

A professional headshot of Anders Abelmann, a man with dark, curly hair, wearing a dark suit jacket, a light blue shirt, and a green patterned tie. He is looking directly at the camera with a slight smile.

# Anders Abelmann, MS, PhD, CIH

## Current Position

Managing Health Scientist

## Discipline Areas

- > Industrial hygiene
- > Exposure assessment
- > Risk assessment
- > Occupational safety

## Years' Experience

9 Years

## Joined Cardno

2011

## Education

- > PhD, Public Health Science, University of Illinois at Chicago, 2010
- > MS, Automation & Mechatronics Engineering, Chalmers University of Technology, Gothenburg, Sweden, 2005

## Summary of Experience

Dr. Anders Abelmann is a Managing Health Scientist with Cardno ChemRisk and a Certified Industrial Hygienist (CIH). His principal areas of training and expertise include industrial hygiene, exposure and risk assessment, and occupational safety. He has been involved in researching, measuring and reconstructing exposure, and assessing risk to consumers and workers exposed to a variety of chemicals such as diesel particulate matter, carbon monoxide, ethylene oxide, propylene oxide, toluene, styrene, formaldehyde, asbestos, silica, diacetyl, and per- and polyfluoroalkyl substances (PFAS). Dr. Abelmann completed his doctorate in Public Health Science, with emphases in industrial hygiene and occupational safety, at the University of Illinois at Chicago. For his doctoral dissertation, he designed, executed, and evaluated a series of welding fume exposure experiments under laboratory-controlled conditions. A fractional factorial experimental design was used to evaluate process, environmental and physiological variables' impacts on breathing zone concentrations. His master's thesis research involved a life-cycle assessment of vegetable proteins, during which he evaluated the environmental impact associated with various protein substitutes in food products.

Dr. Abelmann has conducted independent research and literature reviews on a range of topics and chemicals, the results of which he has presented at scientific conferences and published in the peer-reviewed literature. He has also acted as a peer reviewer for scientific journals and conferences.

Dr. Abelmann is a member of the Advisory Board to the Illinois Education and Research Center at the University of Illinois at Chicago. Previously, he served on the American Industrial Hygiene Association's Finance Committee from 2016 to 2019, on the Board of Directors of the Chicago Local Section of the American Industrial Hygiene Association from 2010 to 2016, and was the Chair of the Environmental Section of the Illinois Public Health Association from 2009 to 2011.

## Significant Projects

### Quantitative Exposure Reconstruction/Industrial Hygiene

Conducted exposure assessments to agents such as formaldehyde, toluene, formaldehyde, diacetyl, and asbestos in various occupational, residential, and consumer product settings.

Reviewed literature pertaining to welding fume composition, exposure, and controls. Designed and executed experiments related to occupational exposure to welding fume.

Investigated a confined space issue in a performing arts setting. Evaluated environmental and physiological parameters, and provided recommendations for remediation.

Planned and conducted several simulation studies to characterize potential exposure to formaldehyde associated with the use of professional hair straightening products and laminate flooring, as well as exposure to diacetyl from use of consumables such as

cigarettes and coffee. For all studies, analyzed and interpreted results from laboratory analysis of air and bulk sampling.

Planned and conducted simulation study to evaluate occupational (direct and bystander) and para-occupational (take-home) exposures to asbestos as a result of manipulating asbestos-containing cement pipe.

#### Occupational and Environmental Health

Reviewed and summarized relevant literature and governmental documents related to occupational exposure to ethylene oxide and propylene oxide. Prepared state-of-the-science timeline with respect to historical evolution of associated regulatory guidelines and scientific knowledge of health effects.

Performed extensive reviews of all of the published literature and unpublished reports pertaining to health effects resulting from occupational and non-occupational exposure to various chemicals associated with wood treating operations (creosote, coal tar, benzene, PAHs, dioxins, pentachlorophenol).

Evaluated and summarized relevant epidemiological and industrial hygiene literature related to occupational and non-occupational exposure to diacetyl. Analyzed published data to evaluate a potential dose-response relationship between occupational and environmental exposure to diacetyl and different disease endpoints. Planned and conducted several simulation studies to evaluate the potential exposure to diacetyl associated with consumption or use of various products, such as wine, butter, cigarettes, and coffee.

Investigated occupational exposure to human waste in an airport setting. Evaluated relevant scientific literature (biological and chemical), as well as medical records. Provided recommendations for the control and prevention of exposure.

Reviewed published literature and governmental reports related to ambient asbestos concentrations. Built and critically evaluated large database consisting of asbestos various parameters including, but not limited to, decade, location, analytical methods, and asbestos concentration.

Evaluated and summarized published scientific literature and governmental documents related to bystander and take-home exposure to asbestos. Constructed a comprehensive timeline describing the evolution of the state-of-the-science throughout the 20th century.

Evaluated and summarized scientific literature and other documents relevant to per- and polyfluoroalkyl substances (PFAS).

#### Risk Assessment

Investigated the possible contamination of warehoused food. Analyzed sampling data for ethylbenzene, naphthalene, p-dichlorobenzene, styrene, and toluene to determine whether the food had been impacted prior to or during storage, and the source and nature of the adulterants. Performed a human health risk assessment for various exposure scenarios (adults/children; chronic/subchronic/acute) using established guidelines and regulatory thresholds.

Performed a risk assessment of occupational exposure to welding fume. Used original research data to evaluate risks associated with individual fume components.

### Sustainability

For master's degree research, performed a life-cycle assessment (LCA) of some food products to evaluate the environmental impact of using various vegetable proteins as substitutes for animal protein; conducted extensive review of available literature and used LCA software to analyze a range of parameters including energy use, transportation, and raw materials. More recently, evaluated the performance of various tools for chemical alternatives assessment.

### Certification

- > Certified Industrial Hygienist by the American Board of Industrial Hygiene, #11431

### Professional Honors/Awards

- > Selected for the American Industrial Hygiene Association's Future Leaders Institute Program, 2014
- > Recipient of American Industrial Hygiene Conference & Expo (AIHce)
  - > "Best of Session" Poster Award. Session 403. 2016 - *Characterization of Naturally Occurring Airborne Diacetyl Concentrations Associated with the Preparation and Consumption of Unflavored Coffee*
  - > Second Place "Best of Session" Poster Award. Session 404. 2016 – *Time Trends in Formaldehyde Emissions from Laminate Flooring Products After Installation*
  - > "Best of Session" Poster Award. Session 403. 2015 – *Pilot Study of Exposures to Airborne Concentrations of Naturally Occurring Diacetyl During Coffee Consumption.*
  - > "Best of Session" Poster Award. Session 403. 2014 – *Diacetyl and 2,3-Pentanedione Exposures Associated with Cigarette Smoking: Implications for Risk Assessment of Food and Flavoring Workers.*
  - > "Best of Session" Poster Award. Session 401. 2013 – *A Comparison of Reported Peak Concentrations of Diacetyl in the Workplace and Estimated Diacetyl Concentrations in Mainstream Cigarette Smoke.*
  - > "Best of Session" Poster Award. Session 403. 2013 – *A Comparison of Workday-Duration Occupational Exposures to Diacetyl to Estimated Exposures Associated with Cigarette Smoking*
- > Recipient of American Industrial Hygiene Association's Exposure Assessment Strategies
  - > "Best of Session" Poster Award, 2012 – *Analysis of Time-Weighted Average Concentrations of Formaldehyde During Keratin Hair Smoothing Treatments*
- > Recipient of American Industrial Hygiene Association's Indoor Environmental Quality (IEQ) Committee's
  - > "Best IEQ Paper Award", 2011 – *Characterization of Formaldehyde Exposure Resulting from the Use of Four Professional Hair Straightening Products*
- > Recipient of Alan W. Donaldson Award, 2010
- > Recipient of Michael Bruton Workplace Safety Foundation scholarship, 2010
- > Member, Delta Omega Honor Society, 2010
- > Recipient of Sweden-America Foundation Fellowship, 2009 - 2010
- > Recipient of D.Tech. Marcus Wallenberg Foundation Fellowship, 2009 - 2010
- > Recipient of American Industrial Hygiene Foundation/Chicago Local Section scholarship, 2008

## Memberships and Services to Professional Societies

- > Recipient of American Society of Safety Engineers/Northeastern Illinois Chapter scholarship, 2008
  
- > American Industrial Hygiene Association (AIHA)
  - > Student Member, 2007 – 2010
  - > Full Member, 2010 - present
  - > Chicago Local Section Board of Directors, 2010 - 2016
  - > Finance Committee, 2016 - 2019
- > Illinois Public Health Association (IPHA)
  - > Environmental Health Section, Chair, 2009 - 2011
- > Swedish Association of Occupational and Environmental Hygiene (SYMF)
  - > Member, 2007 - present

## Science Advisory Boards

- > University of Illinois at Chicago
  - > Illinois Education and Resource Center Advisory Board (2013-present)

## Publications

- > Abelmann, A., A.R. McEwen, J.T. Lotter, and J.R. Maskrey. 2020. Survey of 24-h personal formaldehyde exposures in geographically distributed urban office workers in the USA. *Env Sci Poll Res*. Advance online publication, March 9, 2020. doi: 10.1007/s11356-020-08218-0
- > Beckett, E.M., W.D. Cyr, A. Abelmann, A.D. Monnot, S.H. Gaffney, and B.L. Finley. 2019. Derivation of an occupational exposure limit for diacetyl using dose-response data from chronic animal inhalation exposure study. *J Appl Tox*. 39(5):688-701.
- > Abelmann, A., J.R. Maskrey, J.T. Lotter, A.M. Chapman, M.D. Nembhard, J.S. Pierce, J.M. Wilmoth, R.J. Lee, and D.J. Paustenbach. 2018. Evaluation of take-home exposure to asbestos from handling asbestos-contaminated worker clothing following the abrasive sawing of cement pipe. *Inhalation Toxicology*. Advance online publication, Jan. 16, 2018. doi: 10.1080/08958378.2017.1418940.
- > Abelmann, A., M.E. Glynn, J.S. Pierce, P.K. Scott, D.J. Paustenbach. (2016). Letter to the Editor: Response to Finkelstein Letter to the Editor re. Pierce et al., Historical Ambient Airborne Asbestos Concentrations in the United States – an Analysis of Published and Unpublished Literature (1960s-2000s). *Inhalation Toxicology*. 27:754-766, 2015. *Inhalation Toxicology*. 28:581-582.
- > Pierce, J.S., A. Abelmann, J.T. Lotter, P.S. Ruestow, K.M. Unice, E.M. Beckett, H.A. Fritz, J.L. Bare, B.L. Finley. (2016). An Assessment of Formaldehyde Emissions from Laminate Flooring Manufactured in China. *Regulatory Toxicology and Pharmacology*. 81:20-32.
- > Pierce, J.S., A. Abelmann, B.L. Finley. (2016). Comment on “Allen et al. Flavoring Chemicals in E-Cigarettes: Diacetyl, 2,3-Pentanedione, and Acetoin in a Sample of 51 Products, Including Fruit-, Candy-, and Cocktail-Flavored E-Cigarettes. *Environmental Health Perspectives*. DOI:10.1289/EHP348”. *Environmental Health Perspectives*. 124:A100-101.
- > Abelmann, A., M.E. Glynn, J.S. Pierce, P.K. Scott, S. Serrano, D.J. Paustenbach. (2015). Historical Ambient Airborne Asbestos Concentrations in the United States – an

Analysis of Published and Unpublished Literature (1960s-2000s). *Inhalation Toxicology*. 27:754-766.

- > Scott, P.K., A. Abelmann, S. Hoyt and B.D. Kerger. (2015). Headspace and Small Chamber Studies of Airborne Diacetyl Release from Selected Food Flavoring Mixtures: Activity Coefficients and Air Modeling Implications. *Toxicological and Environmental Chemistry*. 97:1319-1336.
- > Pierce, J.S., A. Abelmann, J.T. Lotter, C. Comerford, K. Keeton and B.L. Finley. (2015). Characterization of Naturally Occurring Airborne Diacetyl Concentrations Associated with the Preparation and Consumption of Unflavored Coffee. *Toxicology Reports*. 2:1200-1208.
- > Gaffney, S.H., A. Abelmann, J.S. Pierce, M.E. Glynn, J.L. Henshaw, L.A. McCarthy, J.T. Lotter, M. Liong, and B. Finley. (2015). Naturally Occurring Diacetyl and 2,3-Pentanedione Concentrations Associated with Roasting and Grinding Unflavored Coffee Beans in a Commercial Setting. *Toxicology Reports*. 2:1171-1181.
- > Gauthier, A.M., M. Fung, J. Panko, T. Kingsbury, A.L. Perez, K. Hitchcock, T. Ferracini, J. Sahmel, A. Banducci, M. Jacobsen, A. Abelmann and E. Shay. (2015). Chemical Assessment State of the Science: Evaluation of 32 Decision-Support Tools Used to Screen and Prioritize Chemicals. *Integrated Environmental Assessment and Management* 11:242-255.
- > Pierce, J.S., A. Abelmann and B.L. Finley. (2014). Letter to the Editor: Response to Muge Akpinar-Elci Letter to Editor re. Pierce et al., Diacetyl and 2,3-pentanedione Exposures Associated with Cigarette Smoking: Implications for Risk Assessment of Food and Flavoring Workers. *Critical Reviews of Toxicology* 44:420-435, 2014. *Critical Reviews of Toxicology* 44:640-641.
- > Pierce, J.S., A. Abelmann, L.J. Spicer, R.E. Adams and B.L. Finley. (2014). Diacetyl and 2,3-Pentanedione Exposures Associated with Cigarette Smoking: Implications for Risk Assessment of Food and Flavoring Workers. *Critical Reviews of Toxicology* 44:420-435.
- > Pierce, J.S., A. Abelmann, L.J. Spicer, R.E. Adams, M.E. Glynn, K. Neier, B.L. Finley and S.H. Gaffney. (2011). Characterization of Formaldehyde Exposure Resulting from the Use of Four Professional Hair Straightening Products. *Journal of Occupational and Environmental Hygiene* 8:686-699.
- > Abelmann, A., S.E. Lacey, A. Gribovich, C. Murphy and D. Hinkamp. (2011). Hazard Evaluation and Preventive Recommendations for an Unusual Confined Space Issue in an Opera Set Design. *Journal of Occupational and Environmental Hygiene* 8:D81-D85
- > Dorevitch, S., S.E. Lacey, A. Abelmann and J. Zautcke. (2010). Occupational Needlestick Injuries in a U.S. Airport. *Journal of Occupational and Environmental Medicine* 52:551-554.
- > Lacey, S.E., A. Abelmann and S. Dorevitch. (2010). Exposure to Human Waste from Spills While Servicing Aircraft Lavatories: Hazards and Methods of Prevention. *Industrial Health* 48:123-128.
  
- > Abelmann, A., J.R. Maskrey, J.T. Lotter, A.M. Chapman, M.D. Nembhard, S.F. Schlaegle, B.R. Bandli, R.J. Lee and D.J. Paustenbach. 2018. Asbestos Fiber Transport from Facilities into the Community: Results of Field Studies. Abstract #198. American Industrial Hygiene Conference & Exposition (AIHce) May 21-23, 2018, Philadelphia, PA.
- > Abelmann, A., K. Unice, S.H. Gaffney, A.M. Urban, M. Liong, L. McCarthy, D.M. Hollins, J.L. Henshaw and B.L. Finley. 2015. Airborne Concentrations of Naturally Occurring

## Presentations

Diacetyl Associated with Various Coffee Products. Poster Presentation at American Industrial Hygiene Conference & Expo (AIHce). May 30-June 4, 2015. Salt Lake City, UT.

- > Abelman, A. Chemical Adulterants in Food Products – Using Risk Assessment to Evaluate Potential Risks Associated with Consumption. Drinker Biddle’s Insurance Symposium. June 17-18, 2014. Chicago, IL.
- > Pierce, J.S., A. Abelman, L.J. Spicer, R.E. Adams and B.L. Finley. Diacetyl and 2,3-Pentanedione Exposures Associated with Cigarette Smoking: Implications for Risk Assessment of Food and Flavoring Workers. Poster Presentation at American Industrial Hygiene Conference & Expo (AIHce). May 31-June 5, 2014. San Antonio, TX.
- > Abelman, A., J.S. Pierce, S. Serrano, C.J. Ronk, M.E. Glynn and D.J. Paustenbach. Historical Outdoor Airborne Asbestos Concentrations Associated with Emission Sources in the United States: A Review of Published and Unpublished Data. Poster Presentation at American Industrial Hygiene Conference & Expo (AIHce). May 18-23, 2013. Montreal, Canada.
- > Abelman, A. Unusual application of occupational health in the workplace. WORKSAFE IOWA Webinar Series. May 3, 2013. Online.
- > Abelman, A. Unusual application of occupational health in the workplace – lessons learned from a case study in a hair salon. Central States Occupational and Environmental Medicine Association’s 89<sup>th</sup> Annual Spring Seminar. March 16, 2013. Lisle, IL.
- > Abelman, A., J. Breskey and S. Erdal. Development of Semi-Empirical Relationship between Fume Exposure and Welding-Related Parameters Using Fraction Factorial Design. American Industrial Hygiene Conference & Expo (AIHce). RT 221. June 16-21, 2012. Indianapolis, IN.
- > Pierce, J.S., A. Abelman., L.J. Spicer, R.E. Adams, B.L. Finley and S.H. Gaffney. Characterization of Formaldehyde Exposure Resulting from the Use of Four Professional Hair Straightening Products. American Industrial Hygiene Conference & Expo (AIHce). June 16-21, 2012. Indianapolis, IN.
- > Breskey, J., A. Abelman and S. Erdal. Particle Size Distributions of Welding Fume Measured in the Breathing-Zone and in an Emission Chamber. American Industrial Hygiene Conference & Expo (AIHce). RT 221. June 16-21, 2012. Indianapolis, IN.
- > Abelman, A. 2012. Formaldehyde Exposures in Hair Salons. AIHA Local Section Chicago. February 15, 2012. Chicago, IL.
- > Abelman, A. 2010. Characterizing Welding Fume Exposures - with Implications of the Hexavalent Chromium Standard Discussed. Podium Presentation. Chicagoland Safety and Health Conference. September 13-16, 2010. Naperville, IL.
  
- > Maskrey, J.R., A.R. McEwen, J.T. Lotter, and A. Abelman. 2019. Evaluation of General Population Inhalation Exposures to Formaldehyde Present in the Ambient Environment. Abstract #320. American Industrial Hygiene Conference & Exposition (AIHce) May 20-22, 2019, Minneapolis, MN.
- > Lotter, J.T., A. Abelman, J.R. Maskrey, A.M. Chapman, M.D. Nembhard, J.S. Pierce, J.M. Wilmoth, R.J. Lee and D.J. Paustenbach. 2018. Evaluation of Take-Home Exposure to Asbestos from Handling Asbestos-Contaminated Worker Clothing Following

## Published Abstracts

the Cutting of Cement Pipe. Abstract #292. American Industrial Hygiene Conference & Exposition (AIHce) May 21-23, 2018, Philadelphia, PA.

- > Maskrey, J.R., A. Abelmann, J.T. Lotter, A.M. Chapman, M.D. Nembhard, J.M. Wilmoth, R.J. Lee and D.J. Paustenbach. 2018. Airborne Chrysotile and Crocidolite Exposure to Workers and Bystanders during Use of a Powered Abrasive Saw to Cut Asbestos-Containing Cement Pipe. Abstract #246. American Industrial Hygiene Conference & Exposition (AIHce) May 21-23, 2018, Philadelphia, PA.
- > Finley, B.L., M.E. Glynn, W.D. Cyr, E.W. Beckett, S.H. Gaffney, A.D. Monnot, A. Abelmann, A. Parker and M.A. Maier. 2017. Derivation of an Occupational Exposure Limit for Diacetyl: A Preliminary Analysis. Late Breaking Poster Presentation at Society of Toxicology Annual Meeting. March 12-16, 2017. Baltimore, MD.
- > Finley, B.L., Glynn, M.E., Cyr, W.D., Beckett, E.M., Gaffney, S.H., Monnot, A., Abelmann, A., Parker, A., Maier, M.A. 2017. Derivation of an Occupational Exposure Limit for Diacetyl: A Preliminary Analysis. Society of Toxicology Annual Meeting. March 12-16, 2017. Baltimore, MD.
- > Fritz, H.A., J.T. Lotter, A. Abelmann, P.S. Ruestow, E.M. Beckett, K.M. Unice, J.L. Bare and J.S. Pierce. 2016. Evaluation of Diurnal Variations in Formaldehyde Concentrations Following Installation of Laminate Flooring Using Real-Time Sampling. American Industrial Hygiene Conference & Expo (AIHce). May 21-26, 2016. Baltimore, MD.
- > Lotter, J.T., K.M. Unice, P.S. Ruestow, A. Abelmann, H.A. Fritz, E.M. Beckett, J.L. Bare and J.S. Pierce. 2016. Formaldehyde Emissions from Small Chamber Testing of Laminate Flooring and Comparison to Exposure Modeling. American Industrial Hygiene Conference & Expo (AIHce). May 21-26, 2016. Baltimore, MD.
- > Pierce, J.S., A. Abelmann, J.T. Lotter, C.E. Comerford, K.A. Keeton and B.L. Finley. 2016. Characterization of Naturally Occurring Airborne Diacetyl Concentrations Associated with the Preparation and Consumption of Unflavored Coffee. American Industrial Hygiene Conference & Expo (AIHce). May 21-26, 2016. Baltimore, MD.
- > Pierce, J.S., A. Abelmann, P.S. Ruestow, J.T. Lotter, E.M. Beckett, H.A. Fritz, J.L. Bare and K.M. Unice. 2016. Assessment of Indoor Formaldehyde Concentrations Following the Installation and Removal of Laminate Flooring. American Industrial Hygiene Conference & Expo (AIHce). May 21-26, 2016. Baltimore, MD.
- > Ruestow P.S., J.T. Lotter, A. Abelmann, H.A. Fritz, E.M. Beckett, J.S. Pierce, K.M. Unice and J.L. Bare. 2016. Time Trends in Formaldehyde Emissions from Laminate Flooring Products after Installation. American Industrial Hygiene Conference & Expo (AIHce). May 21-26, 2016. Baltimore, MD.
- > Abelmann, A., M.E. Glynn, J.S. Pierce, P.K. Scott, S. Serrano, D.J. Paustenbach. 2015. Historical Ambient Airborne Asbestos Concentrations in the United States – an Analysis of Published and Unpublished Literature. Society of Toxicology Annual Meeting. March 13-17, 2016. New Orleans, LA.
- > Finley, B.L., M.E. Glynn, A. Abelmann, J.S. Pierce. 2016. Diacetyl Exposure and Respiratory Disease: An Evaluation of the Current Weight of Evidence. Society of Toxicology Annual Meeting. March 13-17, 2016. New Orleans, LA.
- > Pierce, J.S., A. Abelmann, P. Ruestow, J. Lotter, E. Beckett, H.A. Fritz, J. Bare, K. Unice. 2016. Assessment of indoor formaldehyde concentrations following the installation and removal of laminate flooring. Society of Toxicology Annual Meeting. March 13-17, 2016. New Orleans, LA.

- > Gaffney, S.H., A. Abelmann, J.S. Pierce, M.E. Glynn, L. McCarthy, J. Lotter, M. Liong, J.L. Henshaw and B.L. Finley. 2015. Potential Exposure to Naturally Occurring Diacetyl, 2,3-Pentanedione and Respirable Dust from Roasting and Grinding Coffee Beans in an Industrial Setting. American Industrial Hygiene Conference & Expo (AIHce). May 30-June 4, 2015. Salt Lake City, UT
- > Spicer, L.J., J. Lotter, C.E. Comerford, A. Abelmann, J.S. Pierce and B.L. Finley. 2015. Pilot Study of Exposures to Airborne Concentrations of Naturally Occurring Diacetyl During Coffee Consumption. American Industrial Hygiene Conference & Expo (AIHce). May 30-June 4, 2015. Salt Lake City, UT
- > Pierce, J.S., A. Abelmann, J. Lotter, C. Comerford, K. Keeton and B.L. Finley. 2015. Characterization of Diacetyl Exposures Associated with the Preparation and Consumption of Unflavored Coffee. Society of Toxicology Annual Meeting. March 22-26, 2015. San Diego, CA.
- > Urban, A., D.M. Hollins, K. Unice, M. Liong, S.H. Gaffney, B.L. Finley and J.L. Henshaw. Volatile Organic Compounds Released from Spreading Ground Coffee during a Simulated Industrial Task. Society of Toxicology Annual Meeting. March 22-26, 2015. San Diego, CA
- > Gaffney, S.H, C.J. Ronk, B.L. Finley, J.L. Henshaw, J.S. Pierce, L. McCarthy, J. Lotter and A. Abelmann. 2014. Naturally-Occurring Airborne Diacetyl Concentrations Resulting from Roasting and Grinding Coffee Beans in an Industrial Setting. Society of Toxicology Annual Meeting. March 23-27, 2014. Phoenix, AZ
- > Pierce, J.S., A. Abelmann, L. J. Spicer, R.E. Adams and B.L. Finley. Concentrations of Diacetyl and 2,3-Pentanedione in Mainstream Cigarette Smoke: A Comparison to Workplace Exposures. Society of Toxicology Annual Meeting. March 23-27, 2014. Phoenix, AZ
- > Scott, P., A. Abelmann, H. Avens, S. Hoyt and B. Kerger. Headspace and Small Chamber Studies of Airborne Diacetyl Concentrations Associated with Selected Food Flavoring Mixtures. Society of Toxicology Annual Meeting. March 23-27, 2014. Phoenix, AZ
- > Johns, L. E., J. S. Pierce, A. Abelmann and B. L. Finley. Residential and Occupational Exposure to Wood Treating Operations as Risk Factors for Bladder Cancer. Society for Epidemiologic Research 46th Annual Meeting. June 18-21, 2013. Boston, MA
- > Spicer, L.J., J.S. Pierce, M.E. Glynn, A. Abelmann, L. Roberts, L.E. Johns, H. Fritz and B.L. Finley. A Comparison of Workday-Duration Occupational Exposures to Diacetyl to Estimated Exposures Associated with Cigarette Smoking. American Industrial Hygiene Conference & Expo (AIHce). May 18-23, 2013. Montreal, Canada
- > Pierce, J.S., A. Abelmann, L.J. Spicer, L.E. Johns, L. Roberts, H. Fritz, M.E. Glynn and B.L. Finley. A Comparison of Reported Peak Concentrations of Diacetyl in the Workplace to Estimated Diacetyl Concentrations in Mainstream Cigarette Smoke. American Industrial Hygiene Conference & Expo (AIHce). May 18-23, 2013. Montreal, Canada
- > Finley, B.L., J.S. Pierce, A. Abelmann, L.J. Spicer and R.E. Adams. Diacetyl exposure from cigarette smoke: Implications for assessing diacetyl exposure-response in popcorn and flavor manufacturing workers. Society of Risk Analysis Annual Meeting. December 9-12, 2012. San Francisco, CA.
- > Abelmann A., J.S. Pierce, L.J. Spicer, R.E. Adams and B.L. Finley. Exposure to Diacetyl Vapors Associated with Secondhand Cigarette Smoke. 22nd Annual



International Society for Exposure Science Conference. October 28-November 1, 2012. Seattle, WA.

- > Pierce, J.S., A. Abelmann, L.J. Spicer, R.E. Adams and B.L. Finley. Diacetyl Exposure from Active Cigarette Smoking: Implications for Characterizing Health Risks in Popcorn and Flavor Manufacturing Workers. 22nd Annual International Society for Exposure Science Conference. October 28-November 1, 2012. Seattle, WA.
- > Pierce, J.S., L.J. Spicer, A. Abelmann, R.E. Adams, L. Roberts, L. Johns, D.M. Hollins and B.L. Finley. Characterization of Airborne Diacetyl Concentrations Associated With Consuming Different Types Of Wine. IFT Annual Meeting & Food Expo. June 25-28. 2012. Las Vegas, NV
- > Spicer, L.J., J.S. Pierce, A. Abelmann, R.E. Adams, B.L. Finley and S.H. Gaffney. Analysis of Time Weighted Average Concentrations of Formaldehyde During Keratin Hair Smoothing Treatments. American Industrial Hygiene Conference & Expo (AIHce). June 16-21, 2012. Indianapolis, IN
- > Finley, B.L., S.H. Gaffney, A. Abelmann, and J.S. Pierce. 2011. Evaluation of Pentachlorophenol and PCDD/Fs Exposure as Risk Factors for Multiple Myeloma. International Symposium on Halogenated Persistent Organic Pollutants – Dioxin 2011. August 21-25, 2011. Geneva, Switzerland
- > Lacey, S.E, S. Dorevitch, A. Abelmann, and J. Zautcke 2010. Occupational Needlestick Injuries in a U.S. Airport. Poster#O108. American Society of Safety Engineers: Safety 2010. June 13-15, 2010. Baltimore, MD
- > Abelmann, A., S. Erdal, N.A. Esmen and J.E. Indacochea. 2010. Evaluation of the Metal Content, Concentrations, and Fractions in Welding Fume Using Experimental Design and Regression Analysis. Poster#46. Annual Meeting of the American Industrial Hygiene Association. May 22-27, 2010. Denver, CO
- > Abelmann, A., S. Erdal, J.E. Indacochea and N.A. Esmen. 2010. Evaluation of The Relationship Between the Welding Fume Concentration Inside the Welding Helmet and Some Other Metrics of Exposure. Poster. UIC School of Public Health Research Session. April 9, 2010. Chicago, IL
- > Lacey, S.E., A. Abelmann and S. Dorevitch. 2009. Exposure to Human Waste from Spills While Servicing Aircraft Lavatories: Hazards and Methods of Prevention. Poster. 19th Annual International Society for Exposure Science Conference. November 1-5, 2009. Minneapolis, MN
- > Abelmann, A., S. Erdal, J.E. Indacochea and N.A. Esmen. 2009. Development of a Semi-Empirical Relationship Between Welding Fume Concentrations and Welding Process, Environmental, and Physiological Parameters. Poster#7. Annual Meeting of the American Industrial Hygiene Association. May 30 – June 4, 2009. Toronto, Canada
- > Abelmann, A., S. Erdal, J.E. Indacochea and P. Scheff. 2008. Testing and Validation of a Welding Chamber for Personal Exposure Studies. Poster. Annual Meeting of the American Industrial Hygiene Association. May 31 – June 5, 2008. Minneapolis, MN