University of Washington November, 2023

School of Medicine Curriculum Vitae

1. **PERSONAL DATA**

**Name**  Richard C. Harruff, MD, PhD

**Home Address**  4203 SW Manning Street

Seattle, WA 98116

(206) 550-9222

**Birthplace** Anderson, Indiana

**Citizenship** USA

1. **EDUCATION**

**1971-1976** MD - Indiana University School of Medicine, Indianapolis, Indiana

**1971-1976** PhD - Indiana University Department of Pathology,

Bloomington, Indiana

1. **POSTGRADUATE TRAINING**

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| **1976-1980** | Residency in Anatomic and Clinical Pathology. University of Wisconsin Hospitals and Clinics, Madison, Wisconsin |
| **1980-1981** | Rotating Clinical Internship. United States Public Health Service Hospital, Staten Island, New York |
| **1981-1982** | Fellowship in Surgical Pathology. New York University Medical Center, New York, New York |
| **1985-1986** | Fellowship in Forensic Pathology. University of Tennessee, Memphis, Tennessee |

1. **FACULTY POSITIONS HELD**

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| **1971-1974** | Associate Instructor. Indiana University, Department of Chemistry, Bloomington, Indiana |
| **1982-1984** | Senior Associate in Pathology. Emory University School of Medicine, Atlanta, Georgia |
| **1986-1988** | Instructor of Pathology. University of Tennessee College of Medicine, Memphis, Tennessee |
| **1988-1990** | Assistant Professor of Pathology. University of Tennessee College of Medicine, Memphis, Tennessee |
| **1990-1993** | Associate Professor of Pathology. Indiana University School of Medicine, Indianapolis, Indiana |
| **1995--present** | Clinical Assistant Professor of Pathology. University of Washington School of Medicine, Seattle, Washington |
| **2023--present** | Clinical Assistant Professor of Radiology. University of Washington School of Medicine, Seattle, Washington |

1. **HOSPITAL POSITIONS HELD**

Not Applicable

1. **CURRENT EMPLOYMENT**

Retired Chief Medical Examiner, King County Medical Examiner’s Office, Seattle, Washington

1. **HONORS**

**1974-196** National Health Service Scholarship, United States Public Health Service

1. **BOARD CERTIFICATION**

**1984** American Board of Pathology: Anatomic and Clinical Pathology

**1992** American Board of Pathology: Forensic Pathology

1. **CURRENT LICENSE TO PRACTICE**

Washington State MD00030892, 29 July 2023

1. **PROFESSIONAL ORGANIZATIONS**

National Association of Medical Examiners

American Academy of Forensic Sciences

1. **TEACHING RESPONSIBILITIES**

Teaching of UWSOM medical students and pathology residents in Anatomic and Forensic Pathology (Path 683)

Faculty of King County Medical Examiner’s Office Forensic Pathology Fellowship Training Program

Continuing Medical Education Course, weekly sessions “Problems in Forensic Pathology”

1. **EDITORIAL RESPONSIBILITIES**

### Not applicable

1. **SPECIAL NATIONAL RESPONSIBILITIES**

Not applicable.

1. **SPECIAL LOCAL RESPONSIBILITIES**

Not applicable.

1. **RESEARCH FUNDING**

CDC/American Public Health Data Sciences Demonstration Grant

Bureau of Justice Assistance Comprehensive Opioid, Stimulant, and Substance Abuse Program for Overdose Fatality Review

1. **BIBLIOGRAPHY**

**a) Manuscripts in refereed journals**

1. Bonsib SM, Harruff RC, Jenkins WT (1975). Factors Contributing to the Inhibition of Aspartate Aminotransferase by Dicarboxylic Acids. *Journal of Biological Chemistry* 250, 8635-8641.
2. Kelley CJ, Harruff RC, Carmack M (1976). Polyphenolic acids of lithospermum ruderale ii. Carbon-13 nuclear magnetic resonance of lithospermic and rosmarinic acids. *Journal of Organic Chemistry* 41, 449-455.
3. Harruff RC, Jenkins WT (1976). The binding of bromophenol blue to aspartate aminotransferase. *Archives of Biochemistry and Biophysics* 176, 206-213.
4. Harruff RC, Jenkins WT (1976). The effects of halides on the equilibrium and reactivity of aspartate aminotransferase. *Archives of Biochemistry and Biophysics* 176, 394-401.
5. Harruff RC, Jenkins WT (1976). A carbon-13 nmr study of the B-6 vitamins and of their aldimine derivatives. *Organic Magnetic Resonance* 8, 548-557.
6. Golichowski A, Harruff RC, Jenkins WT (1977). The effects of pH on the rates of isotope exchange catalyzed by alanine aminotransferase. *Archives of Biochemistry and Biophysics* 178, 459-467.
7. Harruff RC, Jenkins WT (1978). The mechanism of anion inhibition of aspartate aminotransferase. *Archives of Biochemistry And Biophysics* 188, 37-46.
8. Imbeau SA, Harruff RC, Hirscher M, Reed CE (1978). Terbutaline's effects on the allergy skin test. *Journal of Allergy and Clinical Immunology* 62, 193-196.
9. Jenkins WT, Harruff RC (1979). Solvent and substrate deuterium isotope effects on a transamination reaction catalyzed by pig heart aspartate aminotransferase. *Archives of Biochemistry and Biophysics* 192, 421-429.
10. Padmalatha C, Harruff RC, Ganick D, Hafez GR (1980). Glioblastoma multiforme with tuberous sclerosis. *Archives of Pathology and Laboratory Medicine* 104, 649-650.
11. Harruff RC (1983). Chemical-biological warfare in Asia. *Journal of the American Medical Association* 250, 497-498.
12. Harruff RC, Rohn RJ (1983). Potential errors in the laboratory diagnosis of paroxysmal nocturnal hemoglobinuria. *American Journal of Clinical Pathology* 80, 152-158.
13. McClellan MW, Nassar V, Harruff RC, Mann BB, Finnerty DP, Hewan-Lowe KO (1985). Endometrial carcinoma of the prostatic utricle: a tumor of prostatic origin. *Journal of Urology* 143, 769-773.
14. Harruff RC, Bell JS (1987). Asphyxiating laryngeal cyst. *The American Journal of Forensic Medicine and Pathology* 8, 68-70.
15. Harruff RC, Francisco JT (1987). Cocaine-related deaths in Memphis and Shelby County. *Journal of the Tennessee Medical Association* 80, 475-477.
16. Harruff RC, Ferrell CL, Hagan J, Hamner HW, Hancock D (1987). Dissecting aneurysm of the coronary artery. *Journal of the Tennessee Medical Association* 8, 603-604.
17. Smith OC, Harruff RC (1988). Evidentiary value of the contents of hollow point bullets. *Journal of Forensic Sciences* 33, 1052-1057.
18. Harruff RC, Francisco JT, Elkins SE, Phillips AM, Fernandez S (1988). Cocaine and homicide in Memphis and Shelby County: an epidemic of violence. *Journal of Forensic Sciences* 33, 1231-1237.
19. Hall JC, Harruff RC (1989). Fatal cardiac arrhythmia in a patient with interstitial myocarditis related to chronic arsenic poisoning. *Southern Medical Journal* 82, 1557-1560.
20. Harruff RC (1989). Telecommunications for G.R.I.P.E. - an evaluation of the options. *Bulletin of Pathology Education* 14, 39-42.
21. Harruff RC (1990). G.R.I.P.E. technology survey. *Bulletin of Pathology Education* 15, 21-27.
22. Harruff RC, Phillips AM, Fernandez GS (1991). Cocaine-related deaths in Memphis and Shelby County - ten year history, 1980-1989. *Journal of the Tennessee Medical Association* 84, 66-72.
23. Harruff RC (1991). Multimedia for lectures: preparation of 35 mm slides with a computer system. *Bulletin of Pathology Education* 16, 73-78.
24. Harruff RC (1992). So-called accidental firearm fatalities in children and teenagers in Tennessee, 1961-1988. *The American Journal of Forensic Pathology and Medicine,* 13, 290-298.
25. Harruff RC, Hawley DA, Danesh H (1992). Remediation of pathology students using the National Library of Medicine Videodisc Series in Pathology. *Bulletin of Pathology Education* 17, 37-45.
26. Satoshi M, Harruff RC, Burr DB (1993). Microcracks in articular calcified cartilage of human femoral heads. *Archives of Pathology and Laboratory Medicine* 117, 196-198.
27. Harruff RC (1993). Programs for authoring "Slice of Life" interactive videodisc applications using MS-DOS computers. *Bulletin of Pathology Education* 18, 25-30.
28. Harruff RC (1993). Subendocardial hemorrhages in forensic pathology autopsies. *The American Journal of Forensic Medicine and Pathology* 14, 284 - 88.
29. Vogelweid CM, Verina T, Norton J, Harruff RC, Ghetti B (1993). Hypospermatogenesis is the cause of infertility in the male *Weaver* mutant mouse. *Journal of Neurogenetics* 9, 89-104.
30. Hawley DA, Harruff RC, Pless JE, Clark MA (1994). Disinterment from paving materials: use of heavy equipment for exhumation and examination of bodies. *Journal of Forensic Sciences* 39, 100-106.
31. Harruff RC, Llewellyn AL, Clark MA, Hawley DA, Pless JE (1994). Firearm suicides during confrontations with police. *Journal of Forensic Sciences* 39, 402-411.
32. Eppley BL, Harruff RC, Shah M, Sadove AM (1994). Fibrous hamartomas of the scalp in infancy. *Plastic and Reconstructive Surgery* 94, 195-197.
33. Harruff RC (1995). Comparison of contact shotgun wounds of the head produced by different gauge shotguns. *Journal of Forensic Sciences* 40, 801-804.
34. Kropp BP, Eppley BL, Prevel CD, Rippy MK, Harruff RC, Badylak SF, Adams MC, Rink RC, Keating MA (1995). Experimental assessment of small intestinal submucosa as a bladder wall substitute. *Urology* 46, 396-400.
35. Hartshorne NJ, Harruff RC, Logan BK (1995). Unexpected amantadine intoxication in the death of a trauma patient. *The American Journal of Forensic Medicine and Pathology* 16, 340-343.
36. Harruff RC (1995). Contributions of forensic pathology to medical student education. *Bulletin of Pathology Education* 20, 71-81.
37. Hathaway PB, Stern EJ, Harruff, RC, Heimbach DM (1996). Steam inhalation causing delayed airway occlusion. *AJR American Journal of Roentgenology* 166, 322.
38. Logan BK, Weiss EL, Harruff RC (1996). Case report: distribution of methamphetamine in a massive fatal ingestion. *Journal of Forensic Sciences* 41, 322-323.
39. Taylor JA, Krieger JW, Reay DT, Davis RL, Harruff RC, Cheney LK (1996). Prone sleep position and the sudden infant death syndrome in King County, Washington: a case-control study. *Journal of Pediatrics* 128, 626-630.
40. Haddix TL, Harruff RC, Reay DT, Haglund WD (1996). Asphyxial suicides using plastic bags. *The American Journal of Forensic Medicine and Pathology* 17, 308-311.
41. Hartshorne NJ, Reay DT, Harruff RC (1997). Accidental firearm fatality involving a hand-crafted pen gun. Case report. *The American Journal of Forensic Medicine and Pathology* 18, 92-95.
42. Hartshorne NJ, Harruff RC, Alvord EC Jr (1997). Fatal head injuries in ground-level falls. *The American Journal of Forensic Medicine and Pathology* 18, 258-264.
43. Mori S, Harruff RC, Ambrosius W, Burr DB (1997). Trabecular bone volume and microdamage accumulation in the femoral heads of women with and without femoral neck fractures. *Bone* 21, 521-526.
44. Harruff RC, Avery A, Alter-Pandya AS (1998). Analysis of circumstances and injuries in 217 pedestrian traffic fatalities. *Accident Analysis and Prevention* 30, 11-20.
45. Brundage SI, Harruff RC, Jurkovich GJ, Maier RV (1998). The epidemiology of thoracic aortic injuries in pedestrians. *Journal of Trauma: Injury, Infection and Critical Care* 45, 1010-1014.
46. Raven KP, Reay DT, Harruff RC (1999). Artifactual injuries of the larynx produced by resuscitative intubation*. American Journal of Forensic Medicine and Pathology* 20, 31-36.
47. O’Hara M, Harruff RC, Smialek JE, and Fowler DR (2000). Sleep location and suffocation: how good is the evidence? *Pediatrics* 105, 915-917.
48. Kuehn CM, Taylor KM, Mann FA, Wilson AJ, Harruff RC (2000). Validation of chest X-ray comparisons for unknown decedent identification*. Journal of Forensic Sciences* 47, 725-9.
49. Li MK, Beck MA, Shi Q, Harruff RC (2004). Unexpected hazard of illegal immigration: outbreak of viral myocarditis exacerbated by confinement and deprivation in a shipboard cargo container. *American Journal of Forensic Medicine & Pathology* 25, 117-24.
50. Clarkson JE, Lacy JM, Fligner CL, Thiersch N, Howard J, Harruff RC, Logan BK (2004). Tramadol (Ultram) concentrations in death investigation and impaired driving cases and their significance*. Journal of Forensic Sciences* 49, 1101-5.
51. Grossman DC, Mueller BA, Riedy C, Dowd MD, Villaveces A, Prodzinsky J, Nakagawara J, Howard J, Thiersch N, Harruff, R (2005). Gun storage practices and risk of youth suicide and unintentional firearm injuries. *Journal of the American Medical Association* 293, 707-14.
52. Banta-Green C, Goldbaum G, Kingston S, Golden M, Harruff R, Logan B (2005). Epidemiology of MDMA and associated club drugs in the Seattle area. *Substance Use and Misuse* 40, 1295-315.
53. Landi K, Gutierrez C, Sampson B, Harruff R, Rubio I, Balbela B, Greco MA (2005). Investigation of the sudden death of infants: a multicenter analysis. *Pediatric and Developmental Pathology* 8, 630-8.
54. Necrotizing fasciitis: manifestations, microbiology and connection with black tar heroin (2007). Dunbar NM, Harruff RC. *Journal of Forensic Sciences* 52, 920-3.
55. Incidence and significance of upper body cyanosis in nontraumatic cardiac arrest. Swoboda BD, Eisenberg MS, Harruff RC, Fligner CL (2007). *Prehospital Emergency Care* 11, 207-9.
56. Elderly deaths due to ground level falls (2010). Chisholm KM, Harruff RC. *American Journal of Forensic Medicine and Pathology* 31, 350-4.
57. Case series of completed suicides by burning over a 13 year period. Cimino PJ, Williams TL, Fusaro A, Harruff RC (2011). *Journal of Forensic Sciences* 56(Suppl 1), S109-11.
58. Trends in suicide by carbon monoxide inhalation in King County, Washington, 1996-2009. Schmitt MW, Williams TL, Woodard, KR, Harruff RC (2011). *Journal of Forensic Sciences* 56, 652-5.
59. Petersen TH, Williams T, Nuwayhid N, Harruff R. Postmortem detection of isopropanol in ketoacidosis. *Journal of Forensic Sciences* 2012 May 57(3): 674-678.
60. Analysis of 101 vehicle fire fatalities. Harruff RC, Lubin M, *Academic Forensic Pathology* 2012 June 2(2): 165 -175.
61. Peliosis hepatis presenting as liver rupture in a vulnerable adult: a case report. Buelow B, Otjen J, Sabath AP, Harruff RC. *American Journal of Forensic Medicine and Pathology* 2012 Dec 33(4): 307-10.
62. Harruff RC, Park J, Smelser BJ. Relation of kinetic energy to contact wounds of the head by centerfire rifles and shotgun slugs. *Journal of Forensic Sciences* 2013 Jan;58(1):69-72.
63. Yarid NA, Harruff RC. Globus Pallidus Necrosis Unrelated to Carbon Monoxide Poisoning: Retrospective Analysis of 27 Cases of Basal Ganglia Necrosis. *Journal of Forensic Sciences* 2015 Nov; 60(6): 1484-7.
64. Tracking the opioid drug overdose epidemic in King County, Washington using an improved methodology for certifying heroin-related deaths. *Academic Forensic Pathology* 2015 5(3): 499-506.
65. Butler EK, Boveng HM, Harruff RC, Duchin JS, Vavilala MS, Rivara FP, Rowhani-Rahbar A. Risk of Suicide, Homicide, and Unintentional Firearm Deaths in the Home. JAMA Intern Med. 2020 Jun 1;180(6):909-911.
66. Vannice K, Hood J, Yarid N, Kay M, Harruff R, Duchin J. Accuracy of Medical Examiner's Assessment for Near-Real-Time Surveillance of Fatal Drug Overdoses, King County, Washington, March 2017-February 2018. Public Health Rep. 2022 May-Jun;137(3):463-470.
67. Harruff R, Simpson CM, Gifford AL, Yarid N, Barbour WL, Heidere C. Evaluation of "Real-Time" Fatal Drug Overdose Surveillance by King County Medical Examiner's Office, Seattle, Washington. Am J Forensic Med Pathol. 2023 Mar 1;44(1):11-16.
68. Harruff RC, De Silva M, Lubin M. Medical Examiner Surveillance of the COVID-19 Pandemic in King County, Washington, USA. Am J Forensic Med Pathol. 2023 May 29. doi: 10.1097/PAF.0000000000000839. Epub ahead of print. PMID: 37249491.
69. Harruff RC, Yarid NA, Barbour WL, Martin YH. Medical examiner response to the drug overdose epidemic in King County Washington: "Real-time" surveillance, data science, and applied forensic epidemiology. J Forensic Sci. 2023 Sep;68(5):1632-1642. doi: 10.1111/1556-4029.15329. Epub 2023 Jul 7. PMID: 37417312.
70. Harruff RC, Johnston R, Lubin M, Perera ULMS. Analysis of female strangulation homicides in King County, Washington, from 1978 to 2022. J Forensic Sci. 2023 Sep 27. doi: 10.1111/1556-4029.15384. Epub ahead of print. PMID: 37753824.

**b) Book chapters**

“Traffic Fatalities”, Chapter in *Handbook of Forensic Pathology* (Froede RC, editor), College of American Pathologists, 2003.

**c) Published books, videos, software**

1. *Pathology Facts.* Harruff RC (1994), J.B. Lippincott and Company, Philadelphia.
2. *Forensic Literature Indexing System*, 1990 – 1999, American Academy of Forensic Sciences.

**d) Other Publications**

Scott R, Marchand M, Stover B, Causey K, Harruff R, Hagopian A. Without shelter, people die: disproportionate mortality among King County’s homeless population, 2009–2019. Journal of Social Distress and Homelessness. 18 Jan 20 https://doi.org/10.1080/10530789.2021.2021360.

**e) Manuscripts submitted**

Not applicable

**f) Abstracts**

1. Harruff RC, Jenkins WT (1969). The binding of bromophenol blue to aspartate aminotransferase. First Midwest Conference on Vitamin B-6, Notre Dame University, South Bend, Indiana.
2. Golichowski A, Harruff RC, Jenkins WT (1971). Beta-hydrogen exchange catalyzed by phosphopyridoxal enzymes. *Federation Proceedings* 30, 1211.
3. Jenkins WT, Harruff RC (1974). Natural abundance C-13 nmr applied to pyridoxal catalysis. Joint U.S.-U.S.S.R. Conference on Vitamin B-6 and Pyridoxal Catalysis, Leningrad.
4. Harruff RC, Jenkins WT (1975). Intramolecular interactions of vitamin B-6 studied by carbon-13 nmr. Second Midwest Conference on Vitamin B-6, University of Iowa, Ames.
5. Bonsib SM, Haddad LC, Harruff RC, Jenkins WT (1975). The role of solvation in the binding of inhibitors to aspartate aminotransferase. Second Midwest Conference on Vitamin B-6, University of Iowa, Ames.
6. Harruff RC, Edwards JL (1976). Epithelial elements of lymphoid follicles in the bursa of Fabricius. International Academy of Pathology, Second World Congress of Academic and Environmental Pathology, Washington D.C.
7. Harruff RC, Jenkins WT (1977). Solvent and substrate deuterium isotope effects on the transamination reaction catalyzed by aspartate aminotransferase. Third Biennial Conference on Vitamin B-6 and Its Function in Enzymes, University of Michigan, Ann Arbor.
8. Harruff RC (1988). Computer imaging system in forensic pathology. National Association of Medical Examiners Annual Meeting, Boston, Massachusetts.
9. Harruff RC (1989). Telecommunications in pathology education. Group for Research in Pathology Education Summer Meeting, Aspen, Colorado.
10. Harruff RC (1990). G.R.I.P.E. technology survey. Group for Research in Pathology Education Winter Meeting, Albuquerque, New Mexico.
11. Harruff RC (1991). “Quick Basic” programs for developing interactive videodisc modules for pathology education. “Slice of Life” Videodisc Workshop, University of Utah, Salt Lake City.
12. Harruff RC (1991). Preparation of multimedia 35 mm projection slides for lectures using a computer system. Group for Research in Pathology Education Summer Meeting, Honolulu, Hawaii.
13. Wagner SA, Pless JE, Hawley DA, Clark MA, Harruff RC (1992). Automobile crash fatalities and driver side airbags: a review of six cases. American Academy of Forensic Sciences Annual Meeting, New Orleans, Louisiana.
14. Clark MA, Hawley DA, Pless JE, Harruff RC (1992). Civilian injuries from explosions and bombs. American Academy of Forensic Sciences Annual Meeting, New Orleans, Louisiana.
15. Luthi R, Logan B, Predmore D, Friel P, Hartshorne N, Harruff R, Fligner C, Schmunk G (1995). Two fatalities associated with amantadine overdose. American Academy of Forensic Sciences Annual Meeting, Seattle, Washington.
16. Harruff RC, Reay DT, Haddix TL, Haglund W, Miller SR (1995). Correlation of collision dynamics with anatomic injuries in vehicular traffic fatalities. National Association of Medical Examiners Annual Meeting, San Diego, California.
17. Raven KP, Reay DT, Harruff RC (1997). Artifactual injuries associated with resuscitative intubation. National Association of Medical Examiners Annual Meeting, Baltimore, Maryland.
18. Raven K, Alvord EC, Clark EGI, Harruff RC (1999). Histological criteria for aging cerebral contusions using CD68 and iron stains. National Association of Medical Examiners Annual Meeting, Minneapolis.
19. Harruff RC, Kaufman R, Grossman D (2000). CIREN (Crash Injury Research and Engineering Network). National Association of Medical Examiners Annual Meeting, Indianapolis.
20. Schultke E, Harruff RC (2000). Immunocytochemistry in spinal cord injury: S-100 expression in human autopsy material. Society for Neuroscience Annual Meeting, New Orleans.
21. Li MK, Harruff RC (2001). Two decade review of female homicide victims in King County, Washington. National Association of Medical Examiners Annual Meeting, Richmond.
22. Li MK, Harruff RC (2001). Unexpected hazard of illegal immigration: outbreak of viral myocarditis exacerbated by confinement and deprivation in a shipboard cargo container. National Association of Medical Examiners Annual Meeting, Richmond.
23. Raven KP, Harruff RC, Thompson E, Wyant R (2002) Pseudosoot pattern mimicking a close range gunshot wound. National Association of Medical Examiners Annual Meeting, Shreveport, LA.
24. Clark EGI, Raven KP, Anderson-Wooley D, Harruff RC (2003). Evaluation of Iron and Macrophages in Meninges of Infants Dying Suddenly and Unexpectedly. American Academy of Forensic Sciences Annual Meeting, New Orleans.
25. Landi K, Harruff RC, Gutierrez C, Rodriguez A, Palenzuela, Greco MA (2003). Causes of sudden death in infants: a three year comparison of New York, NY, King County, WA, and Montevideo, Uruguay. Society of Pediatric Pathology Annual Meeting, Washington DC.
26. Banta-Green C, Goldbaum G, Kingston S, Hanrahan M, Harruff R, Logan B, Golden, M (2003). Ecstasy use. Multiple perspectives shed light on use of ‘club drug’: youth, young adults and MSM in Seattle. American Public Health Association Annual Meeting, San Francisco.
27. Haikal NA, Harruff RC (2004). Compressed gas cylinder related injuries: case report of a fatality associated with a recreational paintball gun, review of the literature and safety recommendations. American Academy of Forensic Sciences Annual Meeting, Dallas.
28. Pathology of environmental and occupational toxic exposures. Workshop: Forensic Toxicology – The World Outside of Drugs. American Academy of Forensic Sciences Annual Meeting, Seattle, WA, February 20-25, 2006.
29. Necrotizing fasciitis: manifestations, microbiology and connection with black tar heroin. Dunbar NM, Wigren C, Harruff RC. American Academy of Forensic Sciences Annual Meeting, Seattle, WA, February 20-25, 2006.
30. Measuring misuse of prescription-types opiates: implications for public health. Banta-Green C, Merrill J, Logan B, Harruff R, Gordon AM. American Public Health Association, 134th Annual Meeting and Exposition, Boston, MA, November 7, 2006.
31. Intestinal perforations and volvulus in a young child due to swallowed toy magnets. Harruff RC. National Association of Medical Examiners Annual Meeting, San Antonio, TX, October 13-18, 2006.
32. Comparison of wound severity between center fire rifle projectiles and shotgun slugs. Park JH, Harruff RH. Proceedings of the American Academy of Forensic Sciences Annual Meeting, San Antonio, TX, February 19-24, 2007
33. Death from truck tire servicing: a report of three cases and a review of the literature. Cho P, Fusaro A, Harruff RC. Proceedings of the American Academy of Forensic Sciences Annual Meeting, San Antonio, TX, February 19-24, 2007
34. Geographical factors in carbon monoxide poisonings. Indo-Pacific Association of Law, Medicine and Science, 9th International Congress, Colombo, Sri Lanka, July 22-27, 2007.
35. Expanding role of the medical examiner. Indo-Pacific Association of Law, Medicine and Science, 9th International Congress, Colombo, Sri Lanka, July 22-27, 2007.
36. Role of scene reconstruction in the medicolegal investigation of sudden unexpected infant deaths. Pamela Ulmer and Richard Harruff, American Academy of Forensic Sciences, 61st Annual Scientific Meeting, Denver, Colorado, February 16-21, 2009.
37. Investigation of vehicular fire fatalities. Micheline Lubin, Janaki Warushahennadi, Richard C. Harruff, Katherine Taylor, Timothy Williams, and Aldo Fusaro, National Association of Medical Examiners, 2009 Annual Meeting, San Francisco, California, September 11-16, 2009.
38. Accidental carbon monoxide poisoning: a review of environmental and cultural risk factors of fatal cases in King County. Kristinza R. Woodard and Richard C. Harruff. Proceedings of the American Academy of Forensic Sciences 16, Annual Scientific Meeting, Seattle, Washington, February 22-27, 2010.
39. Analysis of female homicides in King County, Washington, 2000-2007. Janaki Warushahennadi and Richard C. Harruff. Proceedings of the American Academy of Forensic Sciences 16, Annual Scientific Meeting, Seattle, Washington, February 22-27, 2010.
40. Dangerous consequences: agranulocytosis associated with cocaine use – Washington, 2009. Ta M, Wood R, Duchin J, Harruff R, VanEenwyk J. Centers for Disease Control and Prevention (poster).
41. Harruff RC, Fusaro A, Banta-Green C. Methodology to improve the accuracy of certifying opioid deaths. National Association of Medical Examiners Annual Meeting, Baltimore, Maryland, October 8, 2012
42. Tserng J, Williams T, Harruff RC. Occupational and non-occupational logging fatalities, King County, Washington, 1994-2011 (poster presentation). National Association of Medical Examiners Annual Meeting, Baltimore, Maryland, October 7, 2012.
43. Yarid NA, Harruff RC. Globus Pallidus Necrosis Unrelated to Carbon Monoxide Poisoning: Retrospective Analysis of 24 Cases of Basal Ganglia Necrosis. American Academy of Forensic Sciences, 66th Annual Meeting, Seattle, WA, February, 2014.
44. Marshall DM, Harruff RC. Epidemiology, Contributing Factors, and Injuries in 28 Electrocution Fatalities in King County, Washington. National Association of Medical Examiners 2015 Annual Meeting, Charlotte, North Carolina, October 2 – 9, 2015.
45. Murphy CE, Stanzione N, Harruff R. The 20 Year Acetaminophen Experience in a Pacific Northwest Medical Examiner’s Office. 2016 Annual Meeting of the College of American Pathologists, Las Vegas, Nevada, September 25 – 28, 2016.
46. Margaret Flanagan, Richard C Harruff. Digitalis Intoxication and Death from Accidental Foxglove Ingestion. USCAP 2016 Annual Meeting, Seattle, Washington, March 12-18, 2016
47. Richard C. Harruff. Infectious disease death clusters among injection drug users: King County Medical Examiner Office experience. National Association of Medical Examiners 2018 Interim Scientific Program: Emerging Infectious Diseases (EID) and the Medical Examiner. Seattle, February 20, 2018.
48. Nicole A. Yarid, Richard C. Harruff, Andrea Orvik, Janinne Blank, Sini Panicker. Does black tar heroin “protect” King County, Washington, from fentanyl-related mortality? American Academy of Forensic Sciences 2018 Annual Scientific Meeting, Seattle, February 19-24, 2018.
49. Tara Dixon, Brian Mazrim, Richard C. Harruff. Hypothermia deaths due to environmental exposure in King County, Washington. American Academy of Forensic Sciences 2018 Annual Scientific Meeting, Seattle, February 19-24, 2018.
50. Nicole A. Yarid, Julia Hood, Richard C. Harruff, MD, PhD. Developing “real-time” surveillance for drug overdose deaths in King County, Washington. American Academy of Forensic Sciences 2018 Annual Scientific Meeting, Seattle, February 19-24, 2018.
51. Micheline Lubin, Richard C. Harruff, Jillian Jetter, David Martin, Nicole Siver, Cloyd Steiger. The effect of public awareness and legislation against strangulation on the occurrence of gender-based violence in King County, Washington. American Academy of Forensic Sciences 2018 Annual Scientific Meeting, Seattle, February 19-24, 2018.
52. Robert A. Middleberg, Nikolas P. Lemos, Richard C. Harruff, Carl J. Schmidt, Thomas G. Rosano. Postmortem Pediatric Toxicology. American Academy of Forensic Sciences 2018 Annual Scientific Meeting, Seattle, February 19-24, 2018.
53. Marshall DA, Yoda RA, Yarid NA, Folkerth R, Harruff RC, Keene CD. Dementia Workup for Forensic Pathologists Following a Condensed National Institute on Aging; Alzheimer’s Association (NIA-AA) Protocol. American Academy of Forensic Sciences 72nd Annual Scientific Meeting Anaheim, CA February 17-22, 2020.
54. Johnston R, Richard C. Harruff RC, Micheline Lubin M, Cloyd Steiger C, Siver N. Circumstances and Injuries in Female Homicide Victims of Strangulation: A Four-Decade Review of 143 Cases in King County, Washington. American Academy of Forensic Sciences 72nd Annual Scientific Meeting Anaheim, CA February 17-22, 2020.
55. Riser E, Ariyaratne C, Chaudhry I, Caleb Banta-Green C, Harruff RC. The Relationship of Chronic Psychostimulant Use and Cardiovascular Disease. American Academy of Forensic Sciences 72nd Annual Scientific Meeting Anaheim, CA February 17-22, 2020.
56. Taylor J, MD, Harruff R, Yarid N, MD, Heidere K, Simpson C. Keeping Up With the Drug/Opioid Epidemic: In-House Testing Program of the King County, Washington, Medical Examiner’s Office. American Academy of Forensic Sciences 74th Annual Scientific Meeting Colorado Springs, CO February 21-25, 2022.
57. Croom N, Harruff R. Homeless Mortality Reporting by the King County, Washington, Medical Examiner’s Office: Impact and Importance. American Academy of Forensic Sciences 74th Annual Scientific Meeting Colorado Springs, CO February 21-25, 2022.

**17. Other: National Invitational Lectures, etc.**

1. Harruff R. Causes of Death: Sexual Assault Homicides. National District Attorneys Association. Prosecuting Sexual Assault and Related Crimes. Bellevue— East Seattle, Washington, August 13-17, 2018.
2. Harruff R. 1) Death Investigation Part I: The Scene- Mystery and Misconceptions. 2) Death Investigation Part II: The Autopsy- Science and Medicine. National District Attorneys Association. Forensic Evidence Course. Albuquerque, New Mexico. December 3-6, 2018.
3. Harruff R. Novel near real-time surveillance system for investigating opioid-related fatalities. Tuolumne County Opioid Safety Conference - Lessons Learned & Next Steps. Tuolumne, CA. August 16, 2018.
4. Harruff R. Working with Medical Examiners. National Violent Death Reporting System (NVDRS). Atlanta, GA. December 11 – 13, 2018.
5. Harruff R. Medical Examiner’s Role in Epidemic Surveillance: Drug Overdose and COVID-19. American Association of Pathologists' Assistants (AAPA) 46th Annual Conference - the Future of Pathology. Seattle, WA, November 3, 2021.
6. Harruff R. Medical Examiner Response to the Drug Overdose Epidemic in the US (Plenary Lecture). 14th International Congress of Indo Pacific Association of Law Medicine and Science (INPALMS). Colombo, Sri Lanka, December 14, 2022.