Kristen Good

Co-Founder

Kristen Good, MEM, PhD.
Fort Collins, Colorado

413-374-2641
kristen@redspire.us

Experience

RedSpire LLC / Co-Founder
Jan 2025 - Present, Denver, CO

Consulting services supporting clients' needs in occupational health and safety, exposure assessment, and other environmental issues.

Colorado Department of Public Health and Environment / Health Equity Branch Deputy Chief
2021 - Present, Denver, CO

Led effort to develop and establish a new branch within the Disease Control and Public Health Response (DCPHR) Division, with a mission to institutionalize health equity into all division work of preparing for and responding to events and conditions that impact public health. Integral role in growing the branch to its current state of 45+ employees across 5 units.

Maintain leadership, program management, and technical subject-matter expert roles related to occupational health, indoor air quality. Support solutions-focused responses to internal and external partners and the public on the intersection of workplace, environmental exposures, communicable disease management/response. Deploy to Colorado Rapid Response Coordination (CORCC) teams for emergency management responses (major recent examples: 2024 HPAI Avian Influenza outbreak among Dairy & Poultry Farms; 2024 Extreme Heat Season; 2022 Mpox Outbreak; 2020 Cameron Peak Wildfire Response). Participate in inter-department and interagency working groups (e.g., 2024-2025 State Health Improvement Plan, Climate Change and Air Quality Priority Areas) and contribute to legislative/policy reviews.

Serve as Program Director and PI of federal funding for several major initiatives in our Branch, including the Occupational Health Program ,Indoor Air Quality Program, Wildfire Smoke Preparedness Program, and Health Equity Community Grants Program.

Lead on establishing, implementing, and monitoring major subcontracts with external partners. Facilitate procurement processes, manage contractor relationships, and conduct contractor activity/performance monitoring. Involved with more than 70 contracts in past 4 years, ranging from $25K to $47M each.

Colorado Department of Public Health and Environment / COVID-19 Response Industry/Occupational Health Lead & Subject Matter Expert
2020 - 2022, Denver, CO

Led the state's epidemiologic support to COVID-19 response for primarily non-healthcare industries (e.g., food manufacturing, construction, agriculture, warehouse/distribution) and other unique settings (e.g., congregate housing/shelters, detention facilities, hotels and tourism, sporting events, specialized outpatient medical settings).

Conducted industry-specific prevention education and outreach and supported Governor's Office on development of statewide guidance and public health orders that impacted operations of specific industries or businesses.

Provided expert consultation and support to local jurisdictions/managing epi response teams on outbreak response/mitigation for more than 300 workplace outbreaks, often including leading interactions with workplace management/corporate representatives regarding implementation of recommended mitigation strategies.

Colorado State University - Colorado School of Public Health / Postdoctoral Fellow

2018 - 2021, Fort Collins, CO

Department of Environmental & Radiological Health Sciences - Epidemiology Section. Undertook research on a variety of air pollution and exposure assessment projects. Notably, investigating bioaerosol generation from human subjects under controlled conditions. Responsible for developing data collection protocols, working with the Institutional Review Board on participant safety and ethics standards, recruiting and coordinating study participants, supervising students, analyzing data, and disseminating results via conferences, peer reviewed publications, and the media.

Cardno ChemRisk / Senior Associate Health Scientist

2013 - 2015, Boulder, CO

Environmental and occupational health risk assessment specialist. Provided industrial hygiene, exposure assessment and reconstruction, epidemiology, and litigation support for industry clients. Managed client projects and led junior staff; led recruitment for regional office; manager of intern training program. Main topic areas: asbestos, benzene, oil/gas, food contamination, pesticides, OSHA regulations.

Colorado State University / Research Associate II

2013, Fort Collins, CO

Participant recruitment, consent, and scheduling for a large National Institutes of Health funded research project on traffic-related air pollution exposures.

ICF International / Associate Consultant, Risk and Toxicology

2011-2013, Durham, NC

Exposure assessment, risk assessment, and scientific analysis for federal clients; focus on science communication, transparency, and reproducibility across large federal programs.

Duke University / Research Assistant

2009-2011, Durham, NC

Researcher on project evaluating health, social, and environmental impacts and policy tradeoffs for malaria control in East Africa; focus on insecticide-based vector control methods.

Education

Colorado State University / PhD

2015 - 2018, Fort Collins, CO

Environmental Health (Epidemiology concentration)

Research and training on global health and air pollution - focused on the connections between residential energy sources, air pollution, and health in low-income countries.

Key role in the design and implementation of: 1) a controlled exposure study investigating cookstove-generated air pollution and subclinical cardiovascular and respiratory health outcomes in human subjects, and 2) a laboratory-based study to quantify health-relevant emissions of pollutants across different stove and fuel technologies. Additionally, supported a field campaign to measure time-resolved emissions profiles from biomass burning / residential cooking activities in Uganda.

Duke University / MEM

2009 - 2011, Durham, NC

Environmental Management (Toxicology & Environmental Health concentration)

Conducted a comparative human health risk assessment of insecticides used for malaria control. Additionally, designed and implemented expert elicitation interviews of stakeholders in Dar es Salaam, Tanzania on benefits and risks associated with vector control insecticides and factors influencing malaria control decisions, focused on risk-risk tradeoffs and mental models involved in decision making. Extensive coursework in global health policy & practice, environmental health, and project management.

Boston College / B.Sc.

2009 - 2011, Durham, NC

Biology - with a minor in Environmental Studies.

Awards & Service

Nominee, Departmental Annual “Exemplifying Public Health Award”; Colorado Department of Public Health and Environment (CDPHE) – for work on the “Clean Air for Schools” Initiative (2023).

Divisional “Star Award”, Colorado Department of Public Health and Environment (CDPHE) – for work on the “Clean Air for Schools” Initiative (2023).

Executive Director's Performance Award, Colorado Department of Public Health and Environment (CDPHE) - for performance in the initial response to the COVID-19 Pandemic (2020).

Office of the Vice President for Research (OVPR) Fellowship, Colorado State University (2017 - 2018).

2nd Place "People's Choice" Best Poster Award, CSU Ventures Annual Demo Day (2017).

CSU Graduate Student Council Conference Travel Funds Awardee (2017).

CSU ERHS Department Graduate Student Travel Grant Recipient (2015, 2016)

Duke Global Health Initiative Summer Project Funds Recipient (2010).

Nicholas School Environmental Internship Fund Recipient (2010).

Lazar Foundation International Research Scholarship (2010).

Boston College Undergraduate Research Fellowship, Molecular Genetics (2006 - 2009).

Select Publications*

** Note many of my papers are published as Kristen M. Fedak*

Tanner K. et al., Large Particle Emissions from Human Vocalization and Playing of Wind Instruments. Environ. Sci. Tech. 2023.

Neophytou AM. et al., Associations between prenatal and early-life air pollution exposure and lung function in young children: Exploring influential windows of exposure on lung development. Environ. Res. 2023.

Volkens J. et al., Aerosol Emissions from Wind Instruments: Effects of Performer Age, Sex, Sound Pressure Level, and Bell Covers. Scientific Reports, 2022.

Metz A., Investigation of COVID-19 Outbreak among Wildland Firefighters during Wildfire Response, Colorado, USA. Emerging Infectious Diseases. 2022.

Good N. et al, Respiratory aerosol emissions from vocalization: Age and sex differences are explained by volume and exhaled CO_2. Environ. Sci. Technol. Lett., 2021.

Bond T. et al., Quantifying proximity, confinement, and interventions in disease outbreaks: A decision support framework for air-transported pathogens. Environ. Sci. Technol., 2021.

Cole-Hunter T. et al., Short-term differences in cardiac function following controlled exposure to cookstove-generated air pollution: The subclinical tests on volunteers exposed to smoke (STOVES) study. Environ. Int. 2021.

Waltenburg MA. et al., COVID-19 among workers in food processing, food manufacturing, and agriculture workplaces. Emerg. Infect. Dis., 2021.

Waltenburg MA. et al, Update: COVID-19 Among Workers in Meat and Poultry Processing Facilities — United States, April–May 2020. MMWR Morb Mortal Wkly Rep, 2020.

Walker E. et al., Acute changes in blood lipids and inflammatory markers in response to controlled exposures to cookstove-generated air pollution. Int. J. Environ. Health Res., 2020.

Fedak KM. et al., Acute changes in lung function following controlled exposure to

cookstove air pollution in the subclinical tests of volunteers exposed to smoke (STOVES) study. Inhal. Toxicol., 2020.

Walker E. et al., Acute differences in pulse wave velocity, augmentation index, and central pulse pressure following controlled exposures to cookstove air pollution in the Subclinical Tests of Volunteers Exposed to Smoke (STOVES) study. Environ. Res., 2020.

Fedak KM. et al., Acute effects on blood pressure following controlled exposures to cookstove air pollution in the Subclinical Tests of Volunteers Exposed to Smoke (STOVES) Study. J. Am. Heart Assoc., 2019.

Fedak KM. et al., An expert survey on the fuel types used to start cookstoves. Energy Sustain. Dev., 2019.

Bilsback KR, et al., A laboratory assessment of 120 air pollutant emissions from biomass and fossil-fuel cookstoves. Environ. Sci. Technol., 2019.

Fedak KM. et al., Chemical composition and emission factors for cookstove startup (ignition) materials. Environ. Sci. Technol., 2018.

Eilenberg RS. et al., Field measurements of solid-fuel cookstove emissions from uncontrolled cooking in China, Honduras, Uganda, and India. Atmos. Environ., 2018.

Good N. et al., The Fort Collins commuter study: Impact of route type and transport mode on personal exposure to multiple air pollutants. J. Expo. Sci. Environ. Epidemiol., 2016.

Fedak KM. et al., Applying the Bradford Hill Criteria in the 21st century: How data integration has changed causal inference in molecular epidemiology. Emerg. Themes Epidemiol., 2015.

Gross SA. and Fedak KM., Applying a weight-of-evidence approach to evaluate relevance of molecular landscapes in the exposure-disease paradigm. Biomed Res. Int., 2015.

Segal D. et al., Evaluation of the ToxRTool's ability to rate the reliability of toxicological data for human health hazard assessments. Reg. Toxicol. Pharma., 2015.

Fedak KM. et al., Birth outcomes and natural gas development: Methodological limitations. Environ. Health Perspect., 2014.

Selgrade MK. et al., Potential risk of asthma associated with in utero exposure to xenobiotics. Birth Defects Res. C Embryo Today, 2013

U.S. EPA, Comprehensive environmental assessment applied to multiwalled carbon nanotube flame-retardant coatings in upholstery textiles: A case study presenting priority research gaps for future risk assessments. Washington, DC: U.S. Environmental Protection Agency., 2013

Kim D. et al., Reduction of malaria prevalence by indoor residual spraying: A meta-regression analysis. Am. Ind. Hyg. Assoc. J., 2012.

Shalaby NA. et al., A screen for modifiers of notch signaling uncovers amun, a protein with a critical role in sensory organ development. Genetics, 2009.

Select Presentations

Building a Statewide Outreach, Education, and Training Network to Support

Wildfire Smoke Preparedness for School and Community Partners. Rocky Mountain Wildfire Smoke Symposium, 2024.

Wildfire Preparedness in Community Buildings. CDPHE Public Webinar, 2024.

Wildfire Preparedness in Schools. CDPHE Public Webinar, 2024.

CDPHE's Wildfire Smoke Preparedness Program. Colorado State Legislative Interim Committee on Wildfire Matters, 2024.

Wildfires and Disproportionately Impacted Communities. State Legislative Interim Committee on Wildfire Matters Review, 2023.

Ventilation Systems and Infection Prevention Considerations for Residential Care Facilities. Colorado State-wide Residential Care Facilities meeting, 2021.

COVID-19 and Ventilation: A year's worth of questions and some answers. Colorado Community Health Network, 2021.

Colorado Restaurant Winter Outdoor Dining Design Workshop. Invited Expert to participate in full-day workshop sponsored by the Colorado Restaurant Association and Colorado Governor's Office, 2020.

COVID-19, Ventilation, and Energy Efficiency for Building Owners and Managers. Partners for a Clean Environment (PACE), 2020.

What to Do if an Agriculture Employee Tests Positive for COVID-19. Colorado Fruit & Vegetable Growers Association, Colorado State University Extension, 2020.

COVID-19 Outbreak Prevention and Response in the Cattle Industry. Colorado Cattlemen's Association, June 25, 2020.

Personal Monitoring: The Future of Smart Technology, Health, and Environmental Management" (poster). CSU Ventures and The Institute for Entrepreneurship's Annual Demo Day, 2019.

Acute Changes in Blood Pressure Following Controlled Exposures to Cookstove Air Pollution in the Subclinical Tests of Volunteers Exposed to Smoke (STOVES) Study (poster). International Society for Environmental Epidemiology Annual Conference, 2018.

Chemical Composition and Emissions Factors for Cookstove Startup (Ignition) Materials (poster). International Society for Environmental Epidemiology Annual Conference, 2018.

Understanding relationships among health-relevant pollutants emitted from cookstoves" (poster). International Society for Environmental Epidemiology Annual Conference, 2017; Colorado State University Graduate Student Showcase, 2017.

Ethical Considerations in Air Pollution Exposure Assessment" (presentation). International Society for Environmental Epidemiology Annual Conference, 2017.

Web Apps for Cookstoves and Health (poster). CSU Ventures and The Institute for Entrepreneurship's Annual Demo Day, 2017.

How Clean is Clean Enough, Three Minute Thesis Competition, Colorado State University Office of the Vice President for Research Fellowship Challenge, 2017.

Fueling the Fire: An Expert Survey to Explore Materials Used for Cookstove Startup (poster). International Society for Environmental Epidemiology Annual

Conference; Colorado State University Graduate Student Showcase, 2016.

How Clean is Clean Enough? A Controlled Cookstove Exposure Study Engineers in Technical and Humanitarian Opportunities of Service Annual Cookstoves Conference, 2016.

Applying the Bradford Hill Criteria in the 21st Century: How Advances in Molecular Epidemiology Have Changed Causal Inference (poster). Society of Toxicology Annual Conference, 2014.

Identifying Data Gaps and Prioritizing Research Areas to Inform Future Risk Assessment of Multiwalled Carbon Nanotubes" (poster). Society of Toxicology Annual Conference, 2013.

Evaluation of the ToxRTool for Assessing Quality of Toxicological Data for Risk Assessments (poster). Society of Toxicology Annual Conference, 2013.

A Risk-Risk Tradeoff: Human Health Risks from Insecticides Used for Malaria Control (presentation). Duke University Master's Thesis Symposium, 2011.

Teaching

Field Methods of Disease Investigation, Colorado School of Public Health, 2021.

Environmental Public Health & Policy, Colorado School of Public Health, 2020-2021.

Risk Assessment - Environmental Public Health & Policy, Colorado School of Public Health 2016 - 2019 (guest lecturer).

Human Exposure Studies, Risk Assessment, and Asbestos - Environmental and Occupational Health, Colorado State University, 2018 (guest lecturer).

Principles in Epidemiology, Colorado State University, 2017 (supervised teaching).

Cookstoves Air Quality & Health - Perspectives in Global Health, Colorado State University, 2017 (guest lecturer).

Ecological and Human Health Risk Assessment, Duke University, 2011 (teaching assistant).

Recent Funding

Wildfire Smoke Readiness in Colorado: Air Monitoring Networks in Public K-12 Schools as sentinel sites for understanding and responding to Indoor Air Quality in Communities, US Environmental Protection Agency, 2023-2027, Role: Principal Investigator / Director. Amount: $1.8M.

Occupational Safety and Health Statistics: Survey of Occupational Injury and Illness (SOII), US Bureau of Labor and Statistics, 2022-2025. Role: Principal Investigator / Director. Amount: $420,000 (matched).

Reopening Schools: Support for Screening Testing to Reopen & Keep Schools Operating Safely, HHS-CDC, 2022-2023. Role: Project Manager for Indoor Air Quality Improvements Initiative. Amount: $53.0M.

National initiative to address COVID-19 health disparities among populations at high-risk and underserved, including racial/ethnic minority populations and rural communities, HHS-CDC, 2021-2026. Role: Principal Investigator / Director. Amount: $22.5M.

Enhance Collection and Use of Industry and Occupation (I/O) Surveillance Data for COVID-19, HHS-CDC-NIOSH, 2021-2023. Role: Principal Investigator / Director. Amount: $150,000.

Occupational Health and Safety Surveillance in Colorado, HHS-CDC-NIOSH, 2015-2022. Role: Principle Investigator / Director. Amount: $1.2M.

Reducing Bioaerosol Emissions and Exposures in the Performing Arts: A Scientific Roadmap for a Safe Return from COVID-19. Philanthropic Donations, 2020-2021. Role: Project Manager. Amount: $150,000.

Precision spatio-temporal exposure assessment for indoor work environments. CDC NIOSH Mountain & Plains ERC, 2019-2020. Role: Project Manager & Researcher. Amount: $15,000.