

## **PERSONAL INFORMATION**

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Kurt W. Deuschle Professor in Preventive Medicine and Environmental Health  
Professor and Chair, Department of Epidemiology and Environmental Health  
College of Public Health  
111 Washington Ave, Rm 212G  
University of Kentucky  
Phone: (859) 562-2119  
Email: Erin.Haynes@uky.edu

## **EDUCATION**

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- 2002-2004      **Post Doctoral Fellowship**  
NIEHS T32 training program,  
Molecular Epidemiology in Children's Environmental Health  
Department of Environmental Health  
University of Cincinnati College of Medicine
- 2002            **Doctor of Public Health**  
Environmental Health Sciences  
University of Michigan School of Public Health Ann Arbor, MI
- 1997            **Master of Science**  
Department of Environmental Health, Division of Toxicology  
University of Cincinnati College of Medicine
- 1995            **Bachelor of Science**  
Major: Biology  
Minor: Chemistry  
Wilmington College, Wilmington, Ohio.  
Green Key National Honor Society

## **ACADEMIC & SCIENTIFIC APPOINTMENTS**

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### **University of Kentucky College of Public Health**

Professor and Chair, Department of Epidemiology and Environmental Health (2022-present)  
Kurt W. Deuschle Professor in Preventive Medicine and Environmental Health (2019-present)  
Chair, Department of Epidemiology (2018-2022)  
Chair, Department of Preventive Medicine and Environmental Health (2019-2022)  
*Interim* Chair, Department of Preventive Medicine and Environmental Health (2019-2020)

### **University of Cincinnati College of Medicine**

Professor, Division of Epidemiology, Department of Environmental Health (2018)  
Associate Professor with tenure, Division of Epidemiology, Department of Environmental Health (2014-2018)  
Assistant Professor, Division of Epidemiology and Biostatistics, Department of Environmental Health (2008-2014)  
Director, Clinical and Translational Research Training Program (2006-2018)  
Adjunct Professor, Division of Epidemiology, Department of Environmental Health (2006-2008)  
Postdoctoral Fellow, T32 Molecular Epidemiology in Children's Environmental Health (2004-2006)

Erin N. Haynes, DrPH, MS

4/22/2024

**National Academy of Science, Engineering and Medicine (NASEM),**

East Palestine Train Derailment Workshop (2023)

Committee on the Guidance for PFAS Testing and Health Outcomes (2020-2022)

**National Toxicology Program (NTP)**

Board of Scientific Counselors (2022-present)

## RESEARCH: GRANTS AND CONTRACTS

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### CURRENT

R24ES030904-03 NIH/NIEHS

07/01/2019-06/30/2025

**Retention, Maintenance and Enhancement of the Communities Actively Researching Exposure Study (CARES)**

CARES has been supported by multiple NIEHS-funded grants and has been instrumental in the training of next generation community-engaged environmental health scientists for over a decade. The cohort has been instrumental in the development of a lab-on-a-chip sensor for blood metals assessment and is currently exploring the impact of Mn on neuroanatomy, function, chemistry, and physiology through magnetic resonance imaging. The goal of this study is to retain, maintain and enhance the ongoing CARES cohort.

Role: Principal Investigator

P30 ES026529-06A1 NIH/NIEHS

05/01/2023 – 03/31/2028

**Center for Appalachian Research in Environmental Sciences**

The overall goal of the University of Kentucky Center for Appalachian Research and Environmental Science (UK-CARES) is to provide new opportunities and resources to support highly innovative and collaborative research studies that will enhance the ability to identify and capitalize on emerging environmental issues. This will be accomplished by providing developmental and pilot funds for innovative, time-sensitive pilot studies that improve our understanding of the relationships among environmental exposures, human biology, and disease.

Role: Principal Investigator

R21 ES035322-01 NIH/NIEHS

6/2023-5/2025

**Extent of PFAS Contamination Resulting from a Fire at a Hazardous Waste Incinerator in East Liverpool, Ohio**

The project will determine the extent of PFAS exposure in the East Liverpool community.

Role: Principal Investigator

R21 ES035320-01 NIH/NIEHS

5/2023 - 4/2025

**Impact of Landfill Mitigation on Air Quality and Public Health in Bristol, Tennessee and Virginia**

The project will identify air quality during the landfill mitigation process while engaging community throughout the process

Role: Principal Investigator

2P30ES026529-06A1 NIH/NIEHS

07/2023 - 03/2024

**Pilot: Center for Appalachian Research in Environmental Sciences: East Palestine Train Derailment Health Tracking Study**

Conduct health tracking survey to assess health symptoms and experiences of residents in East Palestine, OH; Measure chemicals in home air associated with the derailment in a pilot study of East Palestine residents; Measure biomarkers of exposure and effect in a pilot study of East Palestine residents

Role: Principal Investigator

U54 DA058256-01 NIH

09/2023-08/2028

**Appalachian Tobacco Regulatory Science Team (AppalTRuST)**

Erin N. Haynes, DrPH, MS

4/22/2024

The goal of this project is to elucidate the factors influencing tobacco use and cessation in Appalachian KY with community partners.

Role: Co-Investigator

UL1 TR001998-06

07/2023 - 06/2025

**Diversity Supplement for McWhorter: Kentucky Center for Clinical and Translational Science**

The project will focus on secondhand tobacco smoke exposure and sleep behaviors in a rural Appalachian cohort.

Role: Co-Investigator/Mentor

5P42ES007380-25

NIH/NIEHS

04/01/2020- 1/31/2024

**Superfund Research Program**

The University of Kentucky Superfund Research Center (UK-SRC) proposes to address a pervasive central research problem: the persistence of halogenated organics at Superfund sites and elsewhere.

Role: Co-Investigator; PI: Pennell

5UL1TR001998-06

NIH/NCATS

08/15/2021 – 05/31/2026

**Center for Clinical and Translational Science**

The University of Kentucky (UK) Center for Clinical and Translational Science (CCTS) has created an integrated home for clinical and translational research to promote scientific progress and discoveries at every phase of the translational continuum.

Role: Associate Director and Co-I, PI: Kern

**RESEARCH FUNDING COMPLETED**

12/02/2018 – 07/31/2022 R21/R33 NIH/NIEHS

Validation and Demonstration of point-of-care sensor for multi-metal exposure assessment.

Role: Co-Investigator/PI of R33, Papautsky, University of Illinois, Chicago

07/01/2020-06/30/2022 KY CHFS

Germline and Environmental Factors Associated with Pediatric Brain and Central Nervous System Tumors in Kentucky

Role: Co-Investigator

09/01/2019-08/31/2021 R21 NIH/NIEHS (Ryan, PI; Haynes, Co-I, PI of UK contract)

Developing and Evaluating Novel Strategies for Reporting Back Individual Results of Personal Air Monitors

07/01/2016-06/30/2021 RO1 NIH/NIEHS (MPI, Corresponding PI)

Developmental effects of manganese exposure in rural adolescents: the CARES cohort comes of age.

12/21/2018 – 09/30/2021 Robert Wood Johnson Foundation (MPI)

Empowering Rural Communities for Environmental Action.

07/01/2018 – 06/30/2021 Robert Woods Johnson Foundation (Scutchfield, PI)

Creating the Online "Journal of Appalachia Health" with a Focus on the Social and Economic Determinants of Health and Health Equity in Appalachia

Role: Senior Associate Editor

07/01/2019-12/31/2019 NIH/NIEHS R13 (Haynes, PI)

National Conference of State Legislatures (NCSL) Legislative Summit. Disaster Preparedness and Response

Erin N. Haynes, DrPH, MS 4/22/2024  
Research: A Workshop for the National Conference of State Legislatures  
Role: PI

09/01/2013 – 05/30/2018 NIH/NIEHS R01ES022933 (Papautsky, PI)  
Development of a lab-on-a-chip sensor for blood metals  
Role: Co-Investigator.

April 2013- Dec 2018 NIH-NIEHS 5P30ES006096-19 (Ho, Center PI)  
Center for Environmental Genetics, Community Outreach and Education Core  
Role: Core Lead of the Community Engagement Core (CEC)

Aug 2015- Dec 2018 NIH/ NCRR 1UL1RR026314-01 (Heubi, PI)  
Cincinnati Center for Clinical and Translational Science and Training  
Role: Co-Investigator, Lead for Translational Workforce Development and Co-Lead for Community Engagement Core

Sept 2009 – Aug 2011 NIH/ NCATS 3UL1RR 026314-01S2 (Heubi, PI; Haynes Supplement PI)  
Administrative Supplement for Research Workforce Development and Dissemination, Creation of Online Certificate in Clinical and Translational Research

April 2008 - March 2013 NIEHS 1 R01 ES016531-01 (Haynes, PI)  
Marietta Community Actively Researching Exposure Study (CARES)

Sept 2012 - Aug 2014 NIH/NIEHS R21ES021106-01 (Haynes, PI)  
Multiple Risk Factors and Neurodevelopment Deficits in Rural Appalachian Children

Sept 2013-Aug 2014 NIH/NIEHS 3 P30 ES006096-21S1 (Ho, Center PI)  
Center for Environmental Genetics, supplement award with Oregon State University for hydraulic fracturing air study in Ohio

Sept 2013-Aug 2014 NIH/NIEHS 3 P30 ES006096-21S1 (Ho, Center PI).  
Center for Environmental Genetics, supplement award with University of Pennsylvania for risk perception and hydraulic fracturing research study  
Role: Supplement PI

Sept 2010 – Aug 2012 NIH/NIEHS R21 ES019255-01 (Papautsky, PI)  
Multi-Metal Chip for Point-of-Care Monitoring in Children

Oct 2009 – Sept 2012 NIH/NIEHS 1R21ES017957-01 (Ryan, PI)  
Impact of Traffic-Related Particles on Asthma for Students in an Urban School District

June 2009 – May 2011 NIH/NIEHS 3R01ES016531-02S4 (Haynes, PI)  
Summer Student Research Award, Marietta Community Actively Researching Exposure Study

Oct 2009 – Sept 2011 NIH/NIEHS 3R01ES016531-02S3 (Haynes, PI)  
Administrative Supplement, Marietta Community Actively Researching Exposure Study

June 2009 – May 2010 CCTST Ethics Grant (Haynes, PI)  
The Ethics and Perceptions of Appalachian Americans to Genetic Research

Aug 2009 – July 2010 UC Center for Environmental Genetics (Haynes, PI)  
University of Cincinnati Firefighter Pilot Research Study

Erin N. Haynes, DrPH, MS 4/22/2024  
July 2009 – June 2010 UC Education and Research Center (Haynes, PI)  
Firefighters' Exposure to Fine Particles and Polycyclic Aromatic Hydrocarbons

April 2009 – March 2010 CDC/NIOSH 211-2008-M-27606 (Haynes, PI)  
DNA Analyses to Assess Genetic Susceptibility to Manganese Neurotoxicity

July 2008 – June 2010 NIH/NIEHS 1R03ES017362-01 (Haynes, PI)  
University of Cincinnati-Marietta-Parkersburg Metropolitan Area Reciprocal Research Relationship

June 2007 – March 2012 NIEHS R01 ES015559-01 (Dietrich, PI)  
Early Lead Exposure, ADHD & Persistent Criminality: Role of Genes and Environment

July 2007 – June 2008 NIH/NIEHS Center for Environmental Genetics (Haynes, PI)  
Extent of Metal Exposure in Marietta, Ohio and the Surrounding Area

July 2006 – June 2010 NIOSH 3 T42 OH008432-02S1 (Talaska, PI)  
Biological Monitoring Component Program (ERC)

Aug 2005 - July 2010 NCRR 1 K30 RR022273-01 (Tsevat, PI)  
National Center for Research Resources (NIH) University of Cincinnati Clinical Curriculum Award

Dec 2004 – Nov 2007 NIH/ NIEHS 5R21ES013524-02 (Haynes, PI)  
Neurobehavioral Effects of Low-Level Manganese Exposure

Dec 2003 – Nov 2004 NIH/NIEHS Center for Environmental Genetics Pilot Project  
Neurobehavioral Effects of Low-Level Manganese Exposure

April 2000 – March 2001 NIH/NIEHS Center for Environmental Genetics Pilot Project  
Racial Disparity in Blood Lead Concentration due to Genetic Variation in Calcium Absorption,

Sept 1999 – Aug 2000 Blue Cross Blue Shield of Michigan Foundation, Student Award  
A Systematic review of the Effect of Lead Hazard Controls on Children's Blood Lead Concentrations

Sept 1999 – Aug 2000 Michigan Campus Compact, Scholarship of Engagement  
Primary Prevention of Childhood Lead Poisoning through Maternal Education

## RESEARCH: PUBLICATIONS

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### PEER-REVIEWED JOURNAL ARTICLES

A list of published work is below.

My NCBI Bibliography (includes work published by collaborators attributed to my funding)

<http://www.ncbi.nlm.nih.gov/sites/myncbi/erin.haynes.1/bibliography/41145614/public/?sort=date&direction=ascending>

1. Dunfee, M., Bush, H., Leger, K.A. *et al.* Impact of Implementing New Technology Into K-12 Classrooms on Teacher Well-Being During the COVID-19 Pandemic. *TechTrends* (2024). <https://doi.org/10.1007/s11528-024-00957-y>
2. Boselli E, Wu Z, Haynes EN, Papautsky I. [Screen-Printed Sensors Modified with Nafion and Mesoporous Carbon for Electrochemical Detection of Lead in Blood](#). *J Electrochem Soc.* 2024 Feb 1;171(2):027513. doi: 10.1149/1945-7111/ad2397. Epub 2024 Feb 13. PubMed PMID: 38357555; PubMed Central PMCID: PMC10862559.

3. Martin KV, Hilbert TJ, Reilly M, Christian WJ, Hoover A, Pennell KG, Ding Q, Haynes EN. [PFAS soil concentrations surrounding a hazardous waste incinerator in East Liverpool, Ohio, an environmental justice community](#). *Environ Sci Pollut Res Int*. 2023 Jul;30(33):80643-80654. doi: 10.1007/s11356-023-27880-8. Epub 2023 Jun 10. PubMed PMID: 37300732; PubMed Central PMCID: PMC10510938.
4. Volckens J, Haynes EN, Croisant SP, Cui Y, Errett NA, Henry HF, Horney JA, Kwok RK, Magzamen S, Rappold AG, Ravichandran L, Reinlib L, Ryan PH, Shaughnessy DT. [Health Research in the Wake of Disasters: Challenges and Opportunities for Sensor Science](#). *Environ Health Perspect*. 2023 Jun;131(6):65002. doi: 10.1289/EHP12270. Epub 2023 Jun 30. PubMed PMID: 37389972; PubMed Central PMCID: PMC10312369.
5. Ryan PH, Wolfe C, Parsons A, Brokamp C, Turner A, and Haynes E. Participant engagement to develop report-back materials for personal air monitoring. *Journal of Clinical and Translational Science* 7: e76, 1–8. doi: [10.1017/cts.2023.30](#)
6. Newman, N. C., Knapke, J. M., Kinyalocots, R., Belt, J., & **Haynes, E.** (Accepted/In press). Evaluation of academic detailing to educate clinicians regarding childhood lead poisoning prevention: a pilot study. *Journal of Osteopathic Medicine*. <https://doi.org/10.1515/jom-2022-0125>
7. Wu, Z., Heineman, W. R., **Haynes, E. N.**, & Papautsky, I. (2022). Electrochemical Determination of Manganese in Whole Blood with Indium Tin Oxide Electrode. *Journal of the Electrochemical Society*, 169(5), [057508]. <https://doi.org/10.1149/1945-7111/ac6a19>
8. Martinez M, Harry GJ, **Haynes EN**, Lin PD, Oken E, Horton MK, Wright RO, Arora M, Austin C. [Quantitative fluoride imaging of teeth using CaF emission by laser induced breakdown spectroscopy](#). *J Anal At Spectrom*. 2023 Feb 8;38(2):303-314. doi: 10.1039/d2ja00134a. eCollection 2023 Feb 8. PubMed PMID: 36776552; PubMed Central PMCID: PMC9906802.
9. Politis MD, Freedman JC, **Haynes EN**, Sanders AP. Association of Manganese Biomarker Concentrations with Blood Pressure and Kidney Parameters among Healthy Adolescents: NHANES 2013-2018. *Children (Basel)*. 2021 Sep 25;8(10):846. doi: 10.3390/children8100846. PMID: 34682111; PMCID: PMC8534392.
10. Stolfi A, Fulk F, Reponen T, Hilbert TJ, Brown D, **Haynes EN**. [AERMOD modeling of ambient manganese for residents living near a ferromanganese refinery in Marietta, OH, USA](#). *Environ Monit Assess*. 2021 Jun 13;193(7):419. doi: 10.1007/s10661-021-09206-8. PubMed PMID: 34120251; PubMed Central PMCID: PMC8569639.
11. Hilbert TJ, Brancato C, Carter K, Westneat S, Bush HM, **Haynes EN**. Disinfectant use by K-12 school staff to combat SARS-CoV-2, *American Journal of Infection Control*, doi:10.1016/j.ajic.2021.08.02
12. Martin KV, Sucharew H, Dietrich KN, Parsons PJ, Palmer CD, Wright R, Amarasiriwardena C, Smith DR, **Haynes EN**. [Co-exposure to manganese and lead and pediatric neurocognition in East Liverpool, Ohio](#). *Environ Res*. 2021 Jul 8;202:111644. doi: 10.1016/j.envres.2021.111644. [Epub ahead of print] PubMed PMID: 34246641; NIHMSID:NIHMS1723369.
13. Mottaleb AM, Ding QX, Pennel KG, **Haynes EN**, Morris AJ. Direct injection analysis of Per and Polyfluoroalkyl substances in surface and drinking water by sample filtration and Liquid chromatography-tandem mass spectrometry. *J of Chromatography*. Accepted July 16, 2021
14. **Haynes EN**, Hilbert TJ, Westneat S, Leger KA, Keynton K, Bush H. Impact of the COVID-19 Shutdown on Mental Health in Appalachia by Working Status. *J Appalach Health* 2021;3(1):18-28. <https://doi.org/10.13023/jah.0301.03>

15. **Haynes, EN.** Environmental Biodynamics: A Bold New Frontier. *BioEssays* 2020, 42, 2000225. <https://doi.org/10.1002/bies.202000225>
16. Martin KV, Edmondson D, Cecil KM, Bezi C, Vance ML, McBride D, **Haynes EN.** Manganese Exposure and Neurologic Outcomes in Adult Populations. *Neurol Clin.* 2020 Nov;38(4):913-936. doi: 10.1016/j.ncl.2020.07.008. Epub 2020 Sep 12. PMID: 33040869.
17. Balachandran RC, Mukhopadhyay S, McBride D, Veevers J, Harrison FE, Aschner M, **Haynes EN,** Bowman AB. Brain manganese and the balance between essential roles and neurotoxicity. *J Biol Chem.* 2020 May 8;295(19):6312-6329. doi: 10.1074/jbc.REV119.009453. Epub 2020 Mar 18. PMID: 32188696; PMCID: PMC7212623.
18. Knapke JM, **Haynes EN,** Vaughn LM. Improving Physician Research Training: Incorporating Student Feedback into Program Evaluation. *Studies in Graduate and Postdoctoral Education.* E-pub ahead of print March 9, 2020. <https://doi.org/10.1108/SGPE-03-2019-0036>
19. Yeramaneni S, Yolton K, Kannan K, Dietrich KN, **Haynes EN.** Serum Cotinine versus Parent Reported Measures of Secondhand Smoke Exposure in Rural Appalachian Children. *J Appalach Health.* 2019;1(1):15-26. doi: 10.13023/jah.0101.03. PubMed PMID: 31179444; PubMed Central PMCID: PMC6553863.
20. **Haynes EN,** Hilbert T, Sucharew H, Dietrich KN. Response to "Comment on 'Impact of air manganese on child neurodevelopment in East Liverpool, Ohio' by Haynes et al. (2018)". *Neurotoxicology.* 2018 Sep;68:149-150. doi: 10.1016/j.neuro.2018.07.016. Epub 2018 Aug 3. PubMed PMID: 30081052.
21. Percy Z, DeFranco E, Xu F, Hall ES, **Haynes EN,** Jones D, Muglia LJ, Chen A. Trimester specific PM2.5 exposure and fetal growth in Ohio, 2007-2010. *Environ Res.* 2019 Jan 15;171:111-118. doi: 10.1016/j.envres.2019.01.031. [Epub ahead of print] PMID: 30660917
22. Calvillo A, **Haynes E,** Burkle J, Schroeder K, Calvillo A, Reese J, Reponen T. Pilot study on the efficiency of water-only decontamination for firefighters' turnout gear. *J Occup Environ Hyg.* 2018 Nov 28:1-16. doi: 10.1080/15459624.2018.1554287. PMID: 30485152
23. Ren S, **Haynes E,** Hall E, Hossain M, Chen A, Muglia L, Lu L, DeFranco E. Periconception Exposure to Air Pollution and Risk of Congenital Malformations. *J Pediatrics.* 2018; 193: 76-84. PMID: 29237538
24. Paulik, LB, Hobbie KA, Rohlman D, Smith BW, Scott RP, Kincl L, **Haynes EN,** and Anderson KA. Environmental and individual PAH exposures near rural natural gas extraction. *Environmental Pollution.* Online May 29, 2018. 241: 397–405.
25. Newman N, Elam S, Igoe C, Jones C, Menrath W, Porter D, **Haynes EN.** A Community-Academic Partnership to Reduce Lead Exposure from an Elevated Roadway Demolition, Cincinnati, Ohio, 2012. *Public Health Reports.* 132 (6): 622-626.
26. Zipkin FB, Falciglia GA, Kuhnell P, **Haynes EN.** Development and Evaluation of a Manganese and Iron Food Frequency Questionnaire for Pediatrics. *Int J Environ Res Public Health.* 2017; 14(9). PMID: 28906436.
27. **Haynes EN,** Sucharew H, Hilbert TJ, Kuhnell P, Spencer A, Newman NC, Burns R, Wright R, Parsons PJ, Dietrich KN. Impact of air manganese on child neurodevelopment in East Liverpool, Ohio. *Neurotoxicology.* 2017; [Epub ahead of print]. PMID: 28888663. *NIEHS Paper of the Year 2017; Paper of the Month, October 2017*

28. Knapke JM, **Haynes EN**, Vaughn LM. Using Qualitative Methods to Improve Physician Research Training: Understanding the Student Perspective. *International Journal of Health Sciences Education*. 2017; 4(1):1-15.
29. Kang W, Rusinek C, Bange A, **Haynes E**, Heineman WR, Papautsky I. Determination of manganese by cathodic stripping voltammetry on a microfabricated platinum thin-film electrode. *Electroanalysis*. 2017 Mar;29(3):686-695. doi: 10.1002/elan.201600679. PubMed PMID: 28983182; PubMed Central PMCID: PMC5624726.
30. Kang W, Pei X, Rusinek CA, Bange A, **Haynes EN**, Heineman WR, Papautsky I. Determination of Lead with a Copper-Based Electrochemical Sensor. *Anal Chem*. 2017; 89(6):3345-3352. PMID: 28256823.
31. Fulk F, Succop P, Hilbert TJ, Beidler C, Brown D, Reponen T, **Haynes EN**. Pathways of inhalation exposure to manganese in children living near a ferromanganese refinery: A structural equation modeling approach. *Sci Total Environ*. 2017; 579:768-775. PMID: 27865527.
32. Knapke J, **Haynes E**, Breen J, Kuhnell P, Smith L, Meinzen-Derr J. Evaluation of Online Graduate Epidemiology Instruction and Student Outcomes. *Online Learning*. 2016; 20(4):201-211.
33. Vollet K, **Haynes EN**, Dietrich KN. Manganese Exposure and Cognition Across the Lifespan: Contemporary Review and Argument for Biphasic Dose-Response Health Effects. *Curr Environ Health Rep*. 2016; 3(4):392-404. PMID: 27722879.
34. Fulk F, **Haynes EN**, Hilbert TJ, Brown D, Peterson D, Reponen T. Comparison of stationary and personal air sampling with an air dispersion model for children's ambient exposure to manganese. *J Expo Sci Environ Epidemiol*. 2016; 26(5):494-502. PMID: 27168393.
35. Paulik LB, Donald CE, Smith BW, Tidwell LG, Hobbie KA, Kincl L, **Haynes EN**, Anderson KA. Emissions of Polycyclic Aromatic Hydrocarbons from Natural Gas Extraction into Air. *Environ Sci Technol*. 2016; 50(14):7921-9. PMID: 27400263.
36. **Haynes EN**, Elam S, Burns R, Spencer A, Yancey E, Kuhnell P, Alden J, Walton M, Reynolds V, Newman N, Wright RO, Parsons PJ, Praamsma ML, Palmer CD, Dietrich KN. Community Engagement and Data Disclosure in Environmental Health Research. *Environ Health Perspect*. 2016; 124(2):A24-7. PMID: 26829152.
37. DeFranco E, Moravec W, Xu F, Hall E, Hossain M, **Haynes EN**, Muglia L, Chen A. Exposure to airborne particulate matter during pregnancy is associated with preterm birth: a population-based cohort study. *Environ Health*. 2016; 15:6. PMID: 26768419.
38. Poe S, Vandivier-Pletsch RH, Clay M, Wong HR, **Haynes E**, Rothenberg FG. Cardiac Troponin Measurement in the Critically Ill: Potential for Guiding Clinical Management. *J Investig Med*. 2015; 63(8):905-15. PMID: 26425879.
39. **Haynes EN**, Sucharew H, Kuhnell P, Alden J, Barnas M, Wright RO, Parsons PJ, Aldous KM, Praamsma ML, Beidler C, Dietrich KN. Manganese Exposure and Neurocognitive Outcomes in Rural School-Age Children: The Communities Actively Researching Exposure Study (Ohio, USA). *Environ Health Perspect*. 2015; 123(10):1066-71. PMID: 25902278.
40. Rohlman D, Syron L, Hobbie K, Anderson KA, Scaffidi C, Sudakin D, Peterson ES, Waters KM, **Haynes E**, Arkin L, Feezel P, Kincl L. A Community-Based Approach to Developing a Mobile Device for Measuring Ambient Air Exposure, Location, and Respiratory Health. *Environmental Justice*. 2015; 8(4):126-134.



41. Yeramneni S, Dietrich KN, Yolton K, Parsons PJ, Aldous KM, **Haynes EN**. Secondhand Tobacco Smoke Exposure and Neuromotor Function in Rural Children. *J Pediatr*. 2015; 167(2):253-9. PMID: 25882879.
42. Knapke JM, **Haynes EN**, Kuhnell P, Tsevat J. NIH grant awards as a metric of clinical and translational research training effectiveness. *Clin Transl Sci*. 2015; 8(1):52-6. PMID: 25377275.
43. DeFranco E, Hall E, Hossain M, Chen A, **Haynes EN**, Jones D, Ren S, Lu L, Muglia L. Air pollution and stillbirth risk: exposure to airborne particulate matter during pregnancy is associated with fetal death. *PLoS One*. 2015; 10(3):e0120594. PMID: 25794052.
44. Kang W, Pei X, Bange A, **Haynes EN**, Heineman W, Papautsky I. Copper-based electrochemical sensor with palladium electrode for cathodic stripping voltammetry of manganese. *Anal Chem*. 2014; 86(24):12070-7. PMID: 25476591.
45. Parin ML, Yancey E, Beidler C, **Haynes EN**. Efficacy of Environmental Health E-training for Journalists. *Stud Media Commun*. 2014; 2(1):71-80. PMID: 26998499.
46. Korfmacher KS, Elam S, Gray KM, **Haynes E**, Hughes MH. Unconventional natural gas development and public health: toward a community-informed research agenda. *Rev Environ Health*. 2014; 29(4):293-306. PMID: 25204212.
47. Baxter CS, Hoffman JD, Knipp MJ, Reponen T, **Haynes EN**. Exposure of firefighters to particulates and polycyclic aromatic hydrocarbons. *J Occup Environ Hyg*. 2014; 11(7):D85-91. PMID: 24512044.
48. Rugless F, Bhattacharya A, Succop P, Dietrich KN, Cox C, Alden J, Kuhnell P, Barnas M, Wright R, Parsons PJ, Praamsma ML, Palmer CD, Beidler C, Wittberg R, **Haynes EN\***. Childhood exposure to manganese and postural instability in children living near a ferromanganese refinery in Southeastern Ohio. *Neurotoxicol Teratol*. 2014; 41:71-9. PMID: 24370548.
49. Knapke JM, Tsevat J, Succop PA, Djawe K, Kuhnell P, **Haynes EN**. Publication track records as a metric of clinical research training effectiveness. *Clin Transl Sci*. 2013; 6(6):458-62. PMID: 24330690.
50. Fullencamp AN, **Haynes EN\***, Meloncon L, Succop P, Nebert DW. Perceptions of genetic research in three rural Appalachian Ohio communities. *J Community Genet*. 2013; 4(1):9-17. PMID: 22865241.
51. Lee LS, Pusek SN, McCormack WT, Helitzer DL, Martina CA, Dozier AM, Ahluwalia JS, Schwartz LS, McManus LM, Reynolds BD, **Haynes EN**, Rubio DM. Clinical and translational scientist career success: metrics for evaluation. *Clin Transl Sci*. 2012; 5(5):400-7. PMID: 23067352.
52. Ouyang B, Baxter CS, Lam HM, Yeramneni S, Levin L, **Haynes E**, Ho SM. Hyomethylation of dual specificity phosphatase 22 promoter correlates with duration of service in firefighters and is inducible by low-dose benzo[a]pyrene. *J Occup Environ Med*. 2012; 54(7):774-80. PMID: 22796920.
53. **Haynes EN\***, Ryan P, Chen A, Brown D, Roda S, Kuhnell P, Wittberg D, Terrell M, Reponen T. Assessment of personal exposure to manganese in children living near a ferromanganese refinery. *Sci Total Environ*. 2012; 427-428:19-25. PMID: 22551936.
54. Sahay RD, **Haynes EN**, Rao MB, Pirko I. Assessment of Sexual Satisfaction in Relation to Potential Sexual Problems in Women with Multiple Sclerosis: A Pilot Study. *Sex Disabil*. 2012; 30(2):227-36.

55. **Haynes EN\***, Chen A, Ryan P, Succop P, Wright J, Dietrich KN. Exposure to airborne metals and particulate matter and risk for youth adjudicated for criminal activity. *Environ Res.* 2011; 111(8):1243-8. PMID: 21864838.
56. **Haynes EN\***, Beidler C, Wittberg R, Meloncon L, Parin M, Koprass EJ, Succop P, Dietrich KN. Developing a bidirectional academic-community partnership with an Appalachian-American community for environmental health research and risk communication. *Environ Health Perspect.* 2011; 119(10):1364-72. PMID: 21680278.
57. Jothimuthu P, Wilson RA, Herren J, **Haynes EN**, Heineman WR, Papautsky I. Lab-on-a-chip sensor for detection of highly electronegative heavy metals by anodic stripping voltammetry. *Biomed Microdevices.* 2011; 13(4):695-703. PMID: 21479538.
58. Meloncon L, **Haynes E**, Varelmann M, Groh L. Building a Playground: General Guidelines for Creating Educational Web Sites for Children. *Tech Commun.* 2010; 57(4):398-416. PMID: 26633909.  
*Recipient of the Frank R. Smith Distinguished Article in Technical Communication Award and Cover Page of Technical Communication.*  
*Nominated for the National Council of Teachers Technical and Scientific Communication Best Article (years 2010-2011) in Empirical Research.*
59. **Haynes EN\***, Heckel P, Ryan P, Roda S, Leung YK, Sebastian K, Succop P. Environmental manganese exposure in residents living near a ferromanganese refinery in Southeast Ohio: a pilot study. *Neurotoxicology.* 2010; 31(5):468-74. PMID: 19879291.
60. Brubaker CJ, Schmithorst VJ, **Haynes EN**, Dietrich KN, Egelhoff JC, Lindquist DM, Lanphear BP, Cecil KM. Altered myelination and axonal integrity in adults with childhood lead exposure: a diffusion tensor imaging study. *Neurotoxicology.* 2009; 30(6):867-75. PMID: 19619581.
61. Curran CP, Park RM, Ho SM, **Haynes EN**. Incorporating genetics and genomics in risk assessment for inhaled manganese: from data to policy. *Neurotoxicology.* 2009; 30(5):754-60. PMID: 19646473.
62. Standridge JS, Bhattacharya A, Succop P, Cox C, **Haynes E**. Effect of chronic low level manganese exposure on postural balance: a pilot study of residents in southern Ohio. *J Occup Environ Med.* 2008; 50(12):1421-9. PMID: 19092498.
63. Musaad S, **Haynes EN**. Biomarkers of obesity and subsequent cardiovascular events. *Epidemiol Rev.* 2007; 29:98-114. PMID: 17494057.
64. **Haynes EN\***, Kalkwarf HJ, Hornung R, Wenstrup R, Dietrich K, Lanphear BP. Vitamin D receptor Fok1 polymorphism and blood lead concentration in children. *Environ Health Perspect.* 2003; 111(13):1665-9. PMID: 14527848.
65. **Haynes E\***, Lanphear BP, Tohn E, Farr N, Rhoads GG. The effect of interior lead hazard controls on children's blood lead concentrations: a systematic evaluation. *Environ Health Perspect.* 2002; 101(1):103-7. PMID: 11781171.
66. Kelada SN, Shelton (**Haynes**) E, Kaufmann RB, Khoury MJ. Delta-aminolevulinic acid dehydratase genotype and lead toxicity: a HuGE review. *Am J Epidemiol.* 2001; 154(1):1-13. PMID: 11427399.

## BOOK/ENCYCLOPEDIA CHAPTERS

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1. **Haynes, EN**, McKenzie LM, Malin SA, Cherrie JW, Miller A. Onshore unconventional oil and gas extraction and implications for public health. Invited Oxford University Press Encyclopedia. Accepted June 2017.
2. Langevin S and Haynes, EN. "Manganese in Health and Disease." Eds. Aschner M & Costa LG. *Developmental Effects of Manganese*. Invited book chapter. The Royal Society of Chemistry. 2015.
3. Haynes, EN. Community-Based Participatory Research: An Overview for Application in DoD/VA Research. Invited book chapter for Airborne Hazards, US Army Borden Institute. May 21, 2015.  
<http://www.cs.amedd.army.mil/borden/Portlet.aspx?id=0d4977be-d91a-41c3-8580-c29fdb6f257>
4. Musaad S, Haynes E. *Obesity*. In: Rothman N, Hainaut P, Schulte P, Smith M, Boffetta P, Perera F. Molecular epidemiology: principles and practices. Lyon: IARC Scientific Publication No 163. March 2012.

## AWARDS AND HONORS

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2023	Wilmington College Alumni Award for Outstanding Professional Achievements
2023	University of Kentucky Research Professor
2021	Executive Leadership in Academic Medicine (ELAM) recipient
2020	Delta Omega Honor Society in Public Health Inductee
2019	NIOSH Bullard-Sherwood Research to Practice (r2p) Award
2018	Founders Award, College of Medicine, University of Cincinnati
2017	NIEHS Paper of the Year Award
2017	NIEHS Paper of the Month, October
2017	Ohio School Board Association, Business Community Award
2013	Association of American Medical Colleges Mid-Career Women Faculty Professional Development Seminar awardee
2013	Academic-Community Research Partnership Award for service related to my collaborative approach to the Health Impact Assessment for the 6 <sup>th</sup> Street Viaduct Demolition.
2005-08	NIH Loan Repayment Program

## CURRENT MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS

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Member, International Society of Exposure Science

- President-Elect, 2023
- Co-Chair 2021 Annual Meeting
- Academic Councilor, 2016-2019
- Technical Organizing Committee, 2014-2021

Member, International Society of Environmental Epidemiology

Member, Society for Epidemiologic Research

Member, American Public Health Association

## SERVICE

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### National/International Service

Member	National Academies of Sciences East Palestine Train Derailment Workshop (2023)
Member	Board of Scientific Counselors, National Toxicology Program (2023-present)
Member	National Academies of Sciences Committee on the Guidance for PFAS Testing and Health Outcomes (2020-2022)
Member	External Advisory Committee, Mt Sinai Medical School CTSA (2022-present)
Member	External Review Committee, Mt Sinai Medical School Dept of Environmental Medicine (2021)
Co-Chair	International Society of Exposure Science (ISES) 2021 Annual Meeting
Assoc Editor	Journal of Appalachian Health (2019-present)
Co-chair	National Institute of Environmental Health Sciences (NIEHS) Disaster Response Research (DR2) Network Committee (2019-present)
Member	National Institute of Occupational Health (NIOSH), Emergency Preparedness and Response

Erin N. Haynes, DrPH, MS 4/22/2024  
 (EPR) Program Review Panel, Atlanta, GA (2018)

Member International Society of Exposure Science (ISES) General Scientific Meeting Committee, 2019-2022

Member National Occupational Research Agenda (NORA), Manufacturing Sector Program, Office of Policy, Planning and Evaluation, National Institute for Occupational Safety and Health (2017-2020)

Academic Counselor (elected) International Society of Exposure Science (2017-2020)

Member Ethics and Philosophy Committee, International Society of Environmental Epidemiology, 2015-2017

Chair Technology Fair, Technical Organizing Committee, International Society of Exposure Science Conference, 2014-2018

Chair Appalachian Translational Research Network, 2018

Member International Advisory Committee for the *Second International Conference on the Neurotoxicity and Prevention of Manganese Adverse Health Effects*, 2016

Participant Health Effects Institute (HEI), Potential Impacts of Unconventional Oil and Gas Development in the Appalachian Basin, Public Workshop, 2014

Member National Institute of Environmental Health Sciences (NIEHS) Environmental Health Centers, Hydraulic Fracturing Working Group, 2013-2016

Member Education and Research Training Key Function Committee (KFC), Clinical and Translational Science Award, 2011-2018

Participant National Institute of Environmental Health Sciences Risk Communication Workshop, 2010

Member Planning Committee (2010), National Institute of Environmental Health Sciences, Inaugural Partnerships for Environmental Public Health Research Triangle Park, NC

Member Evaluation Committee, Association for Clinical Research Training (ACRT). Bethesda, MD, 2006-2010

**Service Activities: University of Kentucky Academic Years**

Member Health Behavior and Society Department Self Study Review Panel, UK College of Public Health (2022)

Member Environmental Medicine Department Review Panel, Mt. Sinai Medical School, NY (2022)

Member Pharmacology and Nutritional Sciences Department Self Study Review Panel, UK College of Medicine (2021)

Review Internal pilots submitted to UKCARES and UNITE (2019-present)

Organizer John P. Wyatt, MD Environment and Health Symposium (2021-present)

Member Search Committee, Director of Kentucky Geological Survey

Member President's Sustainability Council (2021-present)

Member CPH Leadership Committee, College of Public Health (2019-present)

Chair Search Committee, Chair of Department of Preventive Medicine and Environmental Health, College of Public Health (2020)

Member External Advisory Board, Molecular Epidemiology in Children's Environmental Health (2020-present)

**Service Activities: University of Cincinnati Academic Years**

Member Reappointment, Promotion, Tenure Committee, Department of Family and Community Medicine (2016-2018)

President Women in Medicine and Science (WIMS) (2015-2018)

Member LEAF Academic Accountability Committee (2015-2017)

Member, Program Committee, Center for Closing the Health Gap (2013-2018)

Commissioner EPA-Appointed, Hamilton County Environmental Action Commission (HCEAC) (2012-2018)

Chair Hamilton County Environmental Action Commission (HCEAC) (2016)

Organizer Symposium for the Ohio-Kentucky-Indiana (OKI) Regional Council of Government's Regional Impact of Traffic Exhaust on Children's Health Symposium (2012).

Member Fernald Community Advisory Committee (2012-2017)

Erin N. Haynes, DrPH, MS	4/22/2024
Member	Search committee for Director of Clinical Studies in Occupational and Ambient Environments Search Committee (2009-2012)
Member	Epidemiology Faculty Search Committee (2012)
Member	Center for Clinical and Translational Science and Training, Steering Committee, Cincinnati, OH (2010-2018)
Member	Internal Advisory Board, NIEHS EHS Core Center 'Center for Environmental Genetics,' (2012-2013)
Member	Internal Advisory Board, Molecular Epidemiology in Children's Environmental Health (2012-2018)
Chair	Curriculum Committee, Master of Science in Clinical and Translational Research (2010-2018)

### Grant Review Panels

1. NIH, NIEHS Environmental Health Study Section – Standing Committee Member (2017-2022)
2. NIH, NIEHS Collaborative Centers in Children's Environmental Health (2021)
3. NIH, NIEHS, Sensor Validation (2021)
4. NIH, NIEHS, Outstanding New Environmental Health Scientist (2014- 2021)
5. NIH, R24, Cohort Maintenance Review Meeting. 2017, 2018
6. NIH, Infectious, Reproductive, Asthma and Pulmonary Conditions Study Section, Nov 2016
7. NIH, Children's Health Exposure Analysis Resources (CHEAR) Review, June 2015
8. NIEHS, Superfund Basic Science Research Center (2013, 2021)
9. CDC, Education and Research Center Pilot Project Program (2011-2013)
10. NIH, Office of the National Coordinator for Health Information Technology (ONC), and Environmental Protection Agency (EPA) Grant Review: My Air My Health Challenge (2012-present).
11. NIEHS, ZES1-LKB-K (R2), Research Careers in Emerging Technologies (2013).
12. NIH, ZES1 SET-J K9 1, Career Grants in the Environmental Health Sciences (11/2012).
13. Breast Cancer Registry of Greater Cincinnati grant program (2011).
14. Conferences on Environmental Diseases 2011/2012 Council ZES1TN-J K 1, Teresa Nesbitt, SRO (11/2011).
15. NIEHS, Environmental Health Science Centers (2009; 2010).

### Manuscript Review

Serve as an *ad hoc* reviewer for the following scientific journals:

1. Journal of Appalachian Health
2. BioEssays, impact factor: 4.08
3. Environmental Health Perspectives, Impact factor: 7.26
4. Environmental Research, Impact factor: 3.85
5. Journal of Occupational and Environmental Medicine, Impact factor: 1.84
6. Environmental Science and Technology, Impact factor: 5.257
7. Journal of Exposure Science and Environmental Epidemiology: 3.187

## COURSES

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2020 2010-2018	<p><u>MPH Capstone</u> for Epidemiology and Environmental Health, UK CPH Co-Director <u>Design and Management of Field Studies in Epidemiology</u>, 3 credit Graduate course, Division of Epidemiology, Department of Environmental Health, University of Cincinnati ~25 students per year</p> <ul style="list-style-type: none"> <li>• The course teaches students to synthesize their research ideas into a hypothesis, specific aims, research design, methods for collecting and analyzing data, recruitment strategies, tips on maintaining a longitudinal cohort, and the grant review process. Students prepare an R21 grant submission during the 10-week course.</li> </ul>
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Erin N. Haynes, DrPH, MS

4/22/2024

- Required course for all MS and PhD students in the Division of Epidemiology and Biostatistics
- The class received a “T” designation, as it is transdisciplinary through a University of Cincinnati (UC) Forward grant, entitled “Innovations in Science Communications” for years 2012-present.
- Student evaluations: Average 4.8/5 in 2017

2018

Communicating Your Science, 2 credit Graduate course, Division of Epidemiology, Department of Environmental Health, University of Cincinnati ~12 students – built and offered this course for University.

2012-2018

Successful Scientific Writing, 1 credit online Graduate course, Division of Epidemiology, Department of Environmental Health, University of Cincinnati ~30 students/year

2005-2010

Molecular Epidemiology, 3 credit Graduate course, Division of Epidemiology and Biostatistics, Department of Environmental Health, University of Cincinnati ~35 students/year

2003

Community Exposure Assessment, Graduate course, Division of Epidemiology and Biostatistics, Department of Environmental Health, University of Cincinnati

2001-2002

Environmental Science I and II, Undergraduate course, Chatfield College, Ohio

1997-1998

Biology Laboratory, Undergraduate course, UC Clermont