked with Michael Schmit of the Division of Criminal Investigation and Linda Paulson from the Office of the Johnson County Attorney on both laboratory analysis and a deposition. A mitochondrial haplotype of a hair found in an ammunition box stolen from the victim matched that of the victim's dog. Mr. Rich pleaded guilty to voluntary manslaughter and first-degree robbery and was given a 35-year sentence.

State of California v. David Westerfield, 2002.

The defendant was charged with the kidnapping and murder of eight-year-old Danielle Van Dam. A mitochondrial haplotype of dog hairs found in the suspect's motor home, on a quilt, and in the lint-trap of his dryer matched that of the Van

Dam's dog. David Westerfield was convicted. This case was the first trial in the United States to admit canine mitochondrial DNA analysis as evidence.

Shasta County, California v. Joshua Lee Davis, 2002.

The defendant was charged with animal cruelty for the vicious stabbing death of a dog. A DNA profile from a knife in the defendant's possession could not be excluded to the dead dog. The defendant pleaded guilty to one felony count of cruelty to animals.

People vs. Jeanette Slover, Michael Slover Sr., and Michael Slover Jr.

The charge against the defendants was first degree murder of Karyn Hearn, the ex-wife of Michael Slover Jr. Dr. Halverson worked with Detective Mike Mannix and Prosecutor Richard Current of Macon County, IL to profile a dog hair recovered from the duct tape used in the disposal of the victim's body. All alleles seen in a partial DNA profile from the hair were consistent with the defendants' dog. The defendants were convicted.

People vs. Laykham, Ventura County, 2002.

The charge against the defendant was residential burglary and assault with intent to commit rape. Dr. Halverson worked with Investigator Dave Williams and Prosecutor Lisa Lee to show that hair found on the defendant's clothing could not be excluded to the victim's dog. Dr. Halverson testified in a Kelly-Frye admissibility hearing and at the trial. The defendant was found guilty of both charges.

City of Tulsa vs. Michael Ohman & Vanessa Sorja, 2000.

Dr. Halverson worked with Tulsa City Prosecutor Patrick Boulden and Officer Carl Willis on a case involving a serious dog attack. The defendants were the owners of the dog that allegedly attacked and seriously injured Wanda Cox. The owners claimed mistaken identification of the dog. STR profiles from hair from the woman's socks could not be excluded to the defendants' dog; they were found guilty of harboring a vicious animal.

Twelfth Judicial District State of New Mexico. State vs. Charles Martinez (Cause No. CR-99-108) and State vs. Chris Faviel (Cause No. CR-98-64), 1998-1999.

Dr. Halverson worked with Prosecuting Attorney Canon Stevens and Detective Jim Biggs on a homicide case. STR profiles from hair on the socks of the victim could not be excluded to the dog owned by one of the suspects. Dr. Halverson provided analysis and expert witness testimony for the trial of Charles Martinez. He was convicted. Chris Faviel filed a guilty plea.

New Jersey Division of Fish and Game Case#4-244-99/#5-244-99, 1999.

Dr. Halverson worked with Dr. Douglas Roscoe and Alan Keel of Forensic Science Associates to DNA profile an escaped Bengal tiger (deceased). The tiger was alleged to have escaped from a private facility in New Jersey; the owner of the facility claimed the tiger had come from a nearby safari park. The

evidence sample was a clump of fur found within the perimeter fence of the private facility. Dr. Halverson used domestic cat STR markers to profile the case samples and 20 tiger samples provided by Dr. Stephen O'Brien as a small database for the case. The clump of fur matched the deceased tiger. The facility has lately been closed and the tigers moved to a reserve in Texas.

Tom O'Connor vs. Irish Coursing Club, 1998.

Dr. Halverson worked with Pat Dalton, a prominent breeder of racing greyhounds, to vindicate Tom O'Connor of misrepresentation in the registration of a litter of puppies. In 1993, Serology Ltd., the Club's DNA testing laboratory, had purported that one puppy in the litter was excluded to the dam. DNA testing by four other laboratories worldwide, including Zoogen, Inc. had found no evidence of exclusion. Dr. Halverson testified at the 1998 hearing. Serology LTD was found to be in error. Tom O'Connor was awarded substantial financial compensation.

Office of the Prosecuting Attorney of King County Washington, 1998. The State Vs, Leulualahi (97-C-08256-9) and State vs. Tuilefano (97-C-01391-3) for the murder of Jay Johnson and Raquel Rivera. Dr. Halverson worked with Prosecuting Attorney Tim Bradshaw and Detective Kenneth O'Keefe on a double homicide case. STR profiles from bloodstains found on the clothing of the suspects could not be excluded to the victim's dog. Dr. Halverson provided analysis and expert witness testimony. Both suspects were convicted. This was the first trial using canine DNA evidence in the United States.

Royal Canadian Mounted Police Detachment File Number 91-0693 (reference: Schraeder, Daniel Fred-Murder of), 1996-1997.

Dr. Halverson and colleague Eric Johnston worked with Dr. Gary Shutler of the RCMP Forensic Laboratory in Winnipeg, Manitoba. Forensic samples of mixed canine/human bloodstains from a 1991 unresolved homicide case were analyzed. STR profiles from the non-human blood on the suspect's jeans could not be excluded to the victim's dog. The evidence was used by the Canadian Royal Counsel to assign murder charges against the primary suspect. In September 1997, the suspect filed a guilty plea.