

CURRICULUM VITAE
John Doyle Beard, BS, MPH, PhD

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EDUCATION:

- PhD, Epidemiology, University of North Carolina at Chapel Hill (UNC-Chapel Hill), Chapel Hill, NC, May 2015
 - Dissertation: Military Service, Deployments, and Exposures in Relation to Amyotrophic Lateral Sclerosis Etiology and Survival
- MPH, Public Health, Brigham Young University (BYU), Provo, UT, April 2010
 - Master's Paper: Suicide and Pesticide Exposures among Pesticide Applicators and Their Spouses in the Agricultural Health Study
- BS, Statistics, BYU, Provo, UT, April 2008

WORK EXPERIENCE:

- Assistant Professor, Department of Public Health, College of Life Sciences, BYU, Provo, UT, July 2017-Present
- O-3 (Lieutenant) Senior Assistant Scientist, 11 Regular Active Corps, Commissioned Corps, U.S. Public Health Service (USPHS), Rockville, MD, assigned to
 - Research Officer (O-4 Research Scientist Billet), Epidemiology Team, Industrywide Studies Branch, Division of Surveillance, Hazard Evaluations and Field Studies, National Institute for Occupational Safety and Health (NIOSH), U.S. Centers for Disease Control and Prevention (CDC), Cincinnati, OH, February 2017-July 2017
- Special Volunteer, Chronic Disease Epidemiology Group, Epidemiology Branch, Division of Intramural Research, National Institute of Environmental Health Sciences (NIEHS), U.S. National Institutes of Health (NIH), Research Triangle Park, NC, July 2015-June 2017
- O-3 (Lieutenant) Senior Assistant Scientist, 11 Regular Active Corps and 41 Ready Reserve Active Corps, Commissioned Corps, USPHS, Rockville, MD, assigned to
 - Epidemic Intelligence Service (EIS) Officer (O-5 Senior Research Scientist Billet), EIS Program, Epidemiology Workforce Branch, Division of Scientific Education and Professional Development, Center for Surveillance, Epidemiology, and Laboratory Services (CSELS), Office of Public Health Scientific Services (OPHSS), CDC, Atlanta, GA, assigned to

- Epidemiology Team, Industrywide Studies Branch, Division of Surveillance, Hazard Evaluations and Field Studies, NIOSH, CDC, Cincinnati, OH, June 2015-February 2017
- Commissioned Officer Training Academy, Assignments and Career Management Branch, Division of Commissioned Corps Personnel and Readiness, Office of the Surgeon General, Potomac, MD, March 2016
- EIS Program, Epidemiology Workforce Branch, Division of Scientific Education and Professional Development, CSELS, OPHSS, CDC, Atlanta, GA, July 2015
- Pre-Doctoral Intramural Research Training Award Fellow, Chronic Disease Epidemiology Group, Epidemiology Branch, Division of Intramural Research, NIEHS, NIH, Research Triangle Park, NC, July 2014-June 2015
- Special Volunteer, Chronic Disease Epidemiology Group, Epidemiology Branch, Division of Intramural Research, NIEHS, NIH, Research Triangle Park, NC, August 2010-June 2014
- Teaching Assistant, EPID 726: Epidemiologic Research Methods, Department of Epidemiology, Gillings School of Global Public Health, UNC-Chapel Hill, Chapel Hill, NC, Spring 2013, Spring 2014
- Teaching Assistant, EPID 725: Research Planning Workshop, Department of Epidemiology, Gillings School of Global Public Health, UNC-Chapel Hill, Chapel Hill, NC, Fall 2012, Fall 2013
- Summer Student, Center for Human Genetics, Division of Medical Genetics, Department of Medicine, School of Medicine, Duke University, Durham, NC, May-August 2011
- Epidemiologist/Tracking Network Coordinator, Surveillance Section, Environmental Epidemiology Program, Bureau of Epidemiology, Division of Disease Control and Prevention, Utah Department of Health (UDOH), Salt Lake City, UT, November 2009-August 2010
- Summers of Discovery Intern, Chronic Disease Epidemiology Group, Epidemiology Branch, Division of Intramural Research, NIEHS, NIH, Research Triangle Park, NC, May-July 2009
- Research Assistant, Department of Health Science, College of Health and Human Performance, BYU, Provo, UT, September 2008-April 2009
- Student Custodian, Custodial Shop, Physical Facilities Division, BYU, Provo, UT, May-August 2008
- Volunteer Research Assistant, Department of Health Science, College of Health and Human Performance, BYU, Provo, UT, May-July 2008

- Teaching Assistant, STAT 466: Introduction to Reliability, Department of Statistics, College of Physical and Mathematical Sciences, BYU, Provo, UT, Winter 2008
- Independent Contractor for Editorial Assistance Services, American Statistical Association, Provo, UT, May 2007-April 2008
- Research Assistant, Department of Statistics, College of Physical and Mathematical Sciences, BYU, Provo, UT, February 2007-April 2008
- Student Advisor, Utah Colleges Exit Poll, Center for the Study of Elections and Democracy, Department of Political Science, College of Family, Home and Social Sciences, and Department of Statistics, College of Physical and Mathematical Sciences, BYU, Provo, UT, October-November 2007
- Student Custodian, Custodial Shop, Physical Facilities Division, BYU, Provo, UT, April 2006-January 2007
- Analysis Co-Team Leader, Utah Colleges Exit Poll, Center for the Study of Elections and Democracy, Department of Political Science, College of Family, Home and Social Sciences, and Department of Statistics, College of Physical and Mathematical Sciences, BYU, Provo, UT, September-December 2006
- Teaching Assistant, STAT 221: Principles of Statistics, Department of Statistics, College of Physical and Mathematical Sciences, BYU, Provo, UT, Fall 2005, Summer 2006
- Student Custodian, Custodial Shop, Physical Facilities Division, BYU, Provo, UT, May 2004-August 2005
- Student Custodian, Custodial Shop, Physical Facilities Division, BYU, Provo, UT, January 2001-April 2002

Consulting:

- Consultant, Health Informatics Branch, Division of Field Studies and Engineering, NIOSH, CDC, Cincinnati, OH, July 2020-July 2021
 - %PMR SAS macro
 - User Manual for SAS Program to Calculate Proportionate Mortality Ratios and 95% Confidence Intervals
 - [<URL>](#). Accessed **Month Day, Year**.

TEACHING/MENTORING:**Courses:**

- Lead Instructor, HLTH 322: Environmental Health, Department of Public Health, College of Life Sciences, BYU, Provo, UT (12 times, most recently Winter 2023)

- Lead Instructor, HLTH 422: Disaster Response and Emergency Preparedness, Department of Public Health, College of Life Sciences, BYU, Provo, UT (three times, most recently Winter 2023)
- Lead Instructor, HLTH 688R: Field Experience, Department of Public Health, College of Life Sciences, BYU, Provo, UT (three times, most recently Winter 2023)
- Lead Instructor, HLTH 449: Epidemiologic Study Design and Analysis, Department of Public Health, College of Life Sciences, BYU, Provo, UT (three times, most recently Fall 2022)
- Lead Instructor, HLTH 491R: Mentored Research, Department of Public Health, College of Life Sciences, BYU, Provo, UT (14 times, most recently Fall 2022)
- Lead Instructor, HLTH 691R: Mentored Research, Department of Public Health, College of Life Sciences, BYU, Provo, UT (three times, most recently Fall 2022)
- Lead Instructor, HLTH 606: Environmental Health Sciences, Department of Public Health, College of Life Sciences, BYU, Provo, UT (five times, most recently Winter 2022)
- Teaching Assistant, EPID 726: Epidemiologic Research Methods, Department of Epidemiology, Gillings School of Global Public Health, UNC-Chapel Hill, Chapel Hill, NC (two times, most recently Spring 2014)
- Teaching Assistant, EPID 725: Research Planning Workshop, Department of Epidemiology, Gillings School of Global Public Health, UNC-Chapel Hill, Chapel Hill, NC (two times, most recently Fall 2013)
- Teaching Assistant, STAT 466: Introduction to Reliability, Department of Statistics, College of Physical and Mathematical Sciences, BYU, Provo, UT (one time, most recently Winter 2008)
- Teaching Assistant, STAT 221: Principles of Statistics, Department of Statistics, College of Physical and Mathematical Sciences, BYU, Provo, UT (two times, most recently Summer 2006)

Guest Lectures:

- Guest Instructor, NDFS 361: Food Microbiology, Department of Nutrition, Dietetics, and Food Science, College of Life Sciences, BYU, Provo, UT (three times, most recently October 24, 2022)
 - Topic: Epidemiology
- Guest Instructor, HLTH 314: Health, Disease and Their Determinants, Part 1, Department of Public Health, College of Life Sciences, BYU, Provo, UT (nine times, most recently October 13, 2022)

- Topics: Environmental Factors that Affect Health – Water (focus on problems with water quality, sanitation, and waste disposal), Environmental and Occupational Health Emphasis, Foodborne Diseases
- Guest Instructor, BIO 100: Principles of Biology, Department of Biology, College of Life Sciences, BYU, Provo, UT (two times, most recently March 27, 2020)
 - Topic: Coronavirus Pandemic
- Guest Instructor, HLTH 600: Foundations of Public Health and Health Promotion, Department of Public Health, College of Life Sciences, BYU, Provo, UT (three times, most recently September 16, 2019)
 - Topic: U.S. Public Health Service (USPHS) and USPHS Commissioned Corps
- Guest Panelist or Instructor, HLTH 315: Health, Disease and Their Determinants, Part 2, Department of Public Health, College of Life Sciences, BYU, Provo, UT (three times, most recently May 20, 2019)
 - Topics: Trauma and Mental Health, Air Pollution
- Guest Instructor, HLTH 492R: Directed Public Health Readings (Faith and Public Health), Department of Public Health, College of Life Sciences, BYU, Provo, UT (two times, most recently April 11, 2019)
 - Topic: How can we best seek revelation in our professional lives?
- Guest Instructor, HLTH 210: Foundations of Public Health, Department of Public Health, College of Life Sciences, BYU, Provo, UT (one time, most recently January 31, 2019)
 - Topic: Environmental/Occupational Health
- Guest Instructor, HLTH 100: Introduction to Public Health, Department of Public Health, College of Life Sciences, BYU, Provo, UT (one time, most recently May 31, 2018)
 - Topic: Environmental/Occupational Health
- Guest Instructor, HLTH 322: Environmental Health, Department of Public Health, College of Life Sciences, BYU, Provo, UT (four times, most recently May 23, 2018)
 - Topics: Children’s Environmental Health, Biological Hazards/Integrated Pest Management, Air Pollution
- Guest Instructor, HLTH 618: Survey and Research Methods, Department of Public Health, College of Life Sciences, BYU, Provo, UT (one time, most recently March 26, 2018)
 - Topic: Power and Sample Size
- Guest Instructor, HLTH 619: Infectious and Chronic Disease Prevention and Control, Department of Public Health, College of Life Sciences, BYU, Provo, UT (one time, most recently October 3, 2017)
 - Topic: Outbreak reporting: elements of outbreak investigations of an infectious nature and how an MPH graduate can contribute in identifying, reporting, responding, and controlling an outbreak

- Guest Instructor, EPID 726: Epidemiologic Research Methods, Department of Epidemiology, Gillings School of Global Public Health, UNC-Chapel Hill, Chapel Hill, NC (two times, most recently March 25, 2014)
 - Topic: Oral presentations for EPID 726
- Guest Instructor, HLTH 604: Principles of Biostatistics, Department of Health Science, College of Health and Human Performance, BYU, Provo, UT (one time, most recently April 1, 2009)
 - Topic: Research questions about relationships among variables

Graduate/MPH Student Committees:

- Reader, Jaqueline Cartwright, Department of Public Health, College of Life Sciences, BYU, Provo, UT, 2022-Present
- Advisor, Kato Haupeakui, Department of Public Health, College of Life Sciences, BYU, Provo, UT, 2022-Present
- Reader, Mariana Hansen, Department of Public Health, College of Life Sciences, BYU, Provo, UT, 2021-Present
- Advisor, Joni Tanuvasa-Letisi, Department of Public Health, College of Life Sciences, BYU, Provo, UT, 2021-Present
- Advisor, Megan Pierce, Department of Public Health, College of Life Sciences, BYU, Provo, UT, 2020-2022
- Reader, Rebekah Stewart, Department of Public Health, College of Life Sciences, BYU, Provo, UT, 2020-2022
- Advisor, Chantel Daines, Department of Public Health, College of Life Sciences, BYU, Provo, UT, 2019-2021
- Reader, Mindy Jensen, Department of Public Health, College of Life Sciences, BYU, Provo, UT, 2019-2021
- Reader, Leiema Hunt, Department of Public Health, College of Life Sciences, BYU, Provo, UT, 2018-2020
- Member, Taylor Hoj, Department of Public Health, College of Life Sciences, BYU, Provo, UT, 2017-2018
- Member, Rilee Smith, Department of Public Health, College of Life Sciences, BYU, Provo, UT, 2017-2018

Undergraduate Honors Thesis Committees:

- Faculty Advisor, Sarah Hamner, Department of Public Health, College of Life Sciences, BYU, Provo, UT, 2018-2019 (Sarah did not finish her thesis)
 - Thesis: Occupational Exposures in Relation to Alzheimer's Disease Mortality
- Faculty Reader, Mitchell Merrill, Department of Spanish and Portuguese, College of Humanities, BYU, Provo, UT, 2017
 - Thesis: Quality of Hispanic Oral Health in the U.S.: Perceptions of Dentists and a Call for Improvement

Graduate Mentoring Awards:

- Project Title: Recognizing and Evaluating Indoor Environmental Quality Hazards in Nepal's Brick Factories and Surrounding Communities
 - Role: Co-Investigator/Co-Faculty Mentor for Shilpa Shrestha
 - Coauthor(s): Steven Thygerson (Principal Investigator), James Johnston
 - Type of Source: Internal to BYU
 - Sponsor: Graduate Mentoring Award, Graduate Studies, BYU, Provo, UT
 - Project Dates: 2018-2019
 - Total Dollar Amount: \$13,350, funded

College Undergraduate Research Awards (CURA)/Office of Research and Creative Activities (ORCA) Student Mentoring Grants:

- Project Title: Chemical Analysis of PM_{2.5} Exposure of Brick Kiln Workers in Nepal
 - Role: Faculty Mentor
 - Coauthor(s): Garrett Braiden (Co-Principal Investigator/Student), Matthew Tibbitts (Co-Principal Investigator/Student)
 - Type of Source: Internal to BYU
 - Sponsor: College Undergraduate Research Award, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2022-2023
 - Total Dollar Amount: \$2,000 for students, \$2,000 for project, funded
- Project Title: Sampling and Analyzing Inhaled PM_{2.5} among Brick Workers in Nepal and Assessing Health Risks
 - Role: Faculty Mentor
 - Coauthor(s): James Lu (Co-Principal Investigator/Student), Alisandra Olivares (Co-Principal Investigator/Student)
 - Type of Source: Internal to BYU
 - Sponsor: College Undergraduate Research Award, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2022-2023
 - Total Dollar Amount: \$2,000 for students, \$2,000 for project, not funded
- Project Title: Spatiotemporal Mapping of PM_{2.5} Concentrations at Brick Kilns in Nepal
 - Role: Faculty Mentor

- Coauthor(s): Taylor Heath (Co-Principal Investigator/Student), Lindsey Layton (Co-Principal Investigator/Student)
- Type of Source: Internal to BYU
- Sponsor: College Undergraduate Research Award, College of Life Sciences, BYU, Provo, UT
- Project Dates: 2022-2023
- Total Dollar Amount: \$2,000 for students, \$2,000 for project, not funded

- Project Title: Multiple Sclerosis Mortality by Industry and Occupation
 - Role: Faculty Mentor
 - Coauthor(s): Emily Hawkes (Principal Investigator/Student)
 - Type of Source: Internal to BYU
 - Sponsor: College Undergraduate Research Award, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2020-2021
 - Total Dollar Amount: \$1,500 for student, \$1,500 for project, funded

- Project Title: Parkinson's disease and Occupational Knowledge
 - Role: Faculty Mentor
 - Coauthor(s): Camille Clark (Principal Investigator/Student)
 - Type of Source: Internal to BYU
 - Sponsor: College Undergraduate Research Award, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2020-2021
 - Total Dollar Amount: \$1,500 for student, \$1,500 for project, funded

- Project Title: Relationship Between Occupational Abilities and Amyotrophic Lateral Sclerosis
 - Role: Faculty Mentor
 - Coauthor(s): Dick Bonsrah (Principal Investigator/Student)
 - Type of Source: Internal to BYU
 - Sponsor: College Undergraduate Research Award, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2020-2021
 - Total Dollar Amount: \$1,500 for student, \$1,500 for project, funded

- Project Title: Mortality from Non-atherosclerotic Dementia in Relation to Occupational Exposures – United States (1985-2014)
 - Role: Faculty Mentor
 - Coauthor(s): Susan Westfall (Principal Investigator/Student)
 - Type of Source: Internal to BYU
 - Sponsor: College Undergraduate Research Award, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2019-2020
 - Total Dollar Amount: \$1,500 for student, \$1,500 for project, funded

- Project Title: Radon Levels and Determinants in Utah County Schools
 - Role: Faculty Mentor
 - Coauthor(s): Cheyenne Chausow (Principal Investigator/Student)
 - Type of Source: Internal to BYU
 - Sponsor: College Undergraduate Research Award, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2019-2020
 - Total Dollar Amount: \$1,500 for student, \$1,500 for project, funded

- Project Title: Temperature Inversions, Air Pollution, and Emergency Department Visits for Epilepsy in Utah, 1996-2017
 - Role: Faculty Mentor
 - Coauthor(s): Mary Johnson (Principal Investigator/Student)
 - Type of Source: Internal to BYU
 - Sponsor: College Undergraduate Research Award, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2019-2020
 - Total Dollar Amount: \$1,500 for student, \$1,500 for project, funded

- Project Title: Do Inversions and Air Pollution Have an Effect on Emergency Department Visits for Migraines in Utah?
 - Role: Faculty Mentor
 - Coauthor(s): Cole Jensen (Principal Investigator/Student)
 - Type of Source: Internal to BYU
 - Sponsor: College Undergraduate Research Award, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2018-2019
 - Total Dollar Amount: \$1,500 for student, \$1,500 for project, funded

- Project Title: Occupational Exposures in Relation to Alzheimer's Disease Mortality
 - Role: Faculty Mentor
 - Coauthor(s): Sarah Hamner (Principal Investigator/Student)
 - Type of Source: Internal to BYU
 - Sponsor: College Undergraduate Research Award, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2018-2019
 - Total Dollar Amount: \$1,500 for student, \$1,500 for project, funded

- Project Title: Building Emergency Preparedness Capacity among Refugees in Salt Lake County
 - Role: Faculty Mentor
 - Coauthor(s): Erica Bennion (Principal Investigator/Student)
 - Type of Source: Internal to BYU
 - Sponsor: Office of Research and Creative Activities Student Mentoring Grants, BYU, Provo, UT
 - Project Dates: 2017-2018

- Total Dollar Amount: \$1,500 for student, \$300 for faculty mentor, not funded
- Project Title: Measuring Water Quality and its Impacts on Health Status in Rural Brazzaville, Republic of the Congo
 - Role: Faculty Mentor
 - Coauthor(s): Brooke Carroll (Principal Investigator/Student)
 - Type of Source: Internal to BYU
 - Sponsor: Office of Research and Creative Activities Student Mentoring Grants, BYU, Provo, UT
 - Project Dates: 2017-2018
 - Total Dollar Amount: \$1,500 for student, \$300 for faculty mentor, not funded

Experiential Learning Awards:

- Project Title: Association Between Amyotrophic Lateral Sclerosis and Occupational Exposures
 - Role: Faculty Mentor
 - Coauthor(s): Dick Bonsrah (Principal Investigator/Student)
 - Type of Source: Internal to BYU
 - Sponsor: Experiential Learning Award, Department of Public Health, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2019-2020
 - Total Dollar Amount: \$1,500 for student, \$1,500 for project, funded
- Project Title: Association Between Temperature Inversions, Air Pollution and Emergency Department Visits due to Depression in Utah
 - Role: Faculty Mentor
 - Coauthor(s): Nathan Smyth (Principal Investigator/Student)
 - Type of Source: Internal to BYU
 - Sponsor: Experiential Learning Award, Department of Public Health, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2019-2020
 - Total Dollar Amount: \$1,500 for student, \$1,500 for project, funded
- Project Title: Association Between Temperature Inversions, Air Pollution, and Emergency Department Visits for Stroke, 1996-2017
 - Role: Faculty Mentor
 - Coauthor(s): Jacob Burgoyne (Principal Investigator/Student)
 - Type of Source: Internal to BYU
 - Sponsor: Experiential Learning Award, Department of Public Health, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2019-2020
 - Total Dollar Amount: \$1,500 for student, \$1,500 for project, funded
- Project Title: Multiple Sclerosis and Occupational Exposures
 - Role: Faculty Mentor
 - Coauthor(s): Emily Hawkes (Principal Investigator/Student)

- Type of Source: Internal to BYU
- Sponsor: Experiential Learning Award, Department of Public Health, College of Life Sciences, BYU, Provo, UT
- Project Dates: 2019-2020
- Total Dollar Amount: \$1,500 for student, \$1,500 for project, funded

Mentored Research (G = graduate student, U = undergraduate student, UG = started as undergraduate student and continued as graduate student):

- Air quality assessment of on-site brick kiln worker housing in Bhaktapur, Nepal: Chemical speciation of indoor and outdoor PM_{2.5} pollution
 - UMarion House, GRilee Smith
- Air pollution, PM_{2.5} chemical components, and temperature inversions in Utah, 1996-2017
 - URachel Canning
- Associations between evaporative cooling and dust mite allergens, endotoxins, and β -(1→3)-D-glucans in house dust: A study of low-income homes
 - GAshlin Cowger
- Associations between school characteristics and classroom radon concentrations in Utah's public schools: a project completed by university environmental health students
 - GElizabeth Davis, UCheyenne Chausow, GMarco Verdeja
- Barometric pressure and emergency department visits for mental health in Utah, 1996-2017
 - GJennifer Benson
- Chemical composition of PM_{2.5} in wood fire and LPG cookstove homes of Nepali brick workers
 - UEmma Montague, UJames Lu, UHaley McBride
- Comparison of liquefied petroleum gas cookstoves and wood cooking fires on PM_{2.5} trends in brick workers' homes in Nepal
 - GMegan Hawks, UHaley Johnston, ULaurel Johnson
- Crosswalks to convert US Census Bureau industry and occupation codes, 1980-2018
 - GMarco Verdeja, UDick Bonsrah, USusan Westfall
- Gaseous air pollutants and respirable crystalline silica at homes at brick kilns in Bhaktapur, Nepal
 - UAlisandra Olivares, USelah Willis
- Keyword searches of O*NET job tasks for exposure assessment, United States of America
 - UMitchell Greenhalgh, UEmily Hawkes, UBailey Jones, USarah Hamner

- Mortality from Alzheimer's disease by industry and occupation — National Occupational Mortality Surveillance, 1985-2014
 - ^UMarli Shaw
- Mortality from amyotrophic lateral sclerosis by industry and occupation — National Occupational Mortality Surveillance, 1985-2014
 - ^UDick Bonsrah
- Mortality from multiple sclerosis by industry and occupation — National Occupational Mortality Surveillance, 1985-2014
 - ^UEmily Hawkes
- Mortality from Parkinson's disease by industry and occupation — National Occupational Mortality Surveillance, 1985-2014
 - ^ULucas Pettit
- Occupational abilities and mortality from amyotrophic lateral sclerosis — National Occupational Mortality Surveillance, 1985-2014
 - ^UDick Bonsrah
- Occupational abilities and mortality from Parkinson's disease — National Occupational Mortality Surveillance, 1985-2014
 - ^ULucas Pettit
- Occupational abilities and suicide — National Occupational Mortality Surveillance, 1985-2014
 - ^UPaula Chanthakoun
- Occupational chemical and cognitive exposures and mortality from neurological diseases
 - ^ULucas Pettit
- Occupational exposure to air pollution, pesticides, and solvents and mortality from Alzheimer's disease — National Occupational Mortality Surveillance, 1985-2014
 - ^USarah Hamner
- Occupational exposure to air pollution, pesticides, and solvents and mortality from amyotrophic lateral sclerosis — National Occupational Mortality Surveillance, 1985-2014
 - ^UDick Bonsrah, ^GShilpa Shrestha
- Occupational exposure to air pollution, pesticides, and solvents and mortality from multiple sclerosis — National Occupational Mortality Surveillance, 1985-2014
 - ^UEmily Hawkes
- Occupational exposure to air pollution, pesticides, and solvents and mortality from non-atherosclerotic dementia — National Occupational Mortality Surveillance, 1985-2014

- ^USusan Westfall
- Occupational exposure to air pollution, pesticides, and solvents and mortality from Parkinson's disease — National Occupational Mortality Surveillance, 1985-2014
 - ^UBailey Jones
- Occupational exposure to air pollution, pesticides, and solvents and suicide — National Occupational Mortality Surveillance, 1985-2014
 - ^UMitchell Greenhalgh
- Occupational exposures to metals and radiation and mortality from non-atherosclerotic dementia — National Occupational Mortality Surveillance, 1985-2014
 - ^GFernando Bello Vargas
- Occupational exposures to metals and radiation and mortality from Parkinson's disease — National Occupational Mortality Surveillance, 1985-2014
 - ^UCamille Clark
- Occupational knowledge and mortality from Parkinson's disease — National Occupational Mortality Surveillance, 1985-2014
 - ^UCamille Clark
- Occupational knowledge and suicide — National Occupational Mortality Surveillance, 1985-2014
 - ^UNoah Pierce
- Occupational safety and health guidelines in relation to COVID-19 risk, death risk, and case fatality proportion: an international, ecological study
 - ^UMorgan Roberts, ^UCamille Clark, ^UEmma Montague
- Prevalence of house dust mite allergens in low-income homes in Utah County, Utah
 - ^URobert Graul
- Radon awareness and policy perspectives on testing and mitigation
 - ^ULucas Pettit
- Suicide by industry and occupation — National Occupational Mortality Surveillance, 1985-2014
 - ^GFernando Bello Vargas
- Temperature inversions and emergency department visits for bipolar disorder in Salt Lake County, Utah, 1996-2017
 - ^UDavid Lopez

- Temperature inversions and emergency department visits for depression in Salt Lake County, Utah, 1996-2017
 - ^UNathan Smyth
- Temperature inversions and emergency department visits for epilepsy in Cache County, Utah, 1996-2017
 - ^UMary Johnson
- Temperature inversions and emergency department visits for epilepsy in Salt Lake County, Utah, 1996-2017
 - ^UMary Johnson
- Temperature inversions and emergency department visits for hemorrhagic stroke in Salt Lake County, Utah, 1996-2017
 - ^UJacob Burgoyne
- Temperature inversions and emergency department visits for influenza-like illness in Salt Lake County, Utah, 1996-2017
 - ^UCarson Telford
- Temperature inversions and emergency department visits for ischemic stroke in Salt Lake County, Utah, 1996-2017
 - ^UJacob Burgoyne
- Temperature inversions and emergency department visits for migraines/headaches in Salt Lake County, Utah, 1996-2017
 - ^UCole Jensen
- Temperature inversions and emergency department visits for multiple sclerosis in Cache County, Utah, 1996-2017
 - ^{UG}Seth Hinrichsen
- Temperature inversions and emergency department visits for multiple sclerosis in Salt Lake County, Utah, 1996-2017
 - ^{UG}Seth Hinrichsen
- Temperature inversions and emergency department visits for myocardial infarction in Salt Lake County, Utah, 1996-2017
 - ^UDouglas Shumway
- Temperature inversions and emergency department visits for spontaneous pregnancy loss in Salt Lake County, Utah, 1996-2017
 - ^UMary Taylor

SCHOLARSHIP/RESEARCH:

Peer-Reviewed Journal Articles (C = co-first author):

1. **Beard JD**, Thygerson SM, Olivares A, Tadge JE, Willis S, Johnston JD. Gaseous air pollutants and respirable crystalline silica inside and outside homes at brick kilns in Bhaktapur, Kathmandu Valley, Nepal. *Int J Environ Res Public Health*. 2022;19(19):12431.
2. Johnston JD, **Beard JD**, Novilla MLB, Weber FX, Chartier RT. PM_{2.5} pollution levels and chemical components at teahouses along the Poon Hill trek in Nepal. *Atmosphere*. 2022;13(7):1018.
3. Roberts M, Thygerson SM, **Beard JD**, Clark C, Montague E. Occupational safety and health guidelines in relation to COVID-19 risk, death risk, and case-fatality proportion: an international, ecological study. *Health Sci Rep*. 2022;5(2):e539.
4. **Beard JD**, Verdeja MA, Bonsrah DA, Westfall SD, Steege AL, Schubauer-Berigan MK. Crosswalks to convert US Census Bureau industry and occupation codes, 1980-2018. *Epidemiology*. 2022;33(2):e8-e9.
5. Johnston JD, Davis SF, Ghanadan GS, Jensen AM, Larsen BC, **Beard JD**. Factors influencing radon mitigation behaviors among Utah residents. *J Environ Health*. 2021;84(3):22-30.
6. Novilla MLB, Johnston JD, **Beard JD**, Pettit LL, Davis SF, Johnson CE. Radon awareness and policy perspectives on testing and mitigation. *Atmosphere*. 2021;12(8):1016.
7. Johnston JD, **Beard JD**, Montague EJ, Sanjel S, Lu JH, McBride H, Weber FX, Chartier RT. Chemical composition of PM_{2.5} in wood fire and LPG cookstove homes of Nepali brick workers. *Atmosphere*. 2021;12(7):911.
8. Errigo IM, Abbott BW, Mendoza DL, Mitchell L, Sayedi SS, Glenn J, Kelly K, **Beard JD**, Bratsman S, Carter T, Chaney RA, Follett A, Freeman A, Frei RJ, Greenhalgh M, Holmes HA, Howe PD, Johnston JD, Lange L, Martin R, Stacey A, Tran T, Wilson D. Human health and economic costs of air pollution in Utah: an expert assessment. *Atmosphere*. 2020;11(11):1238.
9. Davis EA, Ou JY, Chausow C, Verdeja MA, Divver E, Johnston JD, **Beard JD**. Associations between school characteristics and classroom radon concentrations in Utah's public schools: a project completed by university environmental health students. *Int J Environ Res Public Health*. 2020;17(16):5839.
10. Johnston JD, Hawks ME, Johnston HB, Johnson LA, **Beard JD**. Comparison of liquefied petroleum gas cookstoves and wood cooking fires on PM_{2.5} trends in brick workers' homes in Nepal. *Int J Environ Res Public Health*. 2020;17(16):5681.
11. Thygerson SM, **Beard JD**, House MJ, Smith RL, Burbidge HC, Andrus KN, Weber FX, Chartier R, Johnston JD. Air quality assessment of on-site brick kiln worker housing in

- Bhaktapur, Nepal: Chemical speciation of indoor and outdoor PM_{2.5} pollution. *Int J Environ Res Public Health*. 2019;16(21):4114.
12. ^CJohnston JD, ^CCowger AE, Graul RJ, Nash R, Tueller JA, Hendrickson NR, Robinson DR, **Beard JD**, Weber KS. Associations between evaporative cooling and dust mite allergens, endotoxins, and β -(1 \rightarrow 3)-D-glucans in house dust: A study of low-income homes. *Indoor Air*. 2019;29(6):1005-1017.
 13. **Beard JD**, Erdely A, Dahm MM, de Perio MA, Birch ME, Evans DE, Fernback JE, Eye T, Kodali V, Mercer RR, Bertke SJ, Schubauer-Berigan MK. Carbon nanotube and nanofiber exposure and sputum and blood biomarkers of early effect among U.S. workers. *Environ Int*. 2018;116:214-228.
 14. Schubauer-Berigan MK, Dahm MM, Erdely A, **Beard JD**, Birch ME, Evans DE, Fernback JE, Mercer RR, Bertke SJ, Eye T, de Perio MA. Association of pulmonary, cardiovascular, and hematologic metrics with carbon nanotube and nanofiber exposure among U.S. workers: a cross-sectional study. *Part Fibre Toxicol*. 2018;15(1):22.
 15. Armstrong PA, **Beard JD**, Bonilla L, Arboleda N, Lindsley MD, Chae S, Castillo D, Nuñez R, Chiller T, de Perio MA, Pimentel R, Vallabhaneni S. Outbreak of severe histoplasmosis among tunnel workers — Dominican Republic, 2015. *Clin Infect Dis*. 2018;66(10):1550-1557.
 16. Dahm MM, Schubauer-Berigan MK, Evans DE, Birch ME, Bertke S, **Beard JD**, Erdely A, Fernback JE, Mercer RR, Grinshpun SA. Exposure assessments for a cross-sectional epidemiologic study of US carbon nanotube and nanofiber workers. *Int J Hyg Environ Health*. 2018;221(3):429-440.
 17. Fang F, Peters TL, **Beard JD**, Umbach DM, Keller J, Mariosa D, Allen KD, Ye W, Sandler DP, Schmidt S, Kamel F. Blood lead, bone turnover, and survival in amyotrophic lateral sclerosis. *Am J Epidemiol*. 2017;186(9):1057-1064.
 18. **Beard JD**, Engel LS, Richardson DB, Gammon MD, Baird C, Umbach DM, Allen KD, Stanwyck CL, Keller J, Sandler DP, Schmidt S, Kamel F. Military service, deployments, and exposures in relation to amyotrophic lateral sclerosis survival. *PLoS ONE*. 2017;12(10):e0185751.
 19. Rinsky JL, Richardson DB, Wing S, **Beard JD**, Alavanja M, Beane Freeman LE, Chen H, Henneberger PK, Kamel F, Sandler DP, Hoppin JA. Assessing the potential for bias from non-response to a study follow-up interview: an example from the Agricultural Health Study. *Am J Epidemiol*. 2017;186(4):395-404.
 20. **Beard JD**, Steege AL, Ju J, Lu J, Luckhaupt SE, Schubauer-Berigan MK. Mortality from amyotrophic lateral sclerosis and Parkinson's disease among different occupation groups — United States, 1985-2011. *MMWR Morb Mortal Wkly Rep*. 2017;66(27):718-722.

21. Mariosa D, **Beard JD**, Umbach DM, Bellocco R, Keller J, Peters TL, Allen KD, Ye W, Sandler DP, Schmidt S, Fang F, Kamel F. Body mass index and amyotrophic lateral sclerosis: a study of US military veterans. *Am J Epidemiol*. 2017;185(5):362-371.
22. Peters TL, **Beard JD**, Umbach DM, Allen K, Keller J, Mariosa D, Sandler DP, Schmidt S, Fang F, Ye W, Kamel F. Blood levels of trace metals and amyotrophic lateral sclerosis. *NeuroToxicology*. 2016;54:119-126.
23. **Beard JD**, Engel LS, Richardson DB, Gammon MD, Baird C, Umbach DM, Allen KD, Stanwyck CL, Keller J, Sandler DP, Schmidt S, Kamel F. Military service, deployments, and exposures in relation to amyotrophic lateral sclerosis etiology. *Environ Int*. 2016;91:104-115.
24. **Beard JD**, Kamel F. Military service, deployments, and exposures in relation to amyotrophic lateral sclerosis etiology and survival. *Epidemiol Rev*. 2015;37(1):55-70.
25. Dong J, **Beard JD**, Umbach DM, Park Y, Huang X, Blair A, Kamel F, Chen H. Dietary fat intake and risk for Parkinson's disease. *Mov Disord*. 2014;29(13):1623-1630.
26. **Beard JD**, Umbach DM, Hoppin JA, Richards M, Alavanja MCR, Blair A, Sandler DP, Kamel F. Pesticide exposure and depression among male private pesticide applicators in the Agricultural Health Study. *Environ Health Perspect*. 2014;122(9):984-991.
27. **Beard JD**, Hoppin JA, Richards M, Alavanja MCR, Blair A, Sandler DP, Kamel F. Pesticide exposure and self-reported incident depression among wives in the Agricultural Health Study. *Environ Res*. 2013;126:31-42.
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29. **Beard JD**, Umbach DM, Hoppin JA, Richards M, Alavanja MCR, Blair A, Sandler DP, Kamel F. Suicide and pesticide use among pesticide applicators and their spouses in the Agricultural Health Study. *Environ Health Perspect*. 2011;119(11):1610-1615.
30. Merrill RM, **Beard JD**. Influenza vaccination in the United States, 2005-2007. *Med Sci Monitor*. 2009;15(7):PH92-PH100.

Books and Book Chapters:

1. Sloan CD, **Beard JD**. Chapter 4. Designing policy to reduce particulate matter air concentrations in Cache County, Utah. In: Santella AJ, ed. *Master of Public Health Competencies: A Case Study Approach*. Burlington, MA: Jones & Bartlett Learning, LLC; 2019:25-32.

Government Publications and Reports:

1. Babik KR, Schubauer-Berigan M, **Beard J**, Dunn KH, Garcia A. *Industrial Hygiene Report for Carbon Nanotube and Nanofiber Surveys*. Cincinnati, OH: U.S. Department of Health

- and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health; 2017. (File number 383.109). (On file).
2. Babik KR, Schubauer-Berigan M, **Beard J**, Glassford E. Industrial Hygiene Report for Carbon Nanotube and Nanofiber Surveys. Cincinnati, OH: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health; 2017. (File number 383.108). (On file).
 3. Babik KR, Schubauer-Berigan M, **Beard J**, Dunn KH. Industrial Hygiene Report for Carbon Nanotube and Nanofiber Surveys. Cincinnati, OH: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health; 2017. (File number 383.107). (On file).
 4. Babik KR, Schubauer-Berigan M, Dunn KL, **Beard J**, Dunn KH, Garcia A. Industrial Hygiene Report for Carbon Nanotube and Nanofiber Surveys. Cincinnati, OH: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health; 2017. (File number 383.105). (On file).
 5. Babik KR, Schubauer-Berigan M, Dunn KL, **Beard J**, Dunn KH. Industrial Hygiene Report for Carbon Nanotube and Nanofiber Surveys. Cincinnati, OH: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health; 2017. (File number 383.106). (On file).
 6. Epi-Aid 2015-39 Team. Outbreak of Histoplasmosis among Tunnel Workers, Sabana Iglesia, Dominican Republic, September 2015. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Office of Infectious Diseases, National Center for Emerging and Zoonotic Infectious Diseases; 2015. (Epi-Aid number 2015-39). (On file).
 7. Ball RW, Butala SJM, Chaudhuri SN, **Beard JD**, Luedtke PF. The Relationship between Lead and Mercury Levels in Dried Blood Spots from Newborns and Low Birth Weight. Salt Lake City, UT: Utah Department of Health, Division of Disease Control and Prevention, Bureau of Epidemiology, Environmental Epidemiology Program; 2010. (On file).

Published Abstracts:

1. **Beard J**, Greenhalgh M, Hawkes E, Jones, B, Hamner S, Thygerson, S. RF-421 Keyword searches of O*NET job tasks for exposure assessment, United States of America [abstract]. *Occup Environ Med.* 2021;78(Suppl 1):A137.
2. Smyth NS, Graham R, Johnston JD, Sloan CD, **Beard JD**. 3241.0 Association between temperature inversions and emergency department visits for depression in Salt Lake County, Utah [abstract]. The American Public Health Association 2020 Virtual Annual Meeting and Expo, Online, October 24-28, 2020. <https://apha.confex.com/apha/2020/meetingapp.cgi/Paper/474750>. Accessed October 13, 2020.

3. Schubauer-Berigan M, Dahm M, **Beard J**, Kodali V, Zeidler-Erdely P, Erdely A. O6D.4 Association of occupational exposures with ex vivo functional immune response in workers handling carbon nanotubes and nanofibers [abstract]. *Occup Environ Med.* 2019;76(Suppl 1):A58.
4. Cowger AE, Johnston JD, Graul RJ, Nash R, Tueller JA, Hendrickson NR, **Beard JD**, Weber KS. 37: Bioaerosols associated with evaporative cooler use in low-income homes in the semi-arid climate of Utah County, Utah, USA [abstract]. The American Society of Microbiology Rocky Mountain Branch Meeting, Provo, UT, April 13, 2019.
5. **Beard JD**. 1B2. Epidemiological study of U.S. carbon nanotube workers [abstract]. The QEEN II: 2nd Quantifying Exposure to Engineered Nanomaterials from Manufactured Products Workshop, Washington, DC, October 9-10, 2018.
6. Schubauer-Berigan MK, Dahm MM, Erdely A, **Beard JD**, Birch ME, Evans DE, Fernback JE, Mercer RR, Bertke SJ, de Perio MA. P92. Association of pulmonary and cardiovascular health metrics with carbon nanotube and nanofiber exposure among U.S. workers: a cross-sectional study [abstract]. *Ann Epidemiol.* 2017;27(8):530.
7. **Beard JD**, Erdely A, Dahm MM, de Perio MA, Birch ME, Evans DE, Fernback JE, Mercer RR, Bertke SJ, Schubauer-Berigan MK. P91. Carbon nanotube and nanofiber exposure and blood and sputum biomarkers of effect among U.S. workers [abstract]. *Ann Epidemiol.* 2017;27(8):529.
8. Armstrong P, **Beard J**, Chae S-R, Bonilla L, Lindsley M, Castillo D, Nuñez R, Chiller T, Arboleda N, Pimental R, Vallabhaneni S. 79 - Severe and highly fatal outbreak of histoplasmosis among tunnel workers — Dominican Republic, 2015 [abstract]. *Am J Trop Med Hyg.* 2017;95(5 Suppl):27.
9. **Beard JD**, Steege AL, Ju J, Lu J, Luckhaupt SE, Schubauer-Berigan MK. 0321-S/P: Broad occupation category and mortality from amyotrophic lateral sclerosis or Parkinson's disease, National Occupational Mortality Surveillance, 1985-2010 [abstract]. The 2016 Epidemiology Congress of the Americas, Miami, FL, June 21-24, 2016. <https://epiresearch.org/wp-content/uploads/2016/07/Abstract-Book-Final-070416.pdf>. Accessed May 4, 2022.
10. Armstrong PA, **Beard J**, Chae S-R, Bonilla L, Lindsley M, Castillo D, Nuñez R, Chiller T, Arboleda N, Pimental R, Vallabhaneni S. Severe and highly fatal outbreak of histoplasmosis among tunnel workers — Dominican Republic, 2015 [abstract]. The 65th Annual EIS Conference, Atlanta, GA, May 2-5, 2016. <https://www.cdc.gov/eis/downloads/eis-conference-2016.pdf>. Accessed May 4, 2022.
11. **Beard JD**, Steege A, Ju J, Lu J, Luckhaupt S, Schubauer-Berigan M. Mortality from amyotrophic lateral sclerosis or Parkinson's disease by usual occupation — National Occupational Mortality Surveillance, United States, 1985-2010 [abstract]. The 65th Annual

EIS Conference, Atlanta, GA, May 2-5, 2016. <https://www.cdc.gov/eis/downloads/eis-conference-2016.pdf>. Accessed May 4, 2022.

12. **Beard JD**, Erdely A, Schubauer-Berigan MK. 38: Update on cross-sectional epidemiological analysis of associations between carbon nanotube and nanofiber exposure and blood biomarkers of effect [abstract]. The Nanotechnology Research Center Bi-Annual Science Exchange Meeting, National Institute for Occupational Safety and Health, Morgantown, WV, April 13-15, 2016.
13. **Beard JD**, Umbach D, Allen K, Keller J, Sandler D, Schmidt S, Engel LS, Kamel F. Association of amyotrophic lateral sclerosis (ALS) with solvent and chemical exposure during military deployment (P4.138) [abstract]. *Neurology*. 2015;84(14 Suppl):P4.138.
14. Fang F, Peters TL, **Beard JD**, Umbach D, Keller J, Mariosa D, Allen K, Oddone E, Ye W, Sandler DP, Schmidt S, Kamel F. P142: Blood lead, bone turnover, and survival in amyotrophic lateral sclerosis [abstract]. *Amyotroph Lateral Scler Frontotemporal Degener*. 2014;15(Suppl 1):132-133.
15. Peters TL, **Beard JD**, Umbach DM, Allen K, Keller J, Mariosa D, Sandler DP, Schmidt S, Fang F, Ye W, Kamel F. P155: Blood levels of trace metals and amyotrophic lateral sclerosis (ALS) in US military veterans [abstract]. *Amyotroph Lateral Scler Frontotemporal Degener*. 2014;15(Suppl 1):139.
16. **Beard JD**, Umbach DM, Allen KD, Keller J, Sandler DP, Schmidt S, Kamel F. Poster Presentation 4: Association of amyotrophic lateral sclerosis with solvent and chemical exposure during military deployment [abstract]. The National Institute of Environmental Health Sciences 12th Annual Science Days, Research Triangle Park, NC, November 6-7, 2014.
17. **Beard JD**, Umbach DM, Allen KD, Keller J, Oddone EZ, Sandler DP, Schmidt S, Kamel F. 650-S: Association of amyotrophic lateral sclerosis with pesticide exposure during military service or deployment [abstract]. The 47th Annual Meeting of the Society for Epidemiologic Research, Seattle, WA, June 24-27, 2014. <https://epiresearch.org/wp-content/uploads/2014/08/abstract-book-printed.pdf>. Accessed November 13, 2015.
18. **Beard JD**, Hoppin JA, Richards M, Alavanja MCR, Blair A, Sandler DP, Kamel F. P-065: Organophosphate insecticide use and self-reported incident depression among male private pesticide applicators in the Agricultural Health Study [abstract]. *Epidemiology*. 2012;23(Suppl 5S):S-475.
19. Suker AA, Hunter MT, Stewart A, **Beard JD**, Morey E, Reichman P, Arnell E. 205154 Nurse Family Partnership: policy analysis, examination, and recommendations [abstract]. The 137th American Public Health Association Annual Meeting and Expo, Philadelphia, PA, November 7-11, 2009. <https://apha.confex.com/apha/137am/webprogram/Paper205154.html>. Accessed June 7, 2014.

20. **Beard JD.** Cluster analysis to find “voting twins” [abstract]. The Brigham Young University College of Physical and Mathematical Sciences 21st Annual Spring Research Conference, Provo, UT, March 17, 2007.

Technical Reports and Other Publications:

1. **Beard JD.** User Manual for SAS Program to Calculate Proportionate Mortality Ratios and 95% Confidence Intervals. Cincinnati, OH: CDC, NIOSH, Division of Field Studies and Engineering, Health Informatics Branch; 2021.
 - a. %PMR SAS macro
 - b. <URL>. Accessed Month Day, Year.
2. Fields P, **Beard J.** Using Spreadsheet-based Simulation to Forecast Error: A Comparison of Crystal Ball and @RISK. Provo, UT: Brigham Young University, College of Physical and Mathematical Sciences, Department of Statistics; 2007. (On file).
3. Fields PJ, **Beard JD.** Cluster Analysis to Find “Voting Twins”. Provo, UT: Brigham Young University, College of Physical and Mathematical Sciences, Department of Statistics; 2007. (On file).
4. Analysis Team. Early voters leave their print on Utah. In: Lillegren J, ed. 2006 Utah Colleges Exit Poll Report. Provo, UT: Brigham Young University, College of Family, Home and Social Sciences, Department of Political Science, Center for the Study of Elections and Democracy and College of Physical and Mathematical Sciences, Department of Statistics; 2007:14-16.
5. Analysis Team. Rejected. In: Lillegren J, ed. 2006 Utah Colleges Exit Poll Report. Provo, UT: Brigham Young University, College of Family, Home and Social Sciences, Department of Political Science, Center for the Study of Elections and Democracy and College of Physical and Mathematical Sciences, Department of Statistics; 2007:17-18.

Peer-Reviewed Conference Presentations:

1. Johnston JD, **Beard JD**, Montague EJ, Seshananda S, Lu JH, McBride H, Weber FX, Chartier RT. Where there’s smoke: An evaluation of 35 chemical constituents in PM_{2.5} from Nepali brick workers’ homes. Poster presentation at the Healthy Buildings 2021 – America Conference, Online, January 18-20, 2022.
2. **Beard J**, Greenhalgh M, Hawkes E, Jones B, Hamner S, Thygerson S. Keyword searches of O*NET job tasks for exposure assessment, United States of America. Rapid-fire (oral) presentation at the 28th International Symposium on Epidemiology in Occupational Health (EPICOH 2021), Online, October 25-28, 2021.
3. Smyth NS, Graham R, Johnston JD, Sloan CD, **Beard JD.** Association between temperature inversions and emergency department visits for depression in Salt Lake County, Utah. Poster presentation at the American Public Health Association 2020 Virtual Annual Meeting and Expo, Online, October 24-28, 2020.

4. Cowger AE, **Beard JD**, Tueller JA, Weber KS, Johnston JD. What house dust can tell us about indoor air quality: Bioaerosols in low-income homes with evaporative coolers. Poster presentation at the American Industrial Hygiene Conference and Exposition 2019, Minneapolis, MN, May 20-22, 2019.
5. Cowger AE, Johnston JD, Graul RJ, Nash R, Tueller JA, Hendrickson NR, **Beard JD**, Weber KS. Bioaerosols associated with evaporative cooler use in low-income homes in the semi-arid climate of Utah County, Utah, USA. Poster presentation at the American Society of Microbiology Rocky Mountain Branch Meeting, Provo, UT, April 13, 2019.
6. Graul R, Cowger A, Nash R, Tueller J, **Beard J**, Weber S, Johnston J. Prevalence of house dust mite allergens in low-income homes in Utah County, Utah. Poster presentation at the American Industrial Hygiene Conference and Exposition 2018, Philadelphia, PA, May 21-23, 2018.
7. Schubauer-Berigan MK, Dahm MM, Erdely A, **Beard JD**, Birch ME, Evans DE, Fernback JE, Mercer RR, Bertke SJ, de Perio MA. Association of pulmonary and cardiovascular metrics with carbon nanotube and nanofiber exposure among U.S. workers: a cross-sectional study. Poster presentation at the American College of Epidemiology 2017 Annual Meeting, New Orleans, LA, September 24-26, 2017.
8. **Beard JD**, Erdely A, Dahm MM, de Perio MA, Birch ME, Evans DE, Fernback JE, Eye T, Kodali V, Mercer RR, Bertke SJ, Schubauer-Berigan MK. Carbon nanotube and nanofiber exposure and sputum and blood biomarkers of early effect among U.S. workers. Poster presentation at the American College of Epidemiology 2017 Annual Meeting, New Orleans, LA, September 24-26, 2017.
9. Armstrong P, **Beard J**, Chae S-R, Bonilla L, Lindsley M, Castillo D, Nuñez R, Chiller T, Arboleda N, Pimental R, Vallabhaneni S. Severe and highly fatal outbreak of histoplasmosis among tunnel workers — Dominican Republic, 2015. Oral presentation at the American Society of Tropical Medicine and Hygiene 65th Annual Meeting, Atlanta, GA, November 13-17, 2016.
10. **Beard JD**, Steege AL, Ju J, Lu J, Luckhaupt SE, Schubauer-Berigan MK. Broad occupation category and mortality from amyotrophic lateral sclerosis or Parkinson's disease, National Occupational Mortality Surveillance, 1985-2010. Poster presentation at the 2016 Epidemiology Congress of the Americas, Miami, FL, June 21-24, 2016.
11. Armstrong PA, **Beard J**, Chae S-R, Bonilla L, Lindsley M, Castillo D, Nuñez R, Chiller T, Arboleda N, Pimental R, Vallabhaneni S. Severe and highly fatal outbreak of histoplasmosis among tunnel workers — Dominican Republic, 2015. Oral presentation at the 65th Annual EIS Conference, Atlanta, GA, May 2-5, 2016.
12. **Beard JD**, Steege A, Ju J, Lu J, Luckhaupt S, Schubauer-Berigan M. Mortality from amyotrophic lateral sclerosis or Parkinson's disease by usual occupation — National

Occupational Mortality Surveillance, United States, 1985-2010. Oral presentation at the 65th Annual EIS Conference, Atlanta, GA, May 2-5, 2016.

13. **Beard JD**, Umbach DM, Allen KD, Keller J, Sandler DP, Schmidt S, Engel LS, Kamel F. Association of amyotrophic lateral sclerosis (ALS) with solvent and chemical exposure during military deployment. Poster presentation at the American Academy of Neurology 67th Annual Meeting, Washington, DC, April 18-25, 2015.
14. Fang F, Peters TL, **Beard JD**, Umbach D, Keller J, Mariosa D, Allen K, Oddone E, Ye W, Sandler DP, Schmidt S, Kamel F. Blood lead, bone turnover, and survival in amyotrophic lateral sclerosis. Poster presentation at the 25th International Symposium on ALS/MND, Brussels, Belgium, December 5-7, 2014.
15. Peters TL, **Beard JD**, Umbach DM, Allen K, Keller J, Mariosa D, Sandler DP, Schmidt S, Fang F, Ye W, Kamel F. Blood levels of trace metals and amyotrophic lateral sclerosis (ALS) in US military veterans. Poster presentation at the 25th International Symposium on ALS/MND, Brussels, Belgium, December 5-7, 2014.
16. **Beard JD**, Umbach DM, Allen KD, Keller J, Oddone EZ, Sandler DP, Schmidt S, Kamel F. Association of amyotrophic lateral sclerosis with pesticide exposure during military service or deployment. Poster presentation at the 47th Annual Meeting of the Society for Epidemiologic Research, Seattle, WA, June 24-27, 2014.
17. **Beard JD**, Hoppin JA, Richards M, Alavanja MCR, Blair A, Sandler DP, Kamel F. Organophosphate insecticide use and self-reported incident depression among male private pesticide applicators in the Agricultural Health Study. Poster presentation at the 24th Annual Conference of the International Society for Environmental Epidemiology, Columbia, SC, August 26-30, 2012.
18. Beck C, **Beard JD**, Packham S, Giles R, Traphagan M, Graham R. Asthma and air pollution: associations between asthma emergency department visits, PM_{2.5} levels, and temperature inversions in Salt Lake County, Utah. Poster presentation at the 2011 Council of State and Territorial Epidemiologists Annual Conference, Pittsburgh, PA, June 12-16, 2011.
19. **Beard JD**, Beck C, Packham S, Giles R, Traphagan M, Graham R, Morgan J. Temperature inversions, associated PM_{2.5} levels, and emergency department visits for asthma. Poster presentation at the September 2010 Environmental Public Health Tracking Workshop, Salt Lake City, UT, September 13-16, 2010.
20. Suker AA, Hunter MT, Stewart A, **Beard JD**, Morey E, Reichman P, Arnell E. Nurse Family Partnership: policy analysis, examination, and recommendations. Poster presentation at the 137th American Public Health Association Annual Meeting and Expo, Philadelphia, PA, November 7-11, 2009.

Other Conference Presentations († = invited):

1. ¹Johnston JD, Davis SF, Ghanadan GS, Jensen AM, Larsen BC, **Beard JD**. Factors influencing radon mitigation behaviors among Utah residents. Oral presentation at the National Radon Training Event, Bellevue, WA, October 24-26, 2022.
2. ¹Johnston JD, Davis SF, Ghanadan GS, Jensen AM, Larsen BC, **Beard JD**. Factors influencing radon mitigation behaviors among Utah residents. Oral presentation at the U.S. Environmental Protection Agency's Region 8 Radon Stakeholder's Meeting, Moab, UT, April 7-8, 2022.
3. ¹Novilla MLB, Johnston JD, **Beard JD**, Pettit LL, Davis SF, Johnson CE. Radon awareness and policy perspectives on testing and mitigation. Oral presentation at the U.S. Environmental Protection Agency's Region 8 Radon Stakeholder's Meeting, Moab, UT, April 7-8, 2022.
4. Clark C, **Beard JD**. Parkinson's disease Mortality and Occupational Knowledge Areas: Levels and Importance. Poster presentation at the BYU College of Life Sciences College Undergraduate Research Award 2021 Conference, Provo, UT, November 11, 2021.
5. Chausow C, Davis EA, Verdeja MA, Divver E, Ou JY, Johnston JD, **Beard JD**. Radon concentration and determinants in Utah's public schools. Poster presentation at the BYU College of Life Sciences College Undergraduate Research Award 2020 Conference, Online, 2020.
6. Ludlow M, **Beard JD**. How air pollution and inversions influence epilepsy. Poster presentation at the BYU College of Life Sciences College Undergraduate Research Award 2020 Conference, Online, 2020.
7. Westfall SD, **Beard JD**. Mortality from non-atherosclerotic dementia in relation to occupational exposures – United States (1985-2014). Poster presentation at the BYU College of Life Sciences College Undergraduate Research Award 2020 Conference, Online, 2020.
8. Hamner SC, **Beard JD**. Occupational exposures in relation to Alzheimer's disease mortality. Poster presentation at the BYU College of Life Sciences College Undergraduate Research Award 2019 Conference, Provo, UT, April 10, 2019.
9. Jensen CG, **Beard JD**. How air pollution and inversions influence migraines. Poster presentation at the BYU College of Life Sciences College Undergraduate Research Award 2019 Conference, Provo, UT, April 10, 2019.
10. ¹**Beard JD**. Epidemiological study of U.S. carbon nanotube workers. Oral presentation at QEEN II: 2nd Quantifying Exposure to Engineered Nanomaterials from Manufactured Products Workshop, Washington, DC, October 9-10, 2018.
11. ¹**Beard JD**. Outbreak of severe histoplasmosis among tunnel workers — Dominican Republic, 2015. Oral presentation at the Western States Occupational Network – Eleventh Annual Meeting, Denver, CO, September 13-14, 2018.

12. **Beard JD**, Erdely A, Schubauer-Berigan MK. Update on cross-sectional epidemiological analysis of associations between carbon nanotube and nanofiber exposure and blood biomarkers of effect. Poster presentation at the Nanotechnology Research Center Bi-Annual Science Exchange Meeting, NIOSH, CDC, Morgantown, WV, April 13-14, 2016.
13. **Beard JD**, Umbach DM, Allen KD, Keller J, Sandler DP, Schmidt S, Kamel F. Association of amyotrophic lateral sclerosis with solvent and chemical exposure during military deployment. Poster presentation at the NIEHS 12th Annual Science Days, Research Triangle Park, NC, November 6-7, 2014.
14. ¹**Beard JD**. Amyotrophic lateral sclerosis etiology and military service, deployments, and exposures. Oral presentation at the Neuroepidemiological Workshop, Karolinska Institutet, Stockholm, Sweden, July 16-17, 2014.
15. **Beard JD**. Cluster analysis to find “voting twins”. Oral presentation at the BYU College of Physical and Mathematical Sciences 21st Annual Spring Research Conference, Provo, UT, March 17, 2007.

Other Presentations (¹ = invited):

1. ¹**Beard JD**. Epidemic Intelligence Service. Oral presentation at the Texas A&M University Epidemiology Student Organization Meeting, Online, November 28, 2022.
2. ¹Novilla MLB, Johnston JD, **Beard JD**, Pettit LL, Davis SF, Johnson CE. Radon awareness and policy perspectives on testing and mitigation. Oral presentation at the Utah Valley Clean Air Task Force Meeting, Provo, UT, October 24, 2022.
3. ¹**Beard JD**. Temperature inversions and influenza-like illness in Salt Lake County, Utah, 2011-2016: A mentored research project. Oral presentation at the Brigham Young University Public Health Association/American Society of Safety Professionals Retreat, Timpanogos Lodge (near Sundance), UT, October 7, 2022.
4. ¹**Beard JD**. Classroom radon concentrations in Utah’s public schools: a project completed by university environmental health students. Pre-recorded video presentation at the Utah Valley Clean Air Task Force Meeting, Provo, UT, August 30, 2021.
5. ¹**Beard JD**. Temperature inversions and influenza-like illness in Salt Lake County, Utah, 2011-2016. Oral presentation at the Utah Valley Clean Air Task Force Meeting, Provo, UT, June 29, 2020.
6. ¹**Beard JD**. Inverse probability weighting. Oral presentation at the Journal Club Meeting, National ALS Registry, Environmental Health Surveillance Branch, Division of Toxicology and Human Health Sciences, Agency for Toxic Substances and Disease Registry, Atlanta, GA, April 21, 2020.

7. ¹**Beard JD**. Temperature inversions, air pollution, and emergency department visits in Utah, 1996-2017: an update. Oral presentation at the Utah Valley Clean Air Task Force Meeting, Provo, UT, September 23, 2019.
8. ¹Santella AJ, Krytus K, Wichman CS, **Beard JD**. Using public health practice case studies in your MPH curricula. Webinar presentation organized by Jones & Bartlett Learning, LLC, March 5, 2019.
9. ¹**Beard JD**. Winter temperature inversions and emergency department visits for asthma in Salt Lake County, Utah, 2003-2008. Oral presentation at the Utah Valley Clean Air Task Force Meeting, Provo, UT, November 26, 2018.
10. ¹Jarvis D, Hill N, **Beard J**. How to discuss climate change with our associates—how to think/talk about the issues. Oral presentation at the Utah Valley Clean Air Task Force Meeting, Provo, UT, October 22, 2018.
11. Davis EA, **Beard JD**, Divver E, Ou JY, Johnston JD. Radon testing: Utah County school districts. Oral presentation at the Provo School District, Provo, UT, July 23, 2018.
12. ¹**Beard JD**. Environmental/occupational risk factors for neurological diseases; health effects of temperature inversions and air pollution. Oral presentation at the MMBIO Faculty Research Lunch, Department of Microbiology and Molecular Biology, College of Life Sciences, BYU, Provo, UT, June 20, 2018.
13. **Beard JD**, Davis EA, Divver E, Ou JY, Johnston JD. Radon testing: Utah County school districts. Oral presentation at the Nebo School District, Spanish Fork, UT, June 15, 2018.
14. **Beard JD**, Davis EA, Divver E, Ou JY, Johnston JD. Radon testing: Utah County school districts. Oral presentation at the Alpine School District, American Fork, UT, June 13, 2018.
15. **Beard JD**. Carbon nanotube and nanofiber exposure and blood and sputum biomarkers of early effect among U.S. workers. Oral presentation at the Scientists' Seminar, Division of Surveillance, Hazard Evaluations and Field Studies, NIOSH, CDC, Cincinnati, OH, May 22, 2017.
16. ¹**Beard JD**. ALS among veterans: is there a common military exposure? Oral presentation at the Public Health Student Seminar Series, Department of Health Science, College of Life Sciences, BYU, Provo, UT, April 13, 2017.
17. Schubauer-Berigan MK, Babik KR, **Beard JD**. Nanomaterials. Oral presentation at the Industrywide Studies Branch Program Review, Division of Surveillance, Hazard Evaluations and Field Studies, NIOSH, CDC, Cincinnati, OH, November 7, 2016.
18. **Beard JD**. Covariates and biomarkers. Oral presentation at the Industrywide Carbon Nanotube and Nanofiber Cross-Sectional Epidemiological Study Collaborators Meeting,

Industrywide Studies Branch, Division of Surveillance, Hazard Evaluations and Field Studies, NIOSH, CDC, Cincinnati, OH, July 19, 2016.

19. **Beard JD.** Outbreak of histoplasmosis among tunnel cleaning workers, Sabana Iglesia, Dominican Republic, September 2015. Oral presentation at the All-Hands Meeting, Division of Surveillance, Hazard Evaluations and Field Studies, NIOSH, CDC, Cincinnati, OH, February 10, 2016.
20. **Beard JD.** National occupational mortality surveillance for neurological diseases. Oral presentation at the EIS 2015 First Year Fall Course, EIS Program, Epidemiology Workforce Branch, Division of Scientific Education and Professional Development, CSELS, OPHSS, CDC, Atlanta, GA, December 7, 2015.
21. ¹Armstrong P, Bonilla L, **Beard J.** Outbreak of histoplasmosis in Sabana Iglesia, Dominican Republic. Oral presentation at the U.S. Embassy, Santo Domingo, Dominican Republic, October 29, 2015.
22. Armstrong P, Chae S-R, **Beard J,** Vallabhaneni S, Bonilla L, Pimentel R, Castillo D, Nuñez R, Castro B, Cruz R. [Histoplasmosis outbreak in Sabana Iglesia, Dominican Republic]. [Presentation in Spanish]. Oral presentation at the República Dominicana Ministerio de Salud Pública, Santo Domingo, Dominican Republic, September 29, 2015.
23. **Beard JD.** Military service, deployments, and exposures in relation to amyotrophic lateral sclerosis etiology and survival. Oral presentation at the Epidemiology Branch Meeting, Division of Intramural Research, NIEHS, NIH, Research Triangle Park, NC, March 9, 2015.
24. ¹**Beard JD.** Amyotrophic lateral sclerosis etiology and military service, deployments, and exposures. Oral presentation at the Occupational and Environmental Epidemiology Branch Meeting, Epidemiology and Biostatistics Program, Division of Cancer Epidemiology and Genetics, National Cancer Institute, NIH, Rockville, MD, November 10, 2014.
25. ¹**Beard JD.** Amyotrophic lateral sclerosis etiology and military service, deployments, and exposures. Oral presentation at the Division of Surveillance, Hazard Evaluations and Field Studies, NIOSH, CDC, Cincinnati, OH, October 28, 2014.
26. **Beard JD.** Amyotrophic lateral sclerosis etiology and military service, deployments, and exposures. Oral presentation at the Neuroepidemiological Journal Club/Interest Group Meeting, Epidemiology Branch, Division of Intramural Research, NIEHS, NIH, Research Triangle Park, NC, October 2, 2014.
27. **Beard JD.** Military service, deployments, and exposures in relation to amyotrophic lateral sclerosis etiology and survival. Oral presentation at the Environmental/Occupational Epidemiology Seminar, Department of Epidemiology, Gillings School of Global Public Health, UNC-Chapel Hill, Chapel Hill, NC, November 22, 2013.

28. **Beard JD.** Military service, deployments, and exposures in relation to amyotrophic lateral sclerosis etiology and survival. Oral presentation at the Epidemiology Branch Meeting, Division of Intramural Research, NIEHS, NIH, Research Triangle Park, NC, November 18, 2013.
29. **Beard JD, Umbach DM, Hoppin JA, Richards M, Alavanja MCR, Blair A, Sandler DP, Kamel F.** Suicide and pesticide use in the Agricultural Health Study. Poster presentation at the Division of Intramural Research Board of Scientific Counselors Review of the Epidemiology Branch, NIEHS, NIH, Research Triangle Park, NC, June 3, 2013.
30. **Beard JD.** Pesticide exposure and self-reported depression among male private pesticide applicators in the Agricultural Health Study. Oral presentation at the Environmental Epidemiology Seminar, Department of Epidemiology, Gillings School of Global Public Health, UNC-Chapel Hill, Chapel Hill, NC, September 28, 2012.
31. **Beard JD.** Pesticide exposure and self-reported incident depression among wives in the Agricultural Health Study. Oral presentation at the Epidemiology Branch Meeting, Division of Intramural Research, NIEHS, NIH, Research Triangle Park, NC, August 6, 2012.
32. **Beard JD.** Occupational lead exposure and amyotrophic lateral sclerosis in U.S. military veterans. Oral presentation at the Environmental Epidemiology Seminar, Department of Epidemiology, Gillings School of Global Public Health, UNC-Chapel Hill, Chapel Hill, NC, October 14, 2011.
33. **Beard JD.** Suicide and pesticide use among pesticide applicators and their spouses in the Agricultural Health Study. Oral presentation at the Environmental Epidemiology Seminar, Department of Epidemiology, Gillings School of Global Public Health, UNC-Chapel Hill, Chapel Hill, NC, November 19, 2010.
34. Utah Asthma Program, Utah Department of Environmental Quality, National Weather Service, UDOH Environmental Epidemiology Program, UDOH Environmental Public Health Tracking Network, UDOH Office of Health Care Statistics. Asthma and air pollution: associations between asthma emergency department visits, PM_{2.5} levels, and temperature inversions in Utah. Oral presentation at the Utah Asthma Task Force Meeting, UDOH, Salt Lake City, UT, November 16, 2010.
35. **Beard JD.** May 2010 data submission: process and debrief; APEX studies. Oral presentation at the Utah Environmental Public Health Tracking Network's Tracking Network Advisory Committee Meeting (held during the West Virginia Bureau for Public Health's visit to the UDOH as part of the Association of State and Territorial Health Officers' State-to-State Peer Fellowship Program), Surveillance Section, Environmental Epidemiology Program, Bureau of Epidemiology, Division of Disease Control and Prevention, UDOH, Salt Lake City, UT, May 26, 2010.
36. **Beard JD.** Data-partners and warehouse: how to set them up. Oral presentation during the West Virginia Bureau for Public Health's visit to the UDOH as part of the Association of

State and Territorial Health Officers' State-to-State Peer Fellowship Program, Surveillance Section, Environmental Epidemiology Program, Bureau of Epidemiology, Division of Disease Control and Prevention, UDOH, Salt Lake City, UT, May 25, 2010.

37. ¹**Beard JD**. Geocoding/Georeferencing 101: UDOH available GIS tools for you! Oral presentation at the 24th e-Health = Utah Public Health Informatics Brown Bag, UDOH, Salt Lake City, UT, February 24, 2010.
38. ¹UDOH Environmental Epidemiology Program. An assessment of child health in west and central city Salt Lake City. Oral presentation at a Children's Environmental Health and Environmental Justice initiative community meeting, Salt Lake City, UT, February, 2010.
39. **Beard JD**. Suicide and pesticide exposures among pesticide applicators and their spouses in the Agricultural Health Study. Oral presentation at the Epidemiology Branch Meeting, Division of Intramural Research, NIEHS, NIH, Research Triangle Park, NC, July 20, 2009.

Research Funding:

- Project Title: Identifying applications of the United Nations' Sustainable Development Goals to reduce air pollution concentrations in brick kilns in Nepal
 - Role: Principal Investigator
 - Coauthor(s): James Johnston, Andrew South
 - Type of Source: Internal to BYU
 - Sponsor: Roger and Victoria Sant Educational Endowment for a Sustainable Environment, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2022-2023
 - Total Dollar Amount: \$20,000, submitted
- Project Title: Contributions of Respirable Silica and Fine Particulate Matter Exposures to Clinical and Inflammatory Markers of Chronic Obstructive Pulmonary Disease
 - Role: Co-Investigator
 - Coauthor(s): James Johnston (Principal Investigator), Paul Reynolds, James LeCheminant, Neil Peterson
 - Type of Source: External to BYU
 - Sponsor: R15 Academic Research Enhancement Award (AREA), National Institute of Environmental Health Sciences, U.S. National Institutes of Health, Research Triangle Park, NC
 - Project Dates: 2023-2026
 - Total Dollar Amount: \$300,000 (direct costs only), not funded
- Project Title: College of Life Sciences New Faculty Start-up Research Funding—Third of Three Years
 - Role: Principal Investigator
 - Type of Source: Internal to BYU
 - Sponsor: Ira and Mary Lou Fulton Gift Fund, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2022-2023
 - Total Dollar Amount: \$20,000, funded

- Project Title: Spatiotemporal and Personal Monitoring of Nepali Brick Workers' Aerosol Exposures
 - Role: Co-Principal Investigator
 - Coauthor(s): James Johnston (Principal Investigator), Scott Collingwood, James LeCheminant, Paul Reynolds
 - Type of Source: External to BYU
 - Sponsor: Pilot/Small Research Projects in Occupational Safety and Health, NIOSH T42OH008414: Rocky Mountain Center for Occupational and Environmental Health Education and Research Center, University of Utah, Salt Lake City, UT (Office of Extramural Programs, Office of the Director, NIOSH, CDC, Atlanta, GA)
 - Project Dates: 2022-2023
 - Total Dollar Amount: \$18,000 (direct costs only), funded

- Project Title: Poverty-related Household Air Pollution: Effects of Open-fire Cooking vs. Liquefied Petroleum Gas Cookstoves on Clinical and Inflammatory Markers of Chronic Obstructive Pulmonary Disease
 - Role: Co-Investigator
 - Coauthor(s): James Johnston (Principal Investigator), Neil Peterson, James LeCheminant, Paul Reynolds
 - Type of Source: Internal to BYU
 - Sponsor: Interdisciplinary Research Origination Award, Simmons Research Endowment, BYU, Provo, UT
 - Project Dates: 2022-2024
 - Total Dollar Amount: \$40,000, funded

- Project Title: College of Life Sciences New Faculty Start-up Research Funding—Second of Three Years
 - Role: Principal Investigator
 - Type of Source: Internal to BYU
 - Sponsor: Ira and Mary Lou Fulton Gift Fund, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2021-2022
 - Total Dollar Amount: \$20,000, funded

- Project Title: Occupational Risk Factors for Amyotrophic Lateral Sclerosis
 - Role: Principal Investigator
 - Coauthor(s): Steven Thygersen
 - Type of Source: External to BYU
 - Sponsor: R01 – “RFA-TS-21-001: Identify and Evaluate Potential Risk Factors for Amyotrophic Lateral Sclerosis (ALS)”, National ALS Registry, Agency for Toxic Substances and Disease Registry, CDC, Atlanta, GA
 - Project Dates: 2021-2024
 - Total Dollar Amount: \$259,290.45 (direct costs only), not funded

- Project Title: Sustainable air conditioning and health: Are energy-efficient evaporative coolers exposing low-income Utah residents to indoor urban air pollution?

- Role: Co-Investigator
 - Coauthor(s): James Johnston (Principal Investigator)
 - Type of Source: Internal to BYU
 - Sponsor: Roger and Victoria Sant Educational Endowment for a Sustainable Environment, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2019-2020
 - Total Dollar Amount: \$14,000, not funded
- Project Title: Clinical and Subclinical Health Effects Associated with Air Pollution Exposure During Exercise
 - Role: Principal Investigator
 - Coauthor(s): Robert Chaney, Jayson Gifford, Jaron Hansen, James Johnston, James LeCheminant, Neil Peterson, Scott Weber
 - Type of Source: Internal to BYU
 - Sponsor: Interdisciplinary Research Origination Award, Simmons Research Endowment, BYU, Provo, UT
 - Project Dates: 2019-2021
 - Total Dollar Amount: \$119,995, not funded
- Project Title: College of Life Sciences New Faculty Start-up Research Funding—First of Three Years
 - Role: Principal Investigator
 - Type of Source: Internal to BYU
 - Sponsor: Ira and Mary Lou Fulton Gift Fund, College of Life Sciences, BYU, Provo, UT
 - Project Dates: 2018-2019
 - Total Dollar Amount: \$20,000, funded

CITIZENSHIP/SERVICE:

Department of Public Health, College of Life Sciences, BYU, Provo, UT, Committees:

- Member, Environmental and Occupational Health Curriculum Committee, 2017-Present
- Member, Epidemiology Curriculum Committee, 2017-Present
- Member, Professional Development Committee, 2021-Present
- Member, Annual Review Committee, 2018-2019, 2021-2022
- Member, Awards and Scholarships Committee, 2021-2022
- Member, MPH Curriculum and Learning Committee, 2017-2021
- Member, Mentoring (Ad-Hoc) Committee, 2018-2019
- Member, Unit Review Committee (Facilities and Resources Team), 2018-2019

- Member, MPH Admissions Committee, 2017-2018
- Member, Student Mentoring Lab (Ad-Hoc) Committee, 2017-2018

College of Life Sciences, BYU, Provo, UT, Committees:

- Department of Public Health-designated judge for the College of Life Sciences' Three-Minute Thesis Competition, BYU, Provo, UT, February 22, 2018
- Member, ORCA Student Mentoring Grant/Widtsoe Review Committee, 2017-2018

BYU, Provo, UT, Committees:

- Faculty Affiliate, Gerontology Program/Minor, BYU, Provo, UT, 2019-Present
- Member, BYU Dining and Sustainability Committee, 2019-2020, 2022-Present

Expert Peer-Review Panels:

- Peer-Reviewer for Office of Health Assessment and Translation, Division of the National Toxicology Program, National Institute of Environmental Health Sciences. Draft NTP Monograph on Systematic Review of Long-Term Neurological Effects Following Acute Exposure to the Organophosphate Nerve Agent Sarin. Research Triangle Park, NC: Office of Health Assessment and Translation, Division of the National Toxicology Program, National Institute of Environmental Health Sciences; 2018, 2019.

Scientific Journal Manuscript Reviewer:

- American Journal of Epidemiology (AJE), Baltimore, MD
- Biological Trace Element Research, Cham, Switzerland
- Environmental Research, Amsterdam, The Netherlands
- Journal of Neurology, Heidelberg, Germany
- Neurotoxicology and Teratology, Amsterdam, The Netherlands
- Occupational and Environmental Medicine, London, UK
- Radiation Research, Bloomington, IN

Professional Societies:

- Member, Scientific Committee, 29th International Symposium on Epidemiology in Occupational Health, EPICOH 2023, Mumbai, India, 2023
- Member, Scientific Committee, 28th International Symposium on Epidemiology in Occupational Health, EPICOH 2020-2021, Online, 2020-2021 (the conference was delayed)

for one year because of the COVID-19 pandemic, so I served on this committee for the original and delayed conference)

- Co-Chair, Concurrent Session D2: Aging Workforce, Online, 2021
- Member, International Society for Environmental Epidemiology, Herndon, VA, 2012, 2018-2019
- Member, Society for Epidemiologic Research (SER), Clearfield, UT, 2014, 2016, 2018-2021
 - Chair, Concurrent Contributed Session: Occupational Epidemiology, 52nd Annual Meeting, Minneapolis, MN, 2019
 - Volunteer, 47th Annual Meeting, Seattle, WA, 2014
- Member, Commissioned Officer Association, National, Landover, MD, and Cincinnati Branch, Cincinnati, OH, 2016-2017
 - Co-chair, Community Service Sub-committee, Cincinnati Branch, 2016-2017

Other Professional Service:

- Member, Household Hazardous Waste Collection Day Planning Committee, Utah County Health Department, Provo, UT, 2019-Present
- Member, Utah Valley Clean Air Task Force, Provo, UT, 2018-Present
- Participant, Healthy Utah Community Focus Group, Online, May 25, 2022
- NIOSH, CDC, representative, National Neurological Conditions Surveillance System meeting, Division of Health Informatics and Surveillance, CSELS, OPHSS, CDC, Atlanta, GA, May 4, 2017
- Internal peer-reviewer, one scientific journal article manuscript, Epidemiology Team, Industrywide Studies Branch, Division of Surveillance, Hazard Evaluations and Field Studies NIOSH, CDC, Cincinnati, OH, 2017
- Internal peer-reviewer, one large National Occupational Research Agenda grant proposal, Surveillance Branch, Division of Surveillance, Hazard Evaluations and Field Studies NIOSH, CDC, Cincinnati, OH, 2016
- Peer-reviewer, 2016 Alice Hamilton Award for Occupational Safety and Health, Exposure and Risk Assessment Category, NIOSH, CDC, Cincinnati, OH, 2016
- NIOSH, CDC, peer-reviewer for National Council on Radiation Protection and Measurements. Commentary No. 25 - Potential for Central Nervous System Effects from Radiation Exposure During Space Activities Phase I: Overview. Bethesda, MD: National Council on Radiation Protection and Measurements; 2016, 2015

- Internal peer-reviewer, three scientific journal article manuscripts, Epidemiology Branch, Division of Intramural Research, NIEHS, NIH, Research Triangle Park, NC, 2014
- UDOH Environmental Epidemiology Program representative, Children's Environmental Health and Environmental Justice initiative community meetings, Salt Lake City, UT, 2010

Civic, Community, and Volunteer Activities:

- Boy Scout Troop Committee Chair, Troop 1429, Provo Peaks District, Utah National Parks Council, Boy Scouts of America, Provo, UT, February 2018-December 2019
- Cub Scout Den Leader and Committee Member, Pack 151, Blue Jacket District, Dan Beard Council, Boy Scouts of America, Cincinnati, OH, September 2016-July 2017
- Cub Scout Den Leader and Committee Member, Pack 152, Blue Jacket District, Dan Beard Council, Boy Scouts of America, Cincinnati, OH, September 2016-March 2017
- Cub Scout Den Leader and Committee Member, Pack 631, Crosswinds District, Occoneechee Council, Boy Scouts of America, Morrisville, NC, May 2014-June 2015
- Participant, 12th Annual Health Education Advocacy Summit of the Coalition of National Health Education Organizations, Washington, DC, February 2009
- Volunteer Missionary (English speaking), Canada Vancouver Mission, The Church of Jesus Christ of Latter-day Saints, British Columbia, Canada, May 2002-May 2004

HONORS AND AWARDS:

Faculty Development Awards:

- Faculty Development Series Stipend for New Faculty—Second of Two
 - Sponsor: Faculty Center, BYU, Provo, UT
 - Dates: 2019
 - Total Dollar Amount: \$1,000
- Faculty Development Series Stipend for New Faculty—First of Two
 - Sponsor: Faculty Center, BYU, Provo, UT
 - Dates: 2018
 - Total Dollar Amount: \$1,000
- Faculty Development Series Course Development Project Grant
 - Sponsor: Faculty Center, BYU, Provo, UT
 - Dates: 2018
 - Total Dollar Amount: \$300

Research Awards (G = graduate student, U = undergraduate student):

- 1st Place Gold, Best in Show Awards (Student Poster Winner), American Industrial Hygiene Conference and Exposition 2019, Minneapolis, MN, 2019.

- For poster presentation: ^GCowger AE, Beard JD, ^GTueller JA, Weber KS, Johnston JD. What house dust can tell us about indoor air quality: Bioaerosols in low-income homes with evaporative coolers.
- Radon Champion Award, U.S. Environmental Protection Agency Region 8 Radon Stakeholders' Meeting, Utah Department of Environmental Quality, Salt Lake City, UT, 2019.
- Distinguished Poster Award, American Society of Microbiology Rocky Mountain Branch Meeting, Provo, UT, 2019.
 - For poster presentation: ^GCowger AE, Johnston JD, ^UGraul RJ, ^UNash R, ^GTueller JA, ^UHendrickson NR, Beard JD, Weber KS. Bioaerosols associated with evaporative cooler use in low-income homes in the semi-arid climate of Utah County, Utah, USA.
- 2019 Alice Hamilton Award for Excellence in Occupational Safety and Health, Epidemiology and Surveillance Category, NIOSH, CDC, Cincinnati, OH, 2019
 - For their leadership through science by publishing a collection of three publications: Beard JD, Bertke SJ, Birch ME, Dahm MM, de Perio MA, Erdely A, Evans DE, Eye T, Fernback JE, Grinshpun SA, Kodali V, Mercer RR, Schubauer-Berigan MK. Cross-sectional Epidemiologic and Exposure Assessment Studies of Workers Exposed to Carbon Nanotubes and Nanofibers in the United States (the specific publications for which we were given this award are below):
 - Beard JD, Erdely A, Dahm MM, de Perio MA, Birch ME, Evans DE, Fernback JE, Eye T, Kodali V, Mercer RR, Bertke SJ, Schubauer-Berigan MK. Carbon nanotube and nanofiber exposure and sputum and blood biomarkers of early effect among U.S. workers. *Environ Int.* 2018;116:214-228.
 - Dahm MM, Schubauer-Berigan MK, Evans DE, Birch ME, Bertke S, Beard JD, Erdely A, Fernback JE, Mercer RR, Grinshpun SA. Exposure assessments for a cross-sectional epidemiologic study of US carbon nanotube and nanofiber workers. *Int J Hyg Environ Health.* 2018;221(3):429-440.
 - Schubauer-Berigan MK, Dahm MM, Erdely A, Beard JD, Birch ME, Evans DE, Fernback JE, Mercer RR, Bertke SJ, Eye T, de Perio MA. Association of pulmonary, cardiovascular, and hematologic metrics with carbon nanotube and nanofiber exposure among U.S. workers: a cross-sectional study. *Part Fibre Toxicol.* 2018;15(1):22.
 - <https://www.cdc.gov/niosh/awards/pdfs/2019-awards-booklet.pdf>. Accessed April 29, 2019.
- PLOS Veterans Disability & Rehabilitation Research Channel Anniversary Prize 2018, Public Library of Science, San Francisco, CA, 2018
 - Award: \$500, PLOS t-shirt, interview featured on PLOS Research News and PLOS Veterans Disability & Rehabilitation Research Channel
 - For: Beard JD, Engel LS, Richardson DB, Gammon MD, Baird C, Umbach DM, Allen KD, Stanwyck CL, Keller J, Sandler DP, Schmidt S, Kamel F. Military service, deployments, and exposures in relation to amyotrophic lateral sclerosis survival. *PLoS ONE.* 2017;12(10):e0185751.

- Finalist, Mitch Singal Award for Excellence in Occupational and Environmental Health, 65th Annual EIS Conference, Atlanta, GA, 2016
 - For abstract and oral presentation: Beard JD, Steege A, Ju J, Lu J, Luckhaupt S, Schubauer-Berigan M. Mortality from amyotrophic lateral sclerosis or Parkinson's disease by usual occupation — National Occupational Mortality Surveillance, United States, 1985-2010.
- Intramural Paper of the Month (November), NIEHS, NIH, Research Triangle Park, NC, 2014
 - For: Beard JD, Umbach DM, Hoppin JA, Richards M, Alavanja MCR, Blair A, Sandler DP, Kamel F. Pesticide exposure and depression among male private pesticide applicators in the Agricultural Health Study. *Environ Health Perspect.* 2014;122(9):984-991.
 - <https://factor.niehs.nih.gov/2014/11/dir/index.htm>. Accessed April 29, 2019.

Citizenship Awards:

- Honorarium
 - Role: Peer-Reviewer for Office of Health Assessment and Translation, Division of the National Toxicology Program, National Institute of Environmental Health Sciences. Draft NTP Monograph on Systematic Review of Long-Term Neurological Effects Following Acute Exposure to the Organophosphate Nerve Agent Sarin. Research Triangle Park, NC: Office of Health Assessment and Translation, Division of the National Toxicology Program, National Institute of Environmental Health Sciences; 2018.
 - Sponsor: ICF International Inc., Fairfax, VA, on behalf of Office of Health Assessment and Translation, Division of the National Toxicology Program, NIEHS, NIH, Research Triangle Park, NC
 - Dates: 2019
 - Total Dollar Amount: \$500
- 2018 AJE Reviewer of the Year, AJE, Baltimore, MD, and SER, Clearfield, UT, 2019
 - Editors, The. 2018 articles of the year, reviewers of the year, and figure of the year. *Am J Epidemiol.* 2019;188(4):619-620. <https://doi.org/10.1093/aje/kwz046>
- 2014 AJE Reviewer of the Year, AJE, Baltimore, MD, and SER, Clearfield, UT, 2015
 - Editors, The. 2014 articles of the year, reviewers of the year, and figure of the year. *Am J Epidemiol.* 2015;181(4):221-222. <https://doi.org/10.1093/aje/kwv036>

USPHS Commissioned Corps Awards:

Individual Honor and Unit Awards:

- PHS Unit Commendation, 2016
 - For superior performance responding to an outbreak of severe *Histoplasma capsulatum* infections in an occupational setting in the Dominican Republic between August 2015 and January 2016

PHS Service and Training Awards:

- PHS Regular Corps Ribbon, 2016
- PHS Commissioned Corps Training Ribbon, 2016
- Challenge Coin (one of three out of 28 officers), Commissioned Officer Training Academy, Assignments and Career Management Branch, Division of Commissioned Corps Personnel and Readiness, Office of the Surgeon General, Potomac, MD, 2016

Training Grants and Awards:

- Project Title: Pre-Doctoral Intramural Research Training Award Fellowship
 - Role: Pre-Doctoral Intramural Research Training Award Fellow, Chronic Disease Epidemiology Group, Epidemiology Branch
 - Supervisor: Freya Kamel
 - Type of Source: Internal to NIEHS
 - Sponsor: Division of Intramural Research, NIEHS, NIH, Research Triangle Park, NC
 - Project Dates: 2014-2015
 - Total Dollar Amount: \$34,050 annual stipend, 100% of tuition and fees, supplemental health insurance
- Project Title: Pre-Doctoral Fellowship
 - Role: Pre-Doctoral Fellow, Department of Epidemiology, Gillings School of Global Public Health
 - Principal Investigator: Bonnie Rogers
 - Type of Source: Internal to UNC-Chapel Hill
 - Sponsor: NIOSH T42OH00867302: North Carolina Occupational Safety and Health Education and Research Center, UNC-Chapel Hill, Chapel Hill, NC (Office of Extramural Programs, Office of the Director, NIOSH, CDC, Atlanta, GA)
 - Project Dates: 2013-2014
 - Total Dollar Amount: \$22,032 annual stipend, 100% of tuition and fees, supplemental health insurance
- Project Title: Pre-Doctoral Fellowship
 - Role: Pre-Doctoral Fellow, Department of Epidemiology, Gillings School of Global Public Health
 - Principal Investigator: Amy Herring
 - Type of Source: Internal to UNC-Chapel Hill
 - Sponsor: NIEHS T32ES07018: Biostatistics for Research in Environmental Health, UNC-Chapel Hill, Chapel Hill, NC (Division of Extramural Research and Training, NIEHS, NIH, Research Triangle Park, NC)
 - Project Dates: 2010-2013
 - Total Dollar Amount: \$21,180-\$22,032 annual stipend, 60% of tuition and fees, supplemental health insurance
- Project Title: Summers of Discovery Internship, Intramural Research Training Award
 - Role: Summers of Discovery Intern, Chronic Disease Epidemiology Group, Epidemiology Branch
 - Supervisor: Freya Kamel
 - Type of Source: Internal to NIEHS

- Sponsor: Division of Intramural Research, NIEHS, NIH, Research Triangle Park, NC
- Project Dates: 2009
- Total Dollar Amount: \$5,673

- Project Title: MPH practicum fieldwork and project with NIEHS: Identifying environmental risk factors for neurological diseases among at-risk farmers, farm workers, and their respective spouses in the Agricultural Health Study
 - Role: Principal Investigator
 - Faculty Sponsor: Ray Merrill
 - Type of Source: Internal to BYU
 - Sponsor: Mary Lou Fulton Chair, College of Health and Human Performance, BYU, Provo, UT
 - Project Dates: 2009
 - Total Dollar Amount: \$1,500

Academic Awards:Scholarships and Tuition Awards:

- In-state Tuition Award (PhD)
 - Sponsor: Department of Epidemiology, Gillings School of Global Public Health, UNC-Chapel Hill, Chapel Hill, NC
 - Dates: 2011
 - Total Dollar Amount: \$3,614.50

- In-state Tuition Award (PhD)
 - Sponsor: Department of Epidemiology, Gillings School of Global Public Health, UNC-Chapel Hill, Chapel Hill, NC
 - Dates: 2010
 - Total Dollar Amount: \$3,614.50

- MPH Scholarship Award
 - Sponsor: Department of Health Science, College of Life Sciences, BYU, Provo, UT
 - Dates: 2010
 - Total Dollar Amount: \$1,054

- MPH Scholarship Award
 - Sponsor: Department of Health Science, College of Health and Human Performance, BYU, Provo, UT
 - Dates: 2009
 - Total Dollar Amount: \$2,500

- National Science and Mathematics Access to Retain Talent (SMART) Grant (undergraduate)
 - Sponsor: U.S. Department of Education, Washington, DC
 - Dates: 2008
 - Total Dollar Amount: \$2,000

- Mangum-Lewis Scholarship (undergraduate)

- Sponsor: Jennie Knight-Mangum and Bert A. Lewis Families
- Dates: 2001-2002, 2004-2007
- Total Dollar Amount: Eight semesters, full tuition plus \$200-\$300 for books

Other:

- Member, Mu Sigma Rho (National Statistical Honor Society), 2006
- Dean's List, College of Engineering and Technology, BYU, Provo, UT, 2001

Travel Awards:

- 47th Annual Meeting of the Society for Epidemiologic Research Travel Award
 - Sponsor: Department of Epidemiology, Gillings School of Global Public Health, UNC-Chapel Hill, Chapel Hill, NC
 - Dates: 2014
 - Total Dollar Amount: \$927.47
- 63rd Annual EIS Conference David J. Sencer Memorial Scholarship
 - Sponsor: EIS Alumni Association, Atlanta, GA
 - Dates: 2014
 - Total Dollar Amount: \$800
- 12th Annual Health Education Advocacy Summit of the Coalition of National Health Education Organizations Fellowship
 - Sponsor: Department of Health Science, College of Health and Human Performance, BYU, Provo, UT
 - Dates: 2009
 - Total Dollar Amount: \$350

Other Awards:

- Eagle Scout, Boy Scouts of America, Irving, TX, 1999

ADDITIONAL TRAININGS AND SKILLS:**Emergency Response Trainings:**Federal Emergency Management Agency (FEMA), Washington, DC, Trainings:

- Introduction to Incident Command System ICS-100 (IS-00100.b), Federal Emergency Management Agency (FEMA), Washington, DC, August 2015
- ICS for Single Resources and Initial Action Incident, ICS-200 (IS-00200.b), FEMA, Washington, DC, August 2015
- National Incident Management System (NIMS) An Introduction (IS-00700.a), FEMA, Washington, DC, August 2015
- National Response Framework, An Introduction (IS-00800.b), FEMA, Washington, DC, September 2015

Other:

- Basic Life Support for Healthcare Professionals (CPR and AED), American Heart Association, Dallas, TX, July 2015-July 2017

Computer Proficiencies:

- Advanced proficiency in SAS programming language, Microsoft Office (especially Word, Excel, PowerPoint)