

## CURRICULUM VITAE

February 2013

Robert J. Emery, DrPH, CHP, CIH, CBSP, CSP, CHMM, CPP, ARM

### ADDRESSES:

#### *Offices*

Safety, Health, Environment & Risk Management  
The University of Texas Health Science Center at Houston  
1851 Crosspoint Drive, OCB 1.330  
Houston, Texas 77054  
Phone (713) 500-8100  
Fax (713) 500-8111  
*Robert.J.Emery@uth.tmc.edu*

The University of Texas School of Public Health  
Southwest Center for Occupational and Environmental Health  
P.O. Box 20186  
Houston, Texas 77225  
Phone (713) 500-9469  
Fax (713) 500-9442

### EDUCATION:

#### *Undergraduate*

Rockingham Community College Wentworth, NC  
Associate of Science in Environmental Science, 1977

University of North Carolina at Wilmington, Wilmington, NC  
Bachelor of Arts in Environmental Sciences, 1979

#### *Graduate*

University of North Carolina at Chapel Hill, Chapel Hill, NC  
Master of Science in Public Health,  
Radiological Hygiene Program, 1989

East Carolina University, Greenville, NC  
Master of Science in Environmental Health, 1991

University of Texas School of Public Health, Houston, TX  
Doctor of Public Health,  
Occupational Health/Aerospace Medicine Module, 1997

### LICENSURE:

Board Licensed Medical Health Physicist,  
May 1993 - present, Texas Number MP0139

### BOARD CERTIFICATIONS:

American Board of Health Physics;  
Certified Health Physicist (CHP)  
1993, Re-certified 1997, 2001, 2005, 2009

American Board of Industrial Hygiene;  
Certified Industrial Hygienist (CIH)  
1991, Re-certified 1997, 2003, 2008, 2012

Board of Certified Safety Professionals;  
 Certified Safety Professional (CSP)  
 1992, Re-certified 1998, 2004, 2008

#### **OTHER CERTIFICATIONS & REGISTRATIONS:**

National Registry of Radiation Protection  
 Technologists, Radiation Protection Technologist (RPT) 1987

National Environmental Health Association  
 Registered Hazardous Substances Professional (RHSP) 1991

American Biological Safety Association,  
 Registered Biosafety Professional (RBP) 1994

American Institute for Chartered Property Casualty  
 Underwriters/Insurance Institute of America, Associate in Risk  
 Management (ARM), 2002

Institute of Hazardous Materials Management, Certified  
 Hazardous Materials Manager (CHMM), 2002

American Society for Industrial Security, Certified Protection  
 Professional (CPP), 2004, 2007, 2010

American Biological Safety Association  
 Certified Biological Safety Professional (CBSP) 2011

#### **PUBLICATIONS (UT SPH students in italics with \* )**

##### **Publications in peer-reviewed journals**

1. EMERY RJ, Sprau DD, Harris RJ. Estimated committed dose equivalent from the volatilization of <sup>35</sup>S-labelled methionine compounds. *Radiat Prot Management* 7: 51-57; 1990.
2. EMERY RJ, Watson JE, Sprau, DD. Retention and subsequent release of radioactivity from the incineration of waste containing microspheres. *Health Phys* 59: 911-914; 1990. [PMID: 2228618]
3. EMERY RJ, Jeannette M, Sprau DD. Characterization of low-level radioactive waste generated by a large university/hospital complex. *Health Phys* 62: 183-186; 1992. [PMID: 1730561]
4. EMERY RJ, Sprau DD, Lao YJ, Pryor WH. Release of bacterial aerosols during infectious waste compaction: an initial hazard evaluation for health care workers. *Am Ind Hyg Assoc J* 53: 339-345; 1992.
5. EMERY RJ, Johnston TP, Sprau DD. Simple physical, chemical, and biological safety assessments as part of a routine institutional radiation safety survey program. *Health Phys* 69: 278-280; 1995. [PMID: 7622377]
6. EMERY RJ, Sawyer RL, Sprau DD. Assessing the service provided by an institutional radiation safety survey program. *Health Phys* 70: 741-743; 1996. [PMID: 8690588]
7. *Costello RG\**, EMERY RJ. A program for reducing institutional risk when releasing potentially hazardous assets. *J Environ Health* 59: 12-16; 1996.

8. EMERY RJ. A proposed method to minimize waste from institutional radiation safety surveillance programs through the application of expected value statistics. *Health Phys* 72: 470-474; 1997. [PMID: 9030850]
9. Hamilton IS, Cloud M, EMERY R, Mullani, N. A computer-based quality assurance records management system for positron-emission tomography dose calibrators. *Radiat Saf Officer* 2: 32-37; 1997.
10. EMERY RJ, *Savely S\**. The benefits of actively soliciting worker concerns during routine safety inspections. *Prof Saf* 42: 36-38; 1997.
11. EMERY RJ, Pollock J, *Charlton M\**. Notices of violation issued to Texas radioactive material licensees inspected in 1995. *Health Phys* 73: 706-709; 1997. [PMID: 9314236]
12. EMERY RJ, Lee P, Garman J. Achieving biosafety level 3 through the use of biosafety level 2 facilities and biosafety level 3 practices: a prevalence survey of medical research and academic institutions", *Appl Biosaf* 2: 43-46; 1997.
13. EMERY RJ, Cooper SP. Prudent management of minors with occupational exposures to hazardous agents: the radiation protection standard of care. *Inj Prev* 4: 232-235; 1998. [PMID: 9788098]
14. EMERY RJ, Delclos GL, Cooper S P, Hardy R. Evaluating the relative status of health and safety programs for minority academic and research institutions. *Am Ind Hyg Assoc J* 59: 882-888; 1998. [PMID: 9866168]
15. *Costello RG\**, EMERY RJ, Whitehead L. A field method for validating reported activities of P-32 in solid radioactive wastes. *Radiat Prot Dosimetry* 81: 65-69; 1999.
16. EMERY RJ, *Charlton MA\**. Assessing the results of receipt monitoring programs for packages containing radioactive materials. *Health Phys* 77(Suppl 1): S5-S9; 1999.
17. EMERY RJ, *Charlton MA\**, *Goodman, GR\**. Radiation safety program outcomes as indicated by regulatory compliance activities from 1988 to 1997 in Texas. *Health Phys* 78: 335-342; 2000. [PMID: 10688459]
18. EMERY RJ, *Charlton MA\**, *Mathis JL\**. Estimating the administrative cost of regulatory noncompliance: a pilot method for quantifying the value of prevention. *Health Phys* 78(Suppl 2): S40-S47; 2000. [PMID: 10770156]
19. *Savely SM\**, Connor TH, EMERY RJ. A comparison of methods for determining lead content in drinking water: a portable anodic stripping voltammetry instrument method versus the standard EPA 239.2 method. *Am Ind Hyg Assoc J* 61: 557-561; 2000. [PMID: 10976686]
20. EMERY RJ, *Hopkins JR\**, *Charlton MA\**. Anticipating and addressing workplace static magnetic field effects at levels < 0.5 mT. *Health Phys* 79(Suppl 2): S72-S76; 2000. [PMID: 11045515]
21. *Costello RG\**, EMERY RJ, Pakala RB, *Charlton MA\**. Radioactive waste minimization implications of clinically-indicated exsanguination procedures. *Health Phys* 79: 291-293; 2000. [PMID: 10949255]

22. EMERY RJ, *Charlton MA\**, *Orders A B\**, *Hernandez M\**. Using fault tree analysis to identify causes of non-compliance: enhancing violation outcome data for the purposes of education and prevention. *Health Phys* 80(Suppl 1): S16-S21; 2001. [PMID: 11197508]
23. EMERY RJ. Embryo/fetal radiation protection: a basis for comprehensive occupational reproductive health programs. *Chem Health Saf* 8: 15-20; 2001.
24. *Charlton MA\**, EMERY RJ. An analysis of reported incidents involving radiopharmaceuticals for the development of intervention strategies. *Health Phys* 81: 585-591; 2001. [PMID: 11669213]
25. *Reddy SG\**, EMERY RJ. Assessing the effect of long-term availability of engineering controls on needlestick injuries among healthcare workers: a 3 year pre and post implementation comparison. *Am J Infect Control* 29: 425-427; 2001. [PMID: 11743491]
26. EMERY RJ, *Orders AO\**, *Charlton MA\**. Piloting a new radiation protection program strategy: rewarding compliance rather than sanctioning non-compliance *Health Phys* 82(Suppl 1):S18-S22; 2002. [PMID: 11707899]
27. EMERY RJ, *Orders AB*, *McCrary JR\**, *Charlton MA*. An evaluation and comparison of compliance inspection outcome data for radiation protection programs in Maine and Texas. *Health Phys* 82: 395-399; 2002. [PMID: 11845843]
28. EMERY RJ, *Felknor, SA*. An initial radiation safety needs assessment for Costa Rica: the South Texas Chapter of the Health Physic Society's strategic planning appraisal for participation in the 'Radiation Safety Without Borders' initiative. *Health Phys* 82(Suppl 5): S87-S91; 2002. [PMID: 12003035]
29. *Enochs BJ\**, *Connor TH*, EMERY RJ, *Whitehead LW*. An evaluation of potential liquid/aerosol releases from a new retractable syringe. *Appl Biosaf* 7:74-81; 2002
30. EMERY RJ, *Orders AO*, *Charlton MA*. Texas dental x-ray compliance: an analysis of trends for the purposes of education and prevention. *Texas Dental Journal* 119:916-921; 2002. [PMID: 12380237]
31. *Gorham RA\**, EMERY RJ, *Ford CE*, *Cooper SP*. Statistical validation of a commonly used method for personnel dosimetry issuance determinations. *Health Phys* 84: 260-265; 2003. [PMID: 12553656]
32. EMERY RJ, *McCrary JR\**. Effectively displaying broad scope sublicensee radioactive material inventory allocations and possession quantities. *Health Phys* 85(Suppl 1):S39-S-41; 2003. [PMID: 12865749]
33. EMERY, R.J., *McCrary, J.R.\**, A radiation protection program prospectus based on the collection of 10 years of key performance indicator data. *Health Phys* 85(Suppl 2):S89-93; 2003. [PMID: 14570261]
34. *Maness K\**, EMERY RJ, *Cassery D*. An analysis of 45 years of reported overexposure incidents in Texas, 1956 to 2001. *Health Phys* 86: 197-202; 2004. [PMID: 14744055]
35. *Brown BJ\**, EMERY RJ, *Stock T*, *Lee ES*. Radiation protection program outcomes as assessed by the results of compliance inspections in Washington, as compared to the states of Texas and Maine. *Health Phys* 86:308-315; 2004. [PMID: 14982232]

36. *Zerwekh JT\**, EMERY RJ, Waring SC, Lillibridge S. Using the results of routine laboratory workplace surveillance activities to assess compliance with recommended biosafety guidelines. *Appl Biosaf* 9: 76-83; 2004.
37. EMERY, RJ, Delclos, GL. World at work: research and testing laboratories: spotlight on a diverse industry. *Occup Environ Med* 62(3) 200-205; 2005. [PMID: 15723886]
38. EMERY RJ, *Valizadeh F\**, Kennedy V, Shelton A. An analysis of variables influencing the number of radiation overexposure events in Texas from 1970 to 2000. *Health Phys* 89:46-52; 2005. [PMID: 15851691]
39. *Patlovich S\**, EMERY RJ, Whitehead L. Characterization and geolocation of sources of radioactivity lost downhole in the course of oil and gas exploration and production activities in Texas, 1956 to 2001. *Health Phys* 89 (Suppl 5):S69-S77; 2005. [PMID: 16224264]
40. *Korshukin M\**, EMERY RJ. An analysis of reported events of stolen sources of radioactivity in Texas from 1956 to 2000. *Health Phys* 90: 266-272; 2006. [PMID: 16505625]
41. *Lucas A\**, EMERY RJ. Assessing occupational mercury exposures during the onsite processing of spent fluorescent lamps. *J Environ Health* 68: 30-34; 2006. [PMID: 16583552]
42. Cech I, Smolensky MH, Afshar M, Broyles G, Barczyk M, Burau K, EMERY RJ. Lead and copper in the drinking water fountains – information for physicians. *South Med J* 99: 137-142; 2006. [PMID: 16509551]
43. *Thommen PJ\**, EMERY RJ. An analysis of 20 years of radiation-related health care complaints in Texas for the purposes of quality improvement. *Health Phys* 90 (Suppl 2): S62-S66; 2006. [PMID: 16607170]
44. *Bible J\**, EMERY RJ, Williams T, Wang, H. A security vulnerabilities assessment tool for interim storage facilities of low-level radioactive wastes. *Health Phys* 91 (Suppl 2): S66-S73; 2006. [PMID: 17023801]
45. *Harper C\**, EMERY RJ, Casserly D. An assessment of occupational exposures to ultraviolet radiation from transilluminator light boxes in the course of biomedical research procedures. *Chem Health Saf* 15: 16-22; 2008.
46. EMERY RJ, Sladeczek E. Situation photographic postings for enhancing the proper operation of infrequently utilized x-ray devices. *Health Phys* 95(Suppl 5):S152-S155; 2008. [PMID: 18849707]
47. EMERY RJ, Sprau DD, Morecook RC. Risk communication considerations to facilitate the screening of mass populations for potential contamination with radioactive materials. *Health Phys* 95(Suppl 5):S168-S174; 2008. [PMID: 18849710]
48. EMERY RJ, Brown BJ. The compelling display of health and safety data to achieve desired decision making. *Prof Saf* 54: 58-59; 2009.
49. EMERY RJ, Sprau DD, Morecook RC, Herbold JR. Surge capacity volunteer perspectives on a field training exercise specifically designed to emphasize likely roles during a disaster response. *Health Phys* 97(Suppl 3): S155-S160; 2009. [PMID: 19820470]

50. EMERY RJ, Sprau DD, Morecook, RC, Herbold JR. Risk communication considerations for volunteer surge capacity disaster response organizations. *Texas Public Health Assoc J* 61: 25-29; 2009.
51. EMERY RJ, Brown BJ. Successfully capturing and displaying biosafety program 'goodwill value'. *Appl Biosaf* 16: 60-61; 2010.
52. *Rangel KM\**, Delclos G, EMERY RJ, Symanski, E. Assessing maintenance of evaporative cooling systems in Legionellosis outbreaks. *J Occup Environ Hyg* 8: 249-65; 2011. [PMID: 21416443]
53. EMERY, RJ, Gamble, RK, Brown, BJ. A biological safety program prospectus based on the collection of 10 years of key performance indicator data. *Appl Biosaf* 17:1 19-23; 2012.
54. Vellani, KH, EMERY, RJ, Parker, N. Staffing benchmarks: how many security officers are enough? *J Healthcare Protection Management*, 28:2 1-11; 2012.
55. EMERY RJ. How the University of Texas system responded to the need for interim storage of low-level radioactive waste materials. *Health Phys* 103 (Suppl 3):S194-S198; 2012. [PMID: 23026972]
56. EMERY, RJ. A mechanism for providing institutional assurance for the safe handling of acutely toxic or physically dangerous chemicals in research laboratories. *J Chem Health Saf*, (Nov/Dec) 10:1-5, 2012

#### **Submitted**

1. *Gutiérrez, JM\**, EMERY, RJ, Whitehead, LW, Burau, KD, Felknor, SA. A multi-site pilot test study to measure safety climate in a university work setting. Submitted for review to Prof Safe, August 2011, in revision.
2. *Calcote, JC*, Carson, AI, Peskin, MF, Emery, RJ. An Assessment of Post-Disaster Psychological Stress in Hazardous Waste Operations and Emergency Response (HAZWOPER) Workers. *Disaster Medicine and Public Health Preparedness*. Submitted for Review November 2012.

#### **In preparation**

1. *Lemessa, S\**, Whitehead, L, EMERY, RJ, Ford, C, Taylor, W. Assessing building occupant indoor air quality expectation compared to nationally recognized standards. Being prepared for submittal to the *J Environ Health*

#### **Reviews**

1. EMERY RJ. Review of Biohazards Management Handbook. *Health Phys* 73:714; 1997.
2. EMERY, RJ. Review of Safety and Health Management Planning. *Health Phys* 77: 335-336; 1999.

#### **Book chapters**

1. EMERY RJ. Adding value to your radiation protection program. In: Roessler, CE, ed. *Management and Administration of Radiation Safety Programs*. Madison, WI: Medical Physics Publishing 1998: 461 – 471.

2. Sprau, DD, EMERY RJ. Ionizing and non-ionizing radiation. In: Williams LK, Langley R, eds. Environmental Health Secrets. Philadelphia, PA: Hanley & Belfus; 2000: 172 – 178.
3. EMERY RJ, Thomann W. Biological waste management. In: Alaimo RJ, ed. American Chemical Society Handbook of Chemical Health and Safety. New York, NY: Oxford University Press; 2001: 598 - 602.
4. EMERY, RJ, Brown BJ. Integrating radiation safety with institutional risk management and insurance programs. In: Belanger R, Papin PJ, eds. University Health Physics. Madison, WI: Medical Physics Publishing, 2003: 345 – 352.
5. EMERY RJ. Effectively ‘selling’ your campus radiation safety program. In: Belanger R, Papin PJ, eds. University Health Physics. Madison, WI: Medical Physics Publishing, 2003: 377 – 383.
6. Zerwekh JT, EMERY RJ. The laboratory response to bioterrorism. In: Monterrey Institute of Non-Proliferation Studies. The Encyclopedia of Bioterrorism First Edition. Hoboken, NJ: Wiley and Sons; 2005: 313 - 317.
7. EMERY RJ, Charlton MA. Radiation protection programs. In: Nollet L, Poschl M, eds. Concentration of Radionuclides in Food and the Environment: Prevention and Human Health. Boca Raton, FL: CRC Press Taylor & Francis Group; 2006: 367 – 376.
8. EMERY RJ, Brown BJ. Improving communications through the effective display of data. In; Johnson R, ed. Radiation Risk Communications. Madison, WI: Medical Physics Publishing; 2010: 46 - 56.
9. EMERY RJ, Charlton MA, Brown BJ. Contemporary industrial hygiene considerations in the health care work setting. In: Patty’s Industrial Hygiene, 6<sup>th</sup> Edition, Sixth Edition Volume 4, Hoboken, NJ, 2011: 2525 – 2547.
10. Zerwekh JT, EMERY RJ. The laboratory response to bioterrorism. In: Monterrey Institute of Non-Proliferation Studies. The Encyclopedia of Bioterrorism Second Edition. Hoboken, NJ: Wiley and Sons; 2011: 378- 382.

## **CURRENT ACADEMIC INSTRUCTION**

### **University of Texas School of Public Health**

PH 3998/6998 Health & Safety Program Management (co-instructor, annually since 1998)  
 PH 6998 Public Health Communications (co-instructor, annually since 2006)  
 PH 2155 Environmental Sampling and Analysis (guest lecturer, annually since 1997)  
 PH 2110 Overview of Environmental Health (guest lecturer, annually 1999)  
 PH 6998 Special Topics in Occupational Medicine (guest lecturer, annually since 1999)

### **Houston Community College Coleman College for Health Sciences**

Biosafety Technician Training Program (since 2011)

## **PREVIOUS ACADEMIC INSTRUCTION**

### **University of Houston-Clear Lake**

INDH 3133 Industrial Laboratory Safety (lead instructor 2002 -2003)

### **Texas Southern University**

HSEH 234 Introduction to Health Physics (guest lecturer, 1995)

**Texas A&M University**

SENG 680 Industrial Hygiene (guest lecturer, 1995)

NUEN 479 Health Physics (guest lecturer, 1996)

NUEN 681 Nuclear Engineering Seminar (guest lecturer, 1996)

NUEN 612 Radiological Hazards Evaluation (lead instructor, 1997)

**Sam Houston State University**

Environmental Sciences Seminar (guest lecturer, 1999)

**East Carolina University**

ITEC 3292 Industrial Safety, (lead instructor, 1993)

EHLT 5001 Seminar in Environmental Health (guest lecturer 1990 -1993)

EHLT 6980 Environmental Health Practicum (preceptor 1990 - 1993)

EHLT 6600 Air Quality Control Methods and Devices (guest lecturer 1990 -1993)

EHLT 2500 Introduction to Radiological Health (co-instructor 1992- 1993)

EHLT 3600 Air Pollution Control (guest lecturer 1990- 1993)

EHLT 3700 Industrial Hygiene (guest lecturer 1990 -1993)

EHLT 3800 Solid and Hazardous Waste (guest lecturer 1990 -1993)

EHLT 4990 Environmental Health Internship (preceptor 1990 -1993)

MCBI 6490 Topics in Microbiology and Immunology (guest lecturer 1993)

EHLT 6120 Biological Safety (lead instructor, web based class, Fall 2003)

## CONTINUING EDUCATION INSTRUCTION AND OTHER TRAINING

**Southwest Center for Occupational and Environmental Health**

Radiation Safety Officer Course (40 Hour), (course director and lecturer, annually since 1998)

Radiation Safety Officer Update (8 Hour), (course director and lecturer, 1999 – 2002)

Radiation Safety Officer Course for X-ray Producing Devices (16 hour), (course co-director and lecturer, 2003)

Biological Safety Officer Course (24 Hour), (course director and lecturer, annually since 2006)

OSHA Emergency Response Refresher for Labs and Clinics (course co-director and lecturer, 2000 – 2004)

Comprehensive Environmental Health & Safety for Educational Institutions, (course director and lecturer, annually since 1999)

Safely Accommodating the Expanding Clinical Use of PET Radiopharmaceuticals, (course director and lecturer, 2000)

Back to Basics Health Physics Review Series, co-sponsored with South Texas Chapter-Health Physics Society (course director 2001 – 2004)

Industrial Hygiene Review Course, (lecturer, annually since 1999)

Responding to the Current Mail Bioterrorism Threat: Protocols for Screening Packages Suspected of Containing Anthrax, (course director and lecturer, 2001)

Comprehending the Threat of Domestic Nuclear Terrorism, (course director, 2001 -2002)

Certified Hazardous Materials Manager Review Course, (course director and lecturer, annually since 2001)

**Texas A&M University**



Principles of Health Physics Academy for Texas Department of Health Bureau of Radiation Control, June 18, 2001