

SCHOLARSHIP

Peer-reviewed Publications (* indicates undergraduate co-author; † indicates graduate co-author).

Johnston JD, Collingwood SC, LeCheminant JD, Peterson NE, South AJ, Farnsworth CB, Chartier RT, Thiel ME*, Brown TP*, Goss ES*, Jones PK*, Sanjel S, Gifford JR, Beard JD (2025). Comparison of two miniaturized, rectifiable aerosol photometers for personal PM_{2.5} monitoring in a dusty occupational environment. *Atmosphere*. 16(11), 1233. <https://doi.org/10.3390/atmos16111233>

Kitras C†, Beard JD, **Johnston JD**, Lundrigan P (2025). Sustainable radon mitigation through optimized HVAC scheduling. *Proceedings of 2025 IEEE/ACM Conference on Connected Health: Applications, Systems and Engineering Technologies (CHASE)*, New York, NY, USA, 2025, pp. 324-328. <https://ieeexplore.ieee.org/abstract/document/11121074>

Johnston JD, Van Roosendaal SM*, West J*, Jung H*, Sonntag DB (2024). Impact of air conditioning type on ozone intrusion into homes in a semi-arid climate. *Environments*. 11(10), 219. <https://doi.org/10.3390/environments11100219>

Curtis KL†, Chang A, **Johnston JD**, Beard JD, Collingwood SC, LeCheminant JD, Peterson NE, South AJ, Farnsworth CB, Sanjel S, Bikman BT, Arroyo JA, Reynolds PR (2024). Differential inflammatory cytokine elaboration in serum from brick workers in Bhaktapur, Nepal. *Diseases*. 12(6), 129. <https://doi.org/10.3390/diseases12060129>

Beard JD, Collingwood SC, LeCheminant JD, Peterson NE, Reynolds PR, Arroyo JA, South AJ, Farnsworth CB, Fong G*, Cisneros T*, Taylor M*, Sanjel S, **Johnston JD** (2024). Respirable dust and crystalline silica concentrations among workers at a brick kiln in Bhaktapur, Nepal. *Journal of Occupational and Environmental Hygiene*. 21(4), 247-258. <https://doi.org/10.1080/15459624.2024.2311873>

Sonntag DB, Jung H*, Harline RP*, Peterson TC*, Willis SE*, Christensen TR*, **Johnston JD** (2023). Infiltration of outdoor PM_{2.5} pollution into homes with evaporative coolers in Utah County. *Sustainability*. 16(1), 177. <https://doi.org/10.3390/su16010177>

Johnston JD, Collingwood SC, LeCheminant JD, Peterson NE, Reynolds PR, Arroyo JA, South AJ, Farnsworth CB, Chartier RT, Layton LN*, Lu JH*, Penrod MS*, Sanjel S, Beard JD (2023). Personal exposure to fine particulate air pollution among brick workers in Nepal. *Atmosphere*. 14(12), 1783. <https://doi.org/10.3390/atmos14121783>

Beard JD, Thygerson SM, Olivares A*, Tadge JE*, Willis S*, **Johnston JD** (2022). Gaseous air pollutants and respirable crystalline silica inside and outside homes at brick kilns in Bhaktapur, Kathmandu Valley, Nepal. *International Journal of Environmental Research and Public Health*. 19(19), 12431; <https://doi.org/10.3390/ijerph191912431>

Johnston JD, Cowger AE†, Weber KS (2022). Bioaerosol and microbial exposures from residential evaporative coolers and their potential health outcomes: A review. *Indoor Air*. 32(9), e13082; <https://doi.org/10.1111/ina.13082>

Johnston JD, Beard JD, Novilla MLB, Weber FX, Chartier RT (2022). PM_{2.5} pollution levels and chemical components at teahouses along the Poon Hill trek in Nepal. *Atmosphere*. 13(7), 1018; <https://doi.org/10.3390/atmos13071018>

Johnston JD, Davis SF[†], Ghanadan GS*, Jensen AM, Larsen BC, Beard JD (2021). Factors influencing radon mitigation behaviors among Utah residents. *Journal of Environmental Health*. 84(3), 23-30. <https://www.proquest.com/docview/2578205920?pq-origsite=gscholar&fromopenview=true>

Novilla MLB, **Johnston JD**, Beard JD, Pettit LL*, Davis SF[†], Johnson CE* (2021). Radon awareness and policy perspectives on testing and mitigation. *Atmosphere*. 12(8), 1016; <https://doi.org/10.3390/atmos12081016>

Johnston JD, Beard JD, Montague EJ*, Sanjel S, Lu JH*, McBride H*, Weber FX, Chartier RT (2021). Chemical composition of PM_{2.5} in wood fire and LPG cookstove homes of Nepali brick workers. *Atmosphere*. 12(7), 911; <https://doi.org/10.3390/atmos12070911>

Johnston JD, Chaney RA, Spruance LA (2021). Characterizing fine particulate air pollution at two urban elementary schools: A pilot study of arrival and departure environments. *Associative Journal of Health Sciences*. 1(3), 1-4. <https://crimsonpublishers.com/ajhs/pdf/AJHS.000514.pdf>

Errigo IM[†], Abbot BW, Mitchell L, Mendoza DL, Sayedeh SS, Glenn J, Beard JD, Bratsman S, Carter T, Chaney RA, Follett A, Freeman A, Frei RJ, Greenhalgh M, Holmes H, Howe PD, **Johnston JD**, Kelly KE, Lange L, Martin R, Stacy A, Tran T, Wilson D (2020). Human health and economic costs of air pollution in Utah: An expert assessment. *Atmosphere*. 11(11), 1238; <https://doi.org/10.3390/atmos11111238>

Davis EA*, Ou JY, Chausow C*, Verdeja MA[†], Divver E, **Johnston JD**, Beard JD (2020). Associations between school characteristics and classroom radon concentrations in Utah's public schools: A project completed by university environmental health students. *International Journal of Environmental Research and Public Health*. 17(16), 5839; <https://doi.org/10.3390/ijerph17165839>

Johnston JD, Hawks ME[†], Johnston HB*, Johnson LA*, Beard JD (2020). Comparison of liquefied petroleum gas cookstoves and wood cooking fires on PM_{2.5} trends in brick workers' homes in Nepal. *International Journal of Environmental Research and Public Health*. 17(16), 5681; <https://doi.org/10.3390/ijerph17165681>

Thygerson SM, Beard JD, House MJ*, Smith RL[†], Burbidge HC*, Andrus KN*, Weber FX, Chartier R, **Johnston JD** (2019). Air-quality assessment of on-site brick-kiln worker housing in Bhaktapur, Nepal: Chemical speciation of indoor and outdoor PM_{2.5} pollution. *International Journal of Environmental Research and Public Health*. 16:21, 4114; <https://doi.org/10.3390/ijerph16214114>

Johnston JD, Cowger AE[†], Graul RJ*, Nash R*, Tueller JA*, Hendrickson NR*, Robinson DR*, Beard JD, Weber KS (2019). Associations between evaporative cooling and dust-mite allergens, endotoxins, and β-(1→3)-D-glucans in house dust: A study of low-income homes. *Indoor Air*. <https://doi.org/10.1111/ina.12600>

Chaney RA, Montgomery HD*, King JH*, Hendrickson NR*, Sloan CD, **Johnston JD** (2019). A comparison of perceived and measured commuter air pollution exposures. *Journal of Environmental Health*. 82:4, 8-14.

Davis SF*, **Johnston JD**, Magnusson BM, Novilla ML, Torgersen BK*, Schnell AJ*, Crandall A (2018). Predictors of radon testing among Utah residents using a theory-based approach. *Journal of Environmental Health*. 80:6, 20-27. <https://web.s.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=0&sid=fb5105f7-cf32-4c33-8b81-2f403f52800c%40redis>

Sanjel S, Khanal SN, Thygerson SM, Carter WS, **Johnston JD**, Joshi SK (2018). Exposure to respirable silica among clay brick workers in Kathmandu valley, Nepal. *Archives of Environmental and Occupational Health*. 73:6, 347-350.

Chaney RA, Sloan CD, Cooper VC*, Robinson DR*, Hendrickson NR*, McCord TA*, **Johnston JD** (2017). Personal exposure to fine particulate air pollution while commuting: An examination of six transport modes on an urban arterial roadway. *PLoS ONE*, 12:11, e0188053. <https://doi.org/10.1371/journal.pone.0188053>

Sanjel S, Khanal SN, Thygerson SM, Carter WS, **Johnston JD**, Joshi SK (2017). Respiratory symptoms and illnesses related to the concentration of airborne particulate matter among brick kiln workers in Kathmandu Valley, Nepal. *Annals of Occupational and Environmental Medicine*. 29:9. doi: 10.1186/s40557-017-0165-0

Johnston JD, Kruman BA*, Nelson MC*, Merrill RM, Graul RJ*, Hoybjerg TG*, Tuttle SC*, Myers SJ*, Cook RB*, Weber KS (2017). Differential effects of air conditioning type on residential endotoxin levels in a semi-arid climate. *Indoor Air*. doi: 10.1111/ina.12369

Johnston JD, Barney T*, Crandall J*, Brown M*, Westover T*, Paulson S*, Smith M*, Weber KS (2017). Prevalence of house dust mite allergens in low-income homes with evaporative coolers in a semi-arid climate. *Archives of Environmental and Occupational Health*. doi: 10.1080/19338244.2017.1282846

Sloan CD, Weber FX, Bradshaw RK*, Philipp TJ*, Barber WB*, Palmer VL*, Graul RJ*, Tuttle SC*, Chartier RT, **Johnston JD** (2016). Elemental analysis of infant airborne particulate exposures. *Journal of Exposure Science & Environmental Epidemiology*. doi:10.1038/jes.2016.77

Johnston JD, Merrill RM, Zimmerman GC*, Collingwood SC, Reading JC (2016). Factors associated with biosafety level-2 research workers' laboratory exit hand washing behaviors and glove removal compliance. *Journal of Occupational and Environmental Hygiene*, 13:4, 254-264.

Johnston JD, Tuttle SC*, Nelson MC*, Bradshaw RK*, Hoybjerg TG*, Johnson JB*, Kruman BA*, Orton TS*, Cook RB*, Eggett DL, Weber KS (2016). Evaporative cooler use influences temporal indoor relative humidity but not dust mite allergen levels in homes in a semi-arid climate. *PLoS ONE*, 11:1, e0147105. doi:10.1371/journal.pone.0147105

Sloan CD, Philipp TJ*, Bradshaw RK*, Chronister S*, Barber WB*, **Johnston JD** (2016). Applications of GPS-tracked personal and fixed-location PM_{2.5} continuous exposure monitoring. *Journal of the Air & Waste Management Association*, 66:1, 53-65.

Johnston JD, Magnusson BM, Eggett DL, Collingwood SC, Bernhardt SA (2015). Comparison of single-point and continuous sampling methods for estimating residential indoor temperature and humidity. *Journal of Occupational and Environmental Hygiene*, 12:11, 785-794.

Johnston JD, Eggett D, Johnson MJ, Reading JC (2014). The influence of risk perception on biosafety level-2 laboratory workers' hand-to-face contact behaviors. *Journal of Occupational and Environmental Hygiene*, 11:9, 625-632.

Johnston JD, Magnusson BM, Eggett D, Mumford K, Collingwood SC, Bernhardt SA (2014). Sensor drift and predicted calibration intervals of handheld temperature and relative humidity meters under residential field-use conditions. *Journal of Environmental Health*, 77(3), 22-28.

Johnston JD, Thygeson SM, Johnson MJ, Reading JC (2013). Hand washing quality among biosafety level 2 research laboratory workers. *Applied Biosafety*, 18(3), 116-121.

Ashton C[†], Bernhardt SA, Lowe M, Mietchen M, **Johnston JD** (2012). Comparison of HIV/AIDS rates between U.S.-born blacks and African-born blacks in Utah, 2000 – 2009. *Open AIDS J*, 6(Suppl 1: M13), 170-176.

Chessin SJ, **Johnston JD**. (2002). Thermal loading as a causal factor in exceeding the 0.1 PPM laboratory fume hood control level. *Applied Occupational and Environmental Hygiene*, 17(7), 512-518.

Johnston JD, Chessin SJ, Chesnovar BW, Lillquist DR. (2000). The effect of thermal loading on laboratory fume hood performance. *Applied Occupational and Environmental Hygiene*, 15(11), 863-868.

Non Peer-Reviewed Publications

Errigo IM*, Abbot BW, Mendoza DL, Chaney RA, Freeman A, Glenn JD, Howe PD, Carter T, Martin R, Mitchell L, **Johnston JD**, Holmes H, Tran T, Frei RJ, Follett A, Bratsman S, Lange L, Wilson D, Stacy A, Sayedi SS. (2020). Human health and economic costs of air pollution in Utah. Technical Report.

Sloan CD, **Johnston JD**. (2016). Can extreme air pollution events provide a window into incident asthma? *American Journal of Respiratory Critical Care Medicine*, 194(12): 1440-1441.

Invited Presentations (* indicates undergraduate co-author; † indicates graduate co-author)

Johnston JD, Thiel ME*, Brown TP*, Goss ES*, Jones PK[†], Beard JD. Comparison of wearable, rectifiable aerosol photometers for measuring personal PM_{2.5} exposures in a dusty environment. Rocky Mountain Center for Occupational and Environmental Health's 43rd Annual Utah Conference on Safety and Industrial Hygiene, October 2025, Salt Lake City, UT.

Lu JH*, Beard JD, Collingwood SC, LeCheminant JD, Peterson NE, Reynolds PR, Arroyo JA, South AJ, Farnsworth CB, Layton L*, Penrod M*, Sanjel S, **Johnston JD**. Personal breathing zone exposure to fine particulate air pollution among brick workers in Nepal. Rocky Mountain Center for Occupational and Environmental Health's 40th Annual Utah Conference on Safety and Industrial Hygiene, October 2023, Salt Lake City, UT.

Beard JD, Collingwood SC, LeCheminant JD, Peterson NE, Reynolds PR, Arroyo JA, South AJ, Farnsworth CB, Sanjel S, Baxter N[†], Braiden G*, Fong G*, Cisneros T*, Layton L*, Lu JH*, Olivares A*, Penrod M*, Taylor M*, Tibbitts M*, **Johnston JD**. Evaluating PM_{2.5} concentrations in homes of on-site workers at a Nepalese brick manufacturing facility. Rocky Mountain Center for Occupational and Environmental Health's 40th Annual Utah Conference on Safety and Industrial Hygiene, October 2023, Salt Lake City, UT.

Johnston JD, Davis SF, Ghanadan GS*, Jensen AM, Larsen BC, Beard JD, Novilla MLB. Factors influencing radon mitigation behaviors among Utah residents, and policy perspectives on testing and mitigation. National Radon Conference, October 2022, Bellevue, WA.

Johnston JD, Thygerson SM. Occupational and environmental exposures among brick workers in Nepal, and what to do about it. 39th Annual Conference on Safety and Industrial Hygiene, University of Utah, October 2022, Salt Lake City, UT.

Johnston JD, Davis SF, Ghanadan GS*, Jensen AM, Larsen BC, Beard JD. Factors influencing radon mitigation behaviors among Utah residents. Region 8 Radon Stakeholder's Meeting, April 2022, Moab, UT.

Novilla L, **Johnston JD**, Beard JD, Pettit LL*, Davis SF, Johnson CE*. Radon awareness and policy perspectives on testing and mitigation. Region 8 Radon Stakeholder's Meeting, April 2022, Moab, UT.

Johnston JD. (2016). House dust mites in Utah's semi-arid Climate? Utah Asthma Task Force, June 2016. Utah Department of Health, Salt Lake City, UT.

Johnston JD, Davis SF*, Magnusson BM, Novilla L, Torgersen BK*, Gunn A*. (2016). Radon knowledge, attitudes, and testing among Utah County residents. EPA Region 8 Radon Stakeholders Conference, Utah Department of Environmental Quality, Salt Lake City, Utah.

Johnston JD. (2008). Institutional Biosafety Committee Basics. Society of Research Administrators International – Western Section Conference, Denver, CO.

Oral Presentations (* indicates undergraduate co-author; † indicates graduate co-author)

Johnston JD. (2018). Indoor environmental quality in Utah homes. Utah Environmental Health Association Fall Conference, Provo, UT.

Johnston JD. (2016). Dust mite prevalence in Utah's semi-arid climate. Utah Environmental Health Association Spring Conference, Springdale, UT.

Johnston JD, Bernhardt SA, Magnusson BM, Eggett D, Collingwood SC. (2015). Representativeness of single-point sampling for estimating residential indoor air temperature and relative humidity. American Industrial Hygiene Conference and Exposition, Salt Lake City, UT.

Johnston JD, Eggett D, Johnson MJ, Reading JC. (2014). Factors influencing hand-to-face contact among biosafety level-2 research laboratory workers. American Industrial Hygiene Conference and Exposition, San Antonio, TX.

Johnston JD, & Johnson MJ (2011). Quality of hand-washing among biosafety level-2 laboratory workers. Presented at the 54th Annual Conference of the American Biological Safety Association, Anaheim, CA.

Johnston JD, Reading JC, Johnson MJ, & Richardson GE (2010). Hand hygiene in the biosafety level-2 lab: Is it a matter of training? Presented at the 53rd Annual Conference of the American Biological Safety Association, Denver, CO.

Johnston JD, Trunnell EP. (2006). An interdisciplinary approach to biological safety training. Presented at the 49th Annual Conference of the American Biological Safety Association, Boston, MA.

Chessin SJ, **Johnston JD**, Stephenson D, & Lillquist DR. (2000). The effect of thermally hot operations on fume hood performance: A tracer gas analysis. Presented at the American Industrial Hygiene Association Conference, Orlando, FL.

Poster Presentations (* indicates undergraduate co-author; † indicates graduate co-author)

Durling J*, Hansen M*, Beard JD, Collingwood SC, LeCheminant JD, Peterson NE, Gifford JR, Reynolds PR, Arroyo JA, South AJ, Farnsworth CB, Sanjel S, Chartier R, Weber F, **Johnston JD**. Cardiac health measures and PM_{2.5} exposures among Nepalese brick workers. American Industrial Hygiene Association Connect 2025, May 2025, Kansas City, MO, USA.

Hansen M*, Durling J*, Beard JD, Collingwood SC, LeCheminant JD, Peterson NE, Gifford JR, Reynolds PR, Arroyo JA, South AJ, Farnsworth CB, Sanjel S, Chartier R, Weber F, **Johnston JD**. PM_{2.5} chemical components and respiratory symptoms among brick workers in Nepal. American Industrial Hygiene Association Connect 2025, May 2025, Kansas City, MO, USA.

Johnston JD, VanRoosendaal S*, West J*, Jung H*, Sonntag DB. Infiltration of outdoor PM_{2.5} and ozone pollution into homes with evaporative coolers in Utah county. International Society of Indoor Air Quality and Climate (ISIAQ), Indoor Air Conference, July 2024, Honolulu, HI, USA.

Sonntag DB, Jung H*, Harline RP*, Peterson TC*, Willis SE*, **Johnston JD**. Infiltration of outdoor PM_{2.5} pollution into homes with evaporative coolers in Utah County. AAAR 41st Annual Conference, October 2023, Portland, Oregon, USA.

Kidd P*, Eddington C*, Kasteler B*, Beard JD, Collingwood SC, **Johnston JD**, Peterson NE, Reynolds PR, Arroyo JA, South AJ, Sanjel S, Farnsworth CB, LeCheminant JD. PM_{2.5} and body composition, oxygen saturation, and blood pressure in brick factory workers in Nepal. 41st Annual Meeting of the Obesity Society at ObesityWeek, October 2023, Dallas, TX, USA.

Johnston JD, Beard JD, LeCheminant JD, Peterson NE, Reynolds PR, Arroyo JA, South AJ, Farnsworth CB, Baxter N†, Braiden G*, Fong G*, Cisneros T*, Layton L*, Lu JH*, Olivares A*, Penrod M*, Taylor M*, Tibbitts M*, Sanjel S, Collingwood SC. Personal breathing zone concentrations of PM_{2.5} among workers in different occupational groups at a brick kiln in Nepal. 35th Annual Conference of the International Society for Environmental Epidemiology, September 2023, Kaohsiung, Taiwan, E-poster.

Beard JD, Collingwood SC, LeCheminant JD, Peterson NE, Reynolds PR, Arroyo JA, South AJ, Farnsworth CB, Baxter N†, Braiden G*, Fong G*, Cisneros T*, Layton L*, Lu JH*, Olivares A*, Penrod M*, Taylor M*, Tibbitts M*, Sanjel S, **Johnston JD**. Evaluating PM_{2.5} concentrations in homes of on-site workers at a Nepalese brick manufacturing facility. 35th Annual Conference of the International Society for Environmental Epidemiology, September 2023, Kaohsiung, Taiwan, E-poster.

Hinrichsen S†, Graham R, **Johnston JD**, Sloan-Aagard CD, Beard JD. Temperature inversions and emergency department visits for multiple sclerosis in Salt Lake County, Utah, 1996-2017. 2023 Annual Meeting of the Consortium of Multiple Sclerosis Centers, June 2023, Aurora, CO, USA

Haline PR*, Willis SE*, **Johnston JD**, Sonntag DB. Minute by minute concentrations of PM_{2.5} in homes with evaporative coolers versus central air conditioners. Utah Conference on Undergraduate Research, February 2023, Salt Lake City, UT, USA.

Tarone B*, Van Roosendall S*, **Johnston JD**, Sonntag DB. Indoor/outdoor ozone in evaporative cooler vs central air homes in Utah County. Utah Conference on Undergraduate Research, February 2023, Salt Lake City, UT, USA.

Christensen T*, Chanthakhoun P*, Olivares A*, **Johnston JD**, Sonntag DB. Comparison of PM_{2.5} levels in evaporative vs central air homes in Utah County using filter-based sampling. Utah Conference on Undergraduate Research, February 2023, Salt Lake City, UT, USA.

Fuller SR*, Tadge JE*, **Johnston JD**, Weber KS. Health implication of bioaerosol and dust microbiome exposure from evaporative air coolers. Utah Conference on Undergraduate Research 2022, St. George, UT.

Johnston JD, Beard JD, Montague EJ*, Sanjel 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. Healthy Buildings – America 2021, Virtual.

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. American Public Health Association Annual Meeting and Expo 2020, Virtual.

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. American Industrial Hygiene Conference & Expo (AIHce) 2019, Minneapolis, MN.

Coombs S*, Hagman K*, Peterson E*, Ward J*, Ellis Q*, **Johnston JD**. A breath of “fresh” air: Does the estimated level of ambient exposure to PM_{2.5} differ between indoor and outdoor exercise during the winter? American Industrial Hygiene Conference & Expo (AIHce) 2019, Minneapolis, MN.

Ghanadan G*, Davis SF[†], **Johnston JD**. Mitigation behaviors among Utah residents with high radon test results. American Industrial Hygiene Conference & Expo (AIHce) 2019, Minneapolis, MN.

Cowger AE[†], **Johnston JD**, Graul RJ*, Nash R*, Tueller JA*, Hendrickson NR*, Beard JD, and Weber KS. Bioaerosols associated with evaporative cooler use in low-income homes in the semi-arid climate of Utah County, Utah, USA American Society of Microbiology Rocky Mountain Branch Meeting April 13th 2019. Provo Utah.

Hendrickson NR*, King JH*, Montgomery HD*, Chaney RA, Sloan CD, **Johnston JD**. Perceived risk of commuter air pollution exposure. American Industrial Hygiene Conference & Expo (AIHce) 2018, Philadelphia, PA.

Graul R*, Cowger A[†], Nash R*, Tueller J*, Beard JD, Weber KS, **Johnston JD**. Prevalence of dust mite allergens in low-income homes in Utah County, Utah. American Industrial Hygiene Conference & Expo (AIHce) 2018, Philadelphia, PA.

Hendrickson NR*, Cooper VC*, Sloan CD, Chaney RA, **Johnston JD**. Personal exposure to fine particulate air pollution (PM_{2.5}) while commuting: An examination of six transport modes on an urban arterial roadway. American Industrial Hygiene Conference & Expo (AIHce) 2017, Seattle, WA.

Nielsen N*, Palmer V*, Bradshaw B*, Thacker E, **Johnston JD**. Estimating children's exposure to indoor particulate matter (PM₁₀) using a statistical prediction model. American Industrial Hygiene Conference & Expo (AIHce) 2017, Seattle, WA.

Palmer V*, Nielsen N*, Cox A*, Bradshaw B*, Brown M*, Barney T*, Graul R*, Torgersen B*, Tuttle C*, Thacker E, **Johnston JD**. Development of a model to predict preadolescent children's indoor PM₁₀ exposures. NEHA 2016 AEC and HUD Healthy Homes Conference, San Antonio, TX.

Graul RJ*, Tuttle SC*, Kruman BA*, Nelson MC*, Hoybjerg TG*, Meyers S*, Cook RB*, Eggett DL, Weber KS, **Johnston JD**. Differences in indoor dust endotoxin levels based on type of air conditioning in homes in a semi-arid climate. NEHA 2016 AEC and HUD Healthy Homes Conference, San Antonio, TX.

Brown M*, Barney T*, Westover T*, Paulson S*, Smith M*, Crandall J*, Weber KS, **Johnston JD**. Dust mite allergens in low-income homes with evaporative coolers in a semi-arid climate. NEHA 2016 AEC and HUD Healthy Homes Conference, San Antonio, TX.

Davis SF*, Cox AL*, Magnusson BM, Crandall A, Jensen A, Larsen B, Torgersen BK*, **Johnston JD**. Factors influencing radon testing behaviors among Utah County residents. NEHA 2016 AEC and HUD Healthy Homes Conference, San Antonio, TX.

Hoybjerg T*, Christiansen M*, Myers S*, Kruman B*, **Johnston JD**, and Weber KS. Development of sensitive Limulus Amebocyte Lysate assay to quantify endotoxin levels in Utah homes with and without swamp coolers. 9th Annual Utah Conference on Undergraduate Research. February 27, 2015. St. George Utah.

Christiansen M*, Hoybjerg T*, Cook R*, **Johnston JD**, and Weber KS. Comparison of dust mite antigen levels in Utah homes with swamp coolers versus homes with air conditioning. 9th Annual Utah Conference on Undergraduate Research. February 27, 2015. St. George Utah.

Johnston JD, Bernhardt SA, Magnusson BM, Eggett D, Collingwood SC. Comparison of continuous and single-point measurement of residential temperature and relative humidity. 78th National Environmental Health Association Annual Educational Conference, 2014, Las Vegas, NV.

Wahlquist B*, Kruman B*, Weber KS, **Johnston JD**. (2014). The effect of evaporative coolers on indoor relative humidity and dust mite allergens in Utah homes. 8th Annual Utah Conference on Undergraduate Research, Provo, UT.

Campbell E*, Johnson J*, **Johnston JD**, Weber KS. (2014). Development of sensitive ELISA and qPCR assays to quantitate levels of dust mite antigens in homes in Utah with and without swamp coolers. 8th Annual Utah Conference on Undergraduate Research, Provo, UT.

Johnston JD, Johnson MJ. (2010). Hand-to-face contact as a route of transmission in the biosafety level 2 laboratory. Also an Abstract Published in Proceedings of the 53rd Annual American Biological Safety Association Conference, 53. Poster session presented at Proceedings of the 53rd Annual American Biological Safety Association Conference, Denver, CO.

Johnson MJ, **Johnston JD**. (2010). Evaluating glove use in the biosafety level-2 research laboratory. Also an Abstract Published in Proceedings of the 53rd Annual American Biological Safety Association Conference, 52. Poster session presented at 53rd Annual American Biological Safety Association Conference, Denver, CO.

Funding Applications/Awards

Roger and Victoria Sant Endowment, (2023). Identifying applications of the United Nations' sustainable development goals to reduce air pollution concentrations in brick kilns in Nepal. \$13,000, Role: Co-Investigator

Brigham Young University, College of Life Sciences, Teaching Development Grant, (2023). Radon testing in Utah's public schools: A social cognitive theory-based learning experience for environmental health students. \$10,000, Role: Co-Principal Investigator

Utah Department of Environmental Quality, (2023). Radon Program. Radon testing in K-12 schools in rural/low-income areas in Utah. \$3,000, Role: Co-Principal Investigator

NIH/NIOSH (T42OH008414), Rocky Mountain Center for Occupational and Environmental Health (RMCOEH), Pilot/small Research Projects in Occupational Safety and Health, (2023 – 2024). Sustainable, low-cost mitigation strategies for K12 schools and employees. \$19,840, Role: Co-Investigator

NIH/NIOSH (T42OH008414), Rocky Mountain Center for Occupational and Environmental Health (RMCOEH), Pilot/Small Research Projects in Occupational Safety and Health, (2022 - 2023). Spatiotemporal and personal monitoring of Nepali brick workers' aerosol exposures. \$19,400, Role: Principal Investigator

Brigham Young University, Interdisciplinary Research (IDR) Origination Award, (2022-2024). 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. \$40,000, Role: Principal Investigator

Charles Redd Center for Western Studies, Annalee Naegle Redd Assistantship, (2019). Characterization of bacterial and fungal species in Utah homes with evaporative coolers and central air conditioners. \$12,000, Role: Principal Investigator

Douglas C. Heiner Research Gift, (2014). Efficacy of high-volume dehumidification to reduce allergen levels in the homes of allergic subjects. \$11,000. Role: Principal Investigator

NIH, National Institute of Child Health & Human Development, (2012). Quality assurance, quality control, and availability of materials for the National Children's Study. Contract (#HHSN275200800027C), sub-award agreement between University of Utah and Utah State University, contract #10009468-1. \$285,875, Role: Co-Investigator (20%)

Guest Curator

Seferovich H, Belnap D, Chase Z, Dunn M, Farnsworth C, Hirschmann E, Hope S, **Johnston JD**, Lundberg K, Nelson G, Petersen AM, Smith MW. Sanctify Yourselves: A Multidisciplinary Approach to Cleansing, Purifying, and Sanctifying exhibition at the Education in Zion Gallery, Brigham Young University, Provo, Utah, 2023-26.

Media Features on Research Projects

BYU News, Life and Breath: Interdisciplinary BYU team travels to Nepal to study health effects of air pollution, February 21, 2024. <https://news.byu.edu/byu-team-of-nursing-public-health-engineering-students-faculty-travels-to-nepal-to-study-health-effects-of-air-pollution>

BYU Radio, Matt Townsend Show live interview on dust mite allergens in Utah County homes, June 2, 2016. <http://www.byuradio.org/episode/ffedd537-d4cc-45e9-87b1-f5bc139c7ad9/the-matt-townsend-show-the-abolitionists-war-on-soda-allergies-and-dust-mites?playhead=6580&autoplay=true>

Research from BYU suggests Utah County's climate makes dust mites less of a concern. KSTU FOX 13 News, May 11, 2016. <http://fox13now.com/2016/05/11/research-from-byu-suggests-utah-countys-climate-makes-dust-mites-less-of-a-concern/>

Are dust mites really a problem in Utah? A new study done by BYU says no. ABC 4 News, May 9, 2016. <http://www.good4utah.com/news/top-stories/are-dust-mites-really-a-problem-in-utah>

New BYU study shows low numbers of dust mites in Utah County homes. KSL NewsRadio. May, 2016. <https://audioboom.com/boos/4549098-new-byu-study-shows-low-numbers-of-dust-mites-in-utah-county-homes>

BYU News Feature on house dust mite research and publication. May 6, 2016. <https://news.byu.edu/news/dust-mites-invading-your-mattress-maybe-not-say-byu-researchers>

CITIZENSHIP

BYU Department of Public Health Committees

1. MPH Program. Director (2024 – Present)
2. Accreditation Maintenance Committee. Member (2025 – Present)
3. Student Experiences Committee. Chair (2023 – 2024)
4. Review Committee. Chair (2023 – 2024)
5. Professional Development Committee. Member (2019 – 2025)
6. EOH Emphasis Coordinator (2022 – 2023)
7. MPH Curriculum Committee. Member (2021 – 2022)
8. MPH Admissions Committee. Member (2019 – 2021)
9. Alumni Committee (Ad Hoc). Chair (2018 – 2019)
10. Beard Rank & Status Committee Mentor. Chair (2017 – 2023)
11. Faculty Search Committee. Member (2016 – 2017)
12. Merit Pay Committee. Member (2016 – 2017)
13. Undergraduate Curriculum & Learning Committee. Member (2013 – 2017)
14. MPH Admissions Committee. Member (2016)
15. Student Scholarships Committee. Member (2013 – 2016)
16. Annual Review Committee. Member (2013 – 2014; 2020 - 2021)
17. MPH Admissions Committee. Member (2013)

BYU College of Life Sciences Committees

1. COVID-19 Committee (Ad Hoc). Member. (2020)
2. College Undergraduate Research Awards (CURA) Committee. Member (2018)
3. Mentoring Environment Grant (MEG) Committee. Member. (2013, 2014)
4. Undergraduate ORCA Grant Reviewer. (2012, 2017)

University Committees

1. Institutional Biosafety Committee (IBC). Brigham Young University, Office of Research and Creative Activities. Member. (2013 – 2016)
2. Research Compliance Committee. University of Utah, Office of Research Administration. Member (2004 – 2010)
3. Emergency Operations Center, University of Utah. Safety Officer. (2010)

Professional Associations/Committees

1. Utah County Health Department, Administrative Review Board (2017 - Present)
2. American Industrial Hygiene Association (AIHA)
 - AIHA Representative, Indoor Environmental Quality Global Alliance Board (2020 - 2023)
 - Chair, Indoor Environmental Quality Committee (2017 - 2018)
 - Vice Chair, Indoor Environmental Quality Committee (2016 – 2017)
 - Secretary, Indoor Environmental Quality Committee (2015 – 2016)
 - Secretary-elect, Indoor Environmental Quality Committee (2014 – 2015)
 - Member (2011 – Present)
3. International Society of Indoor Air Quality and Climate
 - Member (2017 – 2018; 2020 - Present)
4. National Environmental Health Association
 - Member (2011 – Present)
5. Utah Section, American Industrial Hygiene Association
 - Member (2013 – Present)
6. Utah County Household Hazardous Waste Committee
 - Member (2015 – 2019)
7. American Biological Safety Association
 - Member (2004 – 2016)

Editorial Appointments

Reviewer, *Atmosphere*

Reviewer, *Journal of Toxicology and Environmental Health, Part A: Current Issues*

Reviewer, *International Journal of Environmental Research and Public Health*

Reviewer, *Journal of Occupational and Environmental Hygiene*

Reviewer, *Environmental Research*

Reviewer, *PLoS ONE*

Reviewer, *Biomedical and Environmental Sciences*

Reviewer, *Journal of Environmental Health*

Reviewer, Applied Biosafety

TEACHING

University Courses

2024 - Present	Public Health Capstone (HLTH 690), Brigham Young University
2019 - Present	Sampling & Exposure Assessment Lab 2 (HLTH 429), Brigham Young University
2015 - Present	Sampling & Exposure Assessment Lab 1 (HLTH 428), Brigham Young University
2018 - 2024	Health, Disease, & Determinants 2 (HLTH 315), Brigham Young University

2012 - 2018 Environmental Health (HLTH 322), Brigham Young University
2012 - 2017 Disaster Response and Emergency Preparedness (HLTH 422), Brigham Young University.
2008 - 2010 Foundations and Theories of Health Promotion (HEDU 6000), University of Utah

Training Courses Taught

07/2022 Air sampling methodologies and non-engineering controls. Comprehensive Review of Industrial Hygiene course. University of Utah, Rocky Mountain Center for Occupational and Environmental Health (RMCOEH), Salt Lake City, UT.
10/2014 Factors influencing hand hygiene in the biosafety level-2 (BSL-2) laboratory. 31st Annual Utah Conference on Safety and Industrial Hygiene, Salt Lake City, UT.
2011 - 2012 Essentials for Healthy Homes Practitioners. National Center for Healthy Housing, CDC.
2004 - 2010 Bloodborne Pathogens. University of Utah, Department of Environmental Health & Safety.
2009 - 2010 Biosafety Level-2 Laboratory Safety. University of Utah, Department of Environmental Health & Safety.

SCHOLASTIC HONORS

2024 Skaggs Distinguished Mentoring Fellowship Award, College of Life Sciences, Brigham Young University, Provo, Utah (2024), \$20,000.
2020 - 2023 Ferrin L. Orton Teaching & Learning Faculty Fellowship, Brigham Young University, Provo, Utah. (2020 – 2023), \$20,000.
2019 1st Place Gold, Best in Show Award (Student Poster Winner), for poster presentation: 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. American Industrial Hygiene Conference and Exposition (AIHce 2019), Minneapolis, MN.
2019 Distinguished Poster Award. Cowger AE*, Johnston JD, Graul RJ*, Nash R*, Tueller JA*, Hendrickson NR*, Beard J, and Weber KS. Bioaerosols associated with evaporative cooler use in low-income homes in the semi-arid climate of Utah County, Utah, USA American Society of Microbiology Rocky Mountain Branch Meeting April 13th 2019. Provo Utah.
2019 1st Place, for poster presentation: Smith SA*, House MJ*, Teniza G*, Strauss AM*, Johnston JD. Air pollution and the risk of outdoor winter exercise. Harold B. Lee Library/College of Life Sciences Poster Competition, March 28, 2019, Brigham Young University, Provo, Utah.
2010 Robert I Gross Memorial Award, American Biological Safety Association, 53rd Annual Biological Safety Conference, Denver, CO.
2006 Jack Lunt Foundation Scholarship, Department of Health Promotion & Education, University of Utah, Salt Lake City, UT.
2000 Golden Pump Award, Rocky Mountain Center for Occupational and Environmental Health, University of Utah, Salt Lake City, UT.

- 1998 Microbiology Service Award, Department of Microbiology, Weber State University, Ogden, UT.
- 1998 - 2000 Industrial Hygiene Graduate Fellowship, U.S. Department of Energy, Oak Ridge Institute for Science and Education, Oak Ridge, TN.
- 1997 Microbiology Activities Scholarship, Department of Microbiology, Weber State University, Ogden, UT.
- 1989 Distinguished Honor Graduate, Personnel Administration Specialist Course, Class 050-89, Company A, 2d Battalion, Troop Brigade, Fort Benjamin Harrison, Indiana.