

## Curriculum Vitae

### Leslie Cizmas, Ph.D.

Department of Environmental and Occupational Health  
School of Public Health  
Texas A&M University  
College Station, TX 77843-1266  
<https://public-health.tamu.edu/directory/cizmas.html>

#### Academic Appointments:

|                        |   |
|------------------------|---|
| Sept. 2025 - present   | Instructional Associate Professor, Department of Environmental and Occupational Health, School of Public Health, Texas A&M University, College Station, TX.                               |
| Sept. 2019 – Aug. 2025 | Instructional Assistant Professor, Department of Environmental and Occupational Health, School of Public Health, Texas A&M Health Science Center, College Station, TX.                    |
| 2012 – 2019            | Assistant Professor, Department of Environmental and Occupational Health, School of Public Health, Texas A&M Health Science Center, College Station, TX.                                  |
| 2005 – 2012            | Research Assistant Professor, Department of Environmental and Occupational Health, School of Rural Public Health, Texas A&M University System Health Science Center, College Station, TX. |
| 2003 - 2005            | Postdoctoral Research Associate, Department of Veterinary Integrative Biosciences, Texas A&M University, College Station, TX.   |
| 1998 - 2003            | Graduate Research Assistant, Department of Veterinary Integrative Biosciences, Texas A&M University, College Station, TX. Graduate Advisor: Dr. K.C. Donnelly.                            |

#### Other Professional Appointments and Experience:

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| 1997 | Environmental Specialist II, Columbia Gas Millennium Project, GAI Consultants, Inc., Monroeville, PA. |
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| 1994 - 1997 | Consultant for Dr. Robert Bereman, Professor, Department of Chemistry, North Carolina State University, Raleigh, NC. |
| 1992 - 1994 | Research Assistant, Duke Wetland Center, Nicholas School of the Environment, Duke University, Durham, NC.            |
| 1991 - 1992 | Grants and Contracts Administrator, Save the Children Federation, Westport, CT.                                      |
| 1988 - 1991 | Program Advisor, Bangladesh Field Office, Save the Children Federation, Dhaka, Bangladesh.                           |
| 1987 - 1988 | Intern, Division of Program Operations, Save the Children Federation, Westport, CT.                                  |
| 1986 - 1987 | Technical Writer, U.S. Peace Corps, San José, Costa Rica.  |
| 1985 - 1986 | Resource Coordinator, U.S. Peace Corps, San José, Costa Rica.  |
| 1983 - 1985 | Fisheries Extension Agent, U.S. Peace Corps, Santa María de Dota, Costa Rica.  |

### Education:

| Degree                             | Conferring Institution                              | Field  | Year |
|------------------------------------|---|--|------|
| B.A.                               | Princeton University                                | Biology  | 1982 |
| Master of Environmental Management | Duke University, Nicholas School of the Environment | Program in Environmental Toxicology, Chemistry & Risk Assessment | 1994 |
| Ph.D.                              | Texas A&M University                                | Toxicology   | 2003 |

**Master's Project:** A Review of the Effect of Organic Matter on the Mechanisms and Rate of Degradation of Atrazine and Deethylatrazine

**Ph.D. Dissertation:** Fractionation and Risk Assessment of Complex Environmental Mixtures

### Awards

- Elected as a member of the Alpha Tau chapter of the Delta Omega Honorary Society in Public Health, April 29, 2025.

- Texas A&M University Association of Former Students Distinguished Achievement Award - College Level. August, 2023.
- Texas A&M Health Science Center School of Rural Public Health Award for Excellence in Education and Teaching, Jan. 20, 2012.
- National Institute of Environmental Health Sciences Toxicology Training Grant Fellowship, Sept., 2001-Aug., 2003.
- Inducted into the Texas A&M Chapter of the Honor Society of Phi Kappa Phi, April, 2003.
- George T. Edds Award, Outstanding Graduate Student in Toxicology, Texas A&M University, May, 2001.
- Inducted into the Honor Society of Agriculture, Gamma Sigma Delta, Feb. 2001.

### **Professional and Scholarly Societies**

- Professional Member, Alliance of Hazardous Materials Professionals

### **Teaching**

#### **Courses Taught at Texas A&M**

- Fall, 2016 - present: PHEO 639: Hazardous Materials Management and Compliance. Developed this course in response to a strong demand in the job market for students with applied knowledge of environmental regulations, compliance, and hazardous materials management. Discussed the specific job skills needed by employers several times with the Texas A&M Environmental and Occupational Health Department's External Industry Advisory Board, to seek recommendations regarding the learning activities that would best prepare students for the workforce. This course examines common types of hazardous materials, applied hazardous materials chemistry, the framework of federal and state environmental laws and regulations, and application of these laws and regulations for effective management of hazardous materials and hazardous waste.
- Fall, 2018 – present: PHLT 304: Biological Basis of Public Health. This course introduces the underlying science of human health and disease, considering biological mechanisms in the individual and in populations. The course covers topics including infectious and chronic diseases; exposure to pathogens and toxins; nutritional deficiencies; child and maternal health; biological bases of mental and behavioral health and addiction. It also examines interactions between biologic and sociocultural factors and the biology of epidemics. Honors students

complete the same work as the rest of the class, plus a literature review paper on a topic of their choice, that they have not previously researched, that is related to the biological basis of public health.

- Spring, 2020: PHLT 489 – Special Topic: Costa Rica Health System and Field Experience. This Education Abroad Experience in Costa Rica involves field trips and active learning sessions focusing on Costa Rica's health system, the indigenous population, migrant workers, and public health agencies and programs. Students also take a field trip to learn about Costa Rica's National Park System and biodiversity. Co-Instructor: Dr. Sherry Lin
- Spring, 2020 – Fall, 2021: PHLT 441: Strategies for Population Health Improvement. This course is a case study-based course covering the three core functions of public health and strategies for improving population health. This course focuses on case studies exploring multiple types of interventions, and involves class discussion, break-out groups, and group assignments.
- January, 2016 – Fall, 2022: PHEO 610, Toxicology in Public Health. This course has been split from the VIBS 670 offering for administrative reasons. This new PHEO 610 course offering provides increased discussion of the role of toxicology in public health. The course covers concepts of toxicology in public health, including One Health, with emphasis on environmental and occupation exposures, distribution, absorption, metabolism and elimination of toxicants, mechanisms of injury at the cellular, organ and systemic level following exposure to toxic chemicals, exposure assessment/risk assessment for non- toxicologists, and the use of toxicology in decision-making. The course also covers current important public health issues relating to toxicology, including tobacco use, opioid abuse, and carcinogens in food.
- August, 2009 – May, 2015: Lead instructor for PHEO 610/VIBS 670, Basic Environmental Toxicology. The SPH students in this course included both MPH and doctoral students, and the TAMU students came from a variety of departments and programs including Toxicology, Physiology, Biomedical Sciences, and Wildlife and Fisheries Sciences.
- Jan., 2011 – May, 2014: led the development of, and served as lead instructor for, SOPH 680: Public Health Capstone. This course was team-taught by a group of faculty from all the core areas of public health and served as the culminating experience for SPH MPH students.
- August, 2014 – December, 2015: Environmental and Occupational Health instructor for SRPH 680: Public Health Capstone (course number became SOPH 680). This course was team- taught by a group of faculty from all the core areas of public health, and served as the culminating experience for SPH MPH students.

- Spring, 2014: Co-developed SOPH 680, MPH Public Health Capstone: Section on Health Systems and Governance Interventions in Conflict-Affected/Fragile Countries (emphasis on Liberia). Course was co-developed with Scott Pool (SPH-HPM) and the Bush School of Government and Public Service. This class was held concurrently with a capstone for Master's students from the Bush School of Government and Public Service. Bush and SPH students worked together on interdisciplinary teams and prepared a report and presentation for the client agency, the US Agency for International Development (DRG Center Cross Sector Programs Team).
- Spring, 2006 – Spring, 2010: PHEO 620, Environmental and Occupational Case Studies. This course was taught annually for the Department of Environmental and Occupational Health, School of Rural Public Health, Texas A&M Health Science Center. From Spring 2008 – Spring 2010, this course served as the capstone course for Environmental and Occupational Health MPH students.

### **Teaching Administration**

- Fall, 2024: As a member of the team preparing the School of Public Health (SPH) self-study for TAMU SPH re-accreditation by the Council on Education for Public Health (CEPH): led compilation of documentation needed to show student mastery of the concentration competencies (CEPH Criterion D4) across all SPH departments, for all nine TAMU SPH Master's and doctoral degree programs, for academic years AY 22-23 and AY 23-24. Compiled syllabi and assignments used to teach these competencies for the nine programs, managed these documents for CEPH review, and identified areas for improvement in teaching the concentration competencies. Updated responses to CEPH Criteria D13 and D14.
- Fall 2023 – Summer, 2025: Led development of TAMU SPH Online Environmental Health MPH Program proposal and associated course revisions; led the approval process for this program through the Texas A&M Curricular Approval Request System (CARS). The program was fully approved in 2024 with a program start date of Fall, 2025.
- August 2020 – present: Program Coordinator, Assessment of Environmental Health MPH and Occupational Safety and Health MPH Programs for SACSCOC Accreditation (HelioCampus/AEFIS Program Evaluation & Use of Evaluation to Improve Programs). In Fall 2023, at the request of the SPH Assistant Dean for Accountability and Strategic Initiatives, provided training on this assessment process to a new Program Coordinator from another department, and included a second new SPH Program Coordinator in this training.
- Fall 2021- Spring 2022: Led the Environmental Health faculty review/revision of the Environmental Health MPH coursework and mapping of competencies to courses; led successful efforts to obtain CEPH (accrediting body) approval of these changes.

- Spring 2022 - Fall 2022: Led the Environmental Health faculty review/revision of the Occupational Safety and Health MPH coursework and mapping of competencies to courses; led successful efforts to obtain CEPH (accrediting body) approval of these changes.
- Spring 2022 - Fall 2022: Led the updates to the Environmental Health DrPH mapping of competencies to courses and successful efforts to obtain CEPH (accrediting body) approval of these changes.

### **Scholarly Presentations on Teaching**

- Using AI to Efficiently Enhance Learning & Reflection. Presented May 1, 2025 at Texas A&M 2025 Transformational Teaching & Learning Conference, April 30 – May 1, 2025.
- Using Online Mental Wellness Resources to Promote Student Resilience and Learning. Presented May 4, 2023 at Texas A&M 2023 Transformational Teaching & Learning Conference, May 3 - 4, 2023.
- Growing Student Resilience through Discussion and Interactive Online Resources. Poster presentation at the Lilly Conference for Evidence-Based Teaching & Learning, Austin, Texas, May 22 – 24, 2023.
- Engaging Large Undergraduate Classes in Whole-Class Discussions. Transformational Teaching and Learning Conference, April 30, 2021. Presented as a 5-Minute Narrated Infographic.
- Strengthening Student Learning by Leveraging University and Community Resources. Presented as a 40-minute pre-recorded session prepared for Online Lilly Conference, Nov. 30 – Dec. 4, 2020
- Mindfulness-Based Strategies for Improving the Teaching and Learning Experience. Presented as a 40-minute pre-recorded session prepared for Online Lilly Conference, Nov. 30 – Dec. 4, 2020
- Highlight of Mindfulness Practices. Ten-minute presentation given September 29, 2020 at Session 1 of the PHLEEx-Sharing from May 2020 Lilly Evidence-Based Teaching Conference.

### **Presentations related to Teaching Administration**

- Update, School of Public Health Re-Accreditation Activities. Presented at the Nov. 6, 2025 Environmental and Occupational Health Industry Advisory Board meeting

regarding ongoing activities for the routine re-accreditation of the Texas A&M School of Public Health by (1) the Council on Education for Public Health and (2) the Southern Association of College and Schools Commission on Colleges (SACSCOC).

- Update, Final Approved Online Environmental Health Master of Public Health Program. Nov. 19, 2024. Presented to Los Alamos National Laboratories representatives to increase awareness of program and recruit potential applicants. Presentation was after this academic program received final approval for delivery in Fall, 2025.
- Update, Final Approved Online Environmental Health Master of Public Health Program. October 25, 2024. Presented to the Environmental and Occupational Health Industry Advisory Board (IAB) at the Fall, 2024 IAB meeting after this academic program received final approval for delivery in Fall, 2025. Purpose was to recruit potential applicants and invite industry partner feedback regarding preferred electives for this program.
- Update on Proposed Online Environmental Health Master of Public Health Program. March 20, 2024. Presented at Spring 2024 Department of Environmental and Occupational Health Industry Advisory Board meeting to publicize the proposed program that was undergoing approval.
- Proposed Online Environmental Health Master of Public Health Program. Feb. 26, 2024. Presented at Texas A&M University meeting between Department of Environmental and Occupational Health and representatives of Los Alamos National Laboratories. Presentation was to publicize the proposed degree that was undergoing approval.
- Recent Revisions to Environmental Health Master of Public Health Program, 2022. Environmental and Occupational Health (EOH) Department's Industry Advisory Board Meeting, Nov. 2022. Presentation of recent curriculum updates to the Environmental Health MPH and discussion with EOH Industry Advisory Board regarding ongoing improvement of Environmental MPH curriculum.
- Recent Revisions to Environmental Health Master of Public Health Program, 2021. Environmental and Occupational Health Department's Industry Advisory Board Meeting, Nov. 2021. Presentation to discuss substantial changes to the Environmental Health MPH program based on prior feedback from Industry Advisory Board members, and invite recommendations for continuous improvement of this MPH program.

### **Activities Completed to Improve the Student Learning Experience**

- Attended Digital Accessibility Series: Presentation on Enhancing Accessibility of PDF Files, October 8, 2025.

- Attended Texas A&M University Center for Teaching Excellence 2-hour Digital Accessibility Workshop, May 5, 2025.
- Attended the May 2024 Transformational Teaching and Learning Conference, including the plenary address by Dr. Alison Cook-Sather "Co-Creating Engaged Learning Experiences with Students" and the plenary workshop "Developing Co-created Learning Experiences that Engage Students". May 1-2, 2024.
- Attended 1-hour TAMU Center for Teaching Excellence session on Student Perspectives on Learning. April 25, 2024.
- Completed the one-week Online Learning Consortium (OLC) course, Online Teaching Essentials 1: Getting Started (recommended by TAMU SPH Academic Technology). June, 2023.
- Completed the one-week Online Learning Consortium (OLC) course, Online Teaching Essentials 2: Converting your Course (recommended by TAMU SPH Academic Technology). August, 2023.
- Completed TAMU Center for Teaching Excellence training "Letting the CAT Out of the Bag: Supporting Learners Using Classroom Assessment Techniques". Feb. 2023.
- Requested and obtained a Peer Teaching Evaluation through the Texas A&M SPH Team Steps (Strengthen Teaching Excellence through Peer Support) Program. Feedback from two peer evaluators was obtained on my course syllabus and my 75-minute lecture in PHLT 304, on October 13, 2020. Feedback addressed methods to improve the course experience for students.
- Mentored students in PHLT 304 as an Honors course.
- Completed multiple TAMU Center for Teaching Excellence Trainings, including:
  - "Exam Questions that Promote Higher Order Thinking"
  - "Equipping Faculty to Confidently Navigate Challenging Topics in the Classroom"
  - "Forming a Teaching Mindset that Supports Student-Centered Learning"
- Completed 6-part series "*Mindfulness Meditation - Going to the Gym for the Mind*", given by Mays Business School Executive Professor, Prof. John Krajicek, April-May 2019.

**Guest lectures taught for:**

- BIMS 489/VIBS 210, Twenty-First Century Global One Health
- HPCH 635, Community Health Development



- PHEO 600, Principles of Environmental and Occupational Health
- PHEO 605, Chemical Hazard Risk Assessment
- PHEO 650, Risk Assessment
- PHEO 675, Water and Environmental Public Health
- PHEO 681, Seminar in Environmental and Occupational Health
- PHEO 689, Environmental Sustainability and Public Health
- PHEB 626, Occupational and Environmental Epidemiology
- CVEN 406, Environmental Protection and Public Health
- VIBS 432, Public Health Practices
- BESC 201, Introduction to Bioenvironmental Science
- PHLT 330, The Environment and Public Health
- HORT 689, Nexus of Food & Nutritional Security, Hunger & Sustainability

### **Invited Presentations to Student Groups**

- Strategies for Mental Health and Wellness during the Pandemic. One-hour invited presentation March 16, 2021 as part of the Pasta & Profs series for University Honors freshmen.
- Self-Care and Resiliency. Invited presentation for Public Health Student Organization, September 9, 2020.
- Impact of Friendship and Community on Physical Health: Invited presentation for Partnership for Primary Care pre-medical student group, Feb. 18, 2020.
- Case Study: Exposure to Inorganic Arsenic in Drinking Water in Rural Bangladesh. Presentation to Texas A&M Student One Health Association, Bryan, TX, February 9, 2016.
- Discussion with Texas A&M University Society of Environmental Toxicology and Chemistry Student Association, Oct. 21, 2015 to discuss career and research opportunities

### **Chair of doctoral committee for:**

- Jen Ross, Dr.PH student, graduated 2013.
- Amber Trueblood, Dr.PH student, graduated 2016.
- Cole Gray, Dr.PH student, graduated 2020.

### **Co-Chair of doctoral committee for:**

- Kamrie Sarnosky, Dr.PH student, graduated 2019.

### **Co-Chair of Master's committee for:**

- Adriana Mendez-Jimenez, Wildlife and Fisheries Sciences, Master's student, graduated 2020.

#### **Member of committee for:**

- Chris Laine, Dr.PH student, School of Public Health, graduated 2014
- Heather Reddick, Dr.PH student, School of Public Health, graduated 2015
- Chase Brewster, MSPH student, School of Public Health, graduated 2015
- James Hunt, Master's student, Department of Veterinary Integrative Biosciences, graduated 2016
- Randall (Jason) Burow, M.Eng. student, Department of Biological and Agricultural Engineering, graduated 2016.
- Long Chen, Dr.PH student, School of Public Health, graduated 2017

### **Service**

#### **Texas A&M University Committees**

- 2024 Texas Transformational Teaching and Learning Conference (TTLC) Committee, Member, November 2023 - May, 2024.
- Texas A&M University Honor Council, Member, August 2019 – August 2024.
- Texas A&M University Distinguished Achievement Awards Selection Committee (TAMU AAFS Committee), Member, 2016 – 2017

#### **Texas A&M School of Public Health (SPH) Individual Service**

- Member of team preparing TAMU SPH re-accreditation self-study documents for the Council on Education for Public Health, Fall 2024.
- Led Environmental and Occupational Health APT faculty review and update of department APT faculty Annual Evaluation plan and template, Fall 2023.
- Peer Teaching Evaluator, Texas A&M SPH Team Steps (Strengthen Teaching Excellence through Peer Support), Training completed Spring 2020. Peer evaluation activities conducted in both Spring 2020 and Fall 2020.
- Also see Teaching Administration activities (under Teaching)

#### **Texas A&M School of Public Health (SPH) Committees**

- Member, SPH EOH Department Head Search Committee, Spring 2025 - present

- Member, EOH APT Faculty Search Committee, Fall 2023 – Spring 2024
- Member, HPM APT Faculty Search Committee, Fall 2023 - Spring 2024
- Chair, EOH APT Faculty Search Committee, Fall 2021 - Spring 2022
- SPH Curriculum Committee:
  - Committee Chair: Sept, 2021 – Sept., 2023
  - Member July 2019 – Dec. 2023
- SPH Awards Committee Summer, 2015
- SPH Curriculum Committee:
  - Member, Fall, 2009 – August, 2014
  - Chair, Feb. 2011 – Nov., 2013
- SPH Quality Enhancement Plan Committee, July, 2011 – 2013
- SPH Research Committee
  - Member, 2006 - Fall, 2009

#### **Reviewed Submitted Journal Articles for:**

- Environmental Science and Technology
- Environment International
- Science of the Total Environment
- Health and Place
- Journal of Health Care for the Poor and Underserved
- International Journal of Environmental Research and Public Health

## **Research and Scholarly Activities**

#### **Published Books**

1. Donnelly KC, Cizmas L.H. (eds). 2006. *Environmental Health in Central & Eastern Europe*. Proceedings of the First Biennial Central & Eastern European Environmental Health Conference held in Prague, Czech Republic, October, 2004. Springer Science & Business Media.

#### **Journal Articles**

1. Abraham DG, Liberatore HK, Aziz MT, Burnett DB, Cizmas LH, Richardson SD.

2023. Impacts of hydraulic fracturing wastewater from oil and gas industries on drinking water: Quantification of 69 disinfection byproducts and calculated toxicity. *Science of the Total Environment* 882:163344.
2. Becker F, Marcantonio f, Datta S, Wichterich C, Cizmas L, Surber J, Kennedy K, Bowles E. 2022. Tracking the source of contaminant lead in children's blood. *Environmental Research* 212: 113307. <https://doi.org/10.1016/j.envres.2022.113307>.
  3. Sarnosky K, Benden M, Sansom G, Cizmas L, Regan AK. 2022. Impact of workplace displacement during a natural disaster on computer performance metrics: A 2-year interrupted time series analysis. *Work: A Journal of Prevention Assessment & Rehabilitation* 71(2):465-470.
  4. Kovalakova P, Cizmas L, Feng M, McDonald TJ, Marsalek B, Sharma VK. 2021. Oxidation of antibiotics by ferrate(VI) in water: Evaluation of their removal efficiency and toxicity changes. *Chemosphere* 277:130365 (<https://doi.org/10.1016/j.chemosphere.2021.130365>).
  5. Liberatore H, Westerman D, Allen J, Plewa M, Wagner E, McKenna A, Weisbrod CR, McCord J, Liberatore R, Burnett D, Cizmas L, Richardson S. 2020. High-Resolution Mass Spectrometry Identification of Novel Surfactant-Derived Sulfur-Containing Disinfection By-Products from Gas Extraction Wastewater. *Environmental Science & Technology* 54(15):9374-9386.
  6. Kovalakova P, Cizmas L, McDonald TJ, Marsalek B, Feng M, Sharma, VK. 2020. Occurrence and toxicity of antibiotics in the aquatic environment: A review. *Chemosphere* 251:126351. <https://doi.org/10.1016/j.chemosphere.2020.126351>.
  7. Sansom G, Cizmas L, Aarvig K, Dixon B, Kirsch KR, Katare A, Sansom L. 2019. Vulnerable populations exposed to lead-contaminated drinking water within Houston Ship Channel Communities. *International Journal of Environmental Research and Public Health*: 16(15): 2745. <https://doi:10.3390/ijerph16152745>.
  8. Li C, Luo F, Duan H, Dong F, Chen X, Feng M, Zhang Z, Cizmas L, Sharma VK. 2019. Degradation of chloramphenicol by chlorine and chlorine dioxide in a pilot-scale water distribution system. *Separation and Purification Technology* 211:564-570, <https://doi.org/10.1016/j.seppur.2018.10.019>.
  9. Trueblood AB, Han D, Shipp EM, Cizmas LH. 2018. Exploring demographic and environmental factors related to unintentional pesticide poisonings in children and adolescents in Texas. *Environmental Health and Toxicology* 33(2):e2018008. Published online 2018 Mar 26. doi: [10.5620/ehp.e2018008](https://doi.org/10.5620/ehp.e2018008); PMID: 29642657.
  10. Zhang X, Ding Z, Yang J, Cizmas L, Lichtfouse E, Sharma VK. 2018. Efficient microwave degradation of humic acids in water using persulfate and activated

- carbon. *Environmental Chemistry Letters*; <https://doi.org/10.1007/s10311-018-0721-z>.
11. Brewster C, Sharma VK, Cizmas L, McDonald TJ. 2018. Occurrence, distribution and composition of aliphatic and polycyclic aromatic hydrocarbons in sediment cores from the Lower Fox River, Wisconsin, US. *Environmental Science and Pollution Research* 25(5):4974-4988; <https://doi.org/10.1007/s11356-017-0819-z>.
  12. Liberatore HK, Plewa MJ, Wagner ED, VanBriesen JM, Burnett DB, Cizmas LH, Richardson SD. 2017. Identification and comparative mammalian cell cytotoxicity of new iodo-phenolic disinfection byproducts in chloraminated oil and gas wastewaters. *Environmental Science and Technology Letters* 4(11):475-480.
  13. Li C, Luo F, Dong F, Zhao J, Zhang T, He G, Cizmas L, Sharma VK. 2017. Chlorine decay and trihalomethane formation following ferrate(VI) preoxidation and chlorination of drinking water. *Chemosphere* 187:413-420.
  14. Li C, Dong F, Feng L, Zhao J, Zhang T, Cizmas L, Sharma VK. 2017. Bacterial community structure and microorganism inactivation following water treatment with ferrate(VI) or chlorine. *Environmental Chemistry Letters* 15(3):525-530.
  15. Feng M, Cizmas L, Wang Z, Sharma VK. 2017. Activation of ferrate(VI) by ammonia in oxidation of flumequine: Kinetics, transformation products, and antibacterial activity assessment. *Chemical Engineering Journal* 323:584-591.
  16. Sharma VK, Yang X, Cizmas L, McDonald TJ, Luque R, Sayes CM, Yuan B, Dionysiou DD. 2017. Impact of metal ions, metal oxides, and nanoparticles on the formation of disinfection byproducts during chlorination. *Chemical Engineering Journal* 317:777-792.
  17. Feng M, Cizmas L, Wang Z, Sharma VK. 2017. Synergistic effect of aqueous removal of fluoroquinolones by a combined use of peroxymonosulfate and ferrate (VI). *Chemosphere* 177:144-148.
  18. He G, Li C, Zhang T, Zhao J, Sharma, VK, Cizmas L. 2017. Transformation of bisphenol A during chloramination in a pilot-scale water distribution system: Effect of pH, flow velocity, and type of pipes. *Chemical Engineering Journal* 312:275-287.
  19. He G, Li C, Dong F, Zhang T, Chen L, Cizmas L, Sharma VK. 2016.

Chloramines in a pilot-scale water distribution system: Transformation of 17 $\beta$ -estradiol and formation of disinfection byproducts. *Water Research* 106:41- 50.

20. Adeboyege NF, Sharma VK, Cizmas L, Sayes CM. 2016. UV light induces Ag nanoparticle formation: roles of natural organic matter, iron and oxygen. *Environmental Chemistry Letters* 14(3):353-357. DOI 10.1007/s10311-016-0577-z.
21. Trueblood AB, Forrester MB, Han D, Shipp EM, Cizmas LH. 2016. Pesticide-related poison center exposures in children and adolescents aged  $\leq$  19 years in Texas, 2000-2013. *Clinical Toxicology* 54(9):852-856.
22. Feng M, Wang X, Chen J, Qu R, Sui Y, Cizmas L, Wang Z, Sharma VK. 2016. Degradation of fluoroquinolone antibiotics by ferrate(VI): effects of water constituents and oxidized products. *Water Research* 103:48-57.
23. Trueblood AB, Shipp EM, Han D, Ross J, Cizmas LH. 2016. Pesticide-related hospitalizations among children and teenagers in Texas, 2004-2013. *Public Health Reports* 131(4):588-596.
24. Sharma VK, Johnson N, Cizmas L, McDonald TJ, Kim H. 2016. A review of the influence of treatment strategies on antibiotic resistant bacteria and antibiotic resistance genes. *Chemosphere* 150:702-714.
25. Trueblood AB, Rincon R, Perales R, Hollingsworth R, Miller C, McDonald TJ, Cizmas L. 2016. A pilot study of changes in environmental knowledge and behaviors among Head Start employees and parents following environmental health training in Webb County, TX. *Journal of Immigrant and Minority Health* 18(1):135-142. PMID: 25538003.
26. Cizmas L, Sharma VK, Gray CM, McDonald TJ. 2015. Pharmaceuticals and personal care products in waters: occurrence, toxicity, and risk. *Environmental Chemistry Letters* 13(4):381-394.
27. Ross JA, Trueblood AB, Donnelly KC, Cizmas LH. 2015. Household pesticide use in *colonias* in Webb and Hidalgo Counties, South Texas, as assessed using a pesticide inventory. *Texas Public Health Association Journal* 67(3): 7-10.
28. Cizmas L, Ackerman L, Donnelly DA, Donnelly KC, McDonald TJ. 2015. Measurement of organophosphate pesticides, organochlorine pesticides, and

- polycyclic aromatic hydrocarbons in household dust from two rural villages in Nepal. *Journal of Environmental and Analytical Toxicology* 5(2) (doi:10.4172/2161-0525.1000261; available at <https://oaktrust.library.tamu.edu/handle/1969.1/154775>).
29. Phillips TD, Richardson M, Cheng YSL, He L, McDonald TJ, Cizmas LH, Safe SH, Donnelly KC, Wang F, Moorthy B, Zhou G-D. 2015. Mechanistic relationships between hepatic genotoxicity and carcinogenicity in male B6C3F1 mice treated with polycyclic aromatic hydrocarbon mixtures. *Archives of Toxicology* 89(6):967-977. PMID: 24888377.
  30. Carrillo-Zuniga G, Donnelly KC, Cortes DE, Olivares E, Gonzalez H, Cizmas L. 2009. Border Health 2012: Bi-National collaboration to develop an outreach environmental education program. *Public Health Reports* 124(3):466-470. PMID: 19445425.
  31. Barbee GC, Barich J, Duncan B, Bickham JW, Matson CW, Hintze CJ, Autenrieth RL, Zhou GD, McDonald TJ, Cizmas L, Norton D, Donnelly KC. 2008. *In situ* biomonitoring of PAH-contaminated sediments using juvenile coho salmon (*Oncorhynchus kisutch*). *Ecotoxicology and Environmental Safety* 71(2):454-464. PMID: 18304636.
  32. Naspinski C, Lingenfelter R, Cizmas L, Naufal Z, He LY, Islamzadeh A, Li Z, Li Z, McDonald T, Donnelly KC. 2008. A comparison of concentrations of polycyclic aromatic compounds detected in dust samples from various regions of the world. *Environment International* 34(7):988-993. PMID: 18452990.
  33. Donnelly KC, Huebner HJ, Claxton LD, Calvin JA, Vos GA, Cizmas L, He L. 2005. Biodegradation of simple chemical mixtures in soil. *Environmental Toxicology and Chemistry* 24(11):2839-2845. PMID: 16398121.
  34. Cizmas L, McDonald TJ, Phillips TD, Gillespie AM, Lingenfelter RA, Kubena LF, Phillips TD, Donnelly KC. 2004. Toxicity characterization of complex mixtures using biological and chemical analysis in preparation for assessment of mixture similarity. *Environmental Science and Technology* 38(19):5127-5133. PMID: 15506208.
  35. Cizmas L, Zhou G-D, Safe SH, McDonald TJ, Zhu L, Donnelly KC. 2004. Comparative *in vitro* and *in vivo* genotoxicities of 7H-benzo[c]fluorene, manufactured gas plant residue (MGP), and MGP fractions. *Environmental and Molecular Mutagenesis* 43(3):159-168. PMID: 15065203.

36. Carrillo-Zuniga G, Coutinho C, Shalat SL, Freeman NCG, Black K, Jimenez W, Calvin J, Ramirez J, Marchenko Y, Cizmas L, Donnelly KC. 2004. Potential sources of childhood exposure to pesticides in an agricultural community. *Journal of Children's Health* 2(1):29-39.
37. Donnelly KC, Lingenfelter R, Cizmas L, Falahatpisheh MH, Qian Y, Tang Y, Garcia S, Ramos K, Tiffany-Castiglioni E, Mumtaz MM. 2004. Toxicity assessment of complex mixtures remains a goal. *Environmental Toxicology and Pharmacology* 18(2):135-141. PMID:21782742
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### **Research Presentations**

- Cizmas, L. Opening remarks and Discussion Leader for the scientific session "Challenges in Water Disinfection: Balancing Microbial and Chemical Risks". Gordon Research Conference on Water Disinfection, Byproducts and Health, "Finding Solutions to Emerging Issues of Water Disinfection Byproducts Using Advanced Multidisciplinary Approaches". July 28, 2019.
- Cizmas L, Sharma VK. Municipal Wastewater Reuse in Agriculture: Do Chemical Contaminants Pose Human Health Risks? Presented at the 2017 International Symposium on Environmental Science and Technology, Beijing Xijiao Hotel, Beijing, China, September 21, 2017.
- Cizmas L, Gray C, Sharma VK, McDonald T. Titanium dioxide and zinc oxide nanoparticles: disinfection byproduct formation in synthetic freshwater. Presented at the American Chemical Society national meeting, San Francisco, CA, April 4, 2017.



- Cizmas L, Gray C, Sharma VK, Chen L, McDonald TJ. A Multi-Step Approach to Assessing the Toxicity of Drinking Water Disinfection By- Products following Chlorination, Chloramination or a Novel Ferrate Disinfection Process. Presented at the International Chemical Congress of Pacific Basin Societies 2015, Honolulu, Hawaii, December 16, 2015.
- Cizmas L, Ross J, Miller C, Rincon R, Perales R, Tamez H, Ginez A, Taylor J, McDonald TJ. A Lay Health Worker-Based Intervention for Reducing Families' Environmental Exposures. Invited presentation at the Society of Toxicology national meeting, March 13, 2013, San Antonio, TX.
- Cizmas L, Ross J, Miller C, Rincon R, Perales R, Tamez H, Ginez A, Taylor J, McDonald TJ. Border Environmental Health Toxicology and Education Research Program, Presented March 10, 2012 to representatives of the CDC and Florida A&M University, San Francisco, CA.
- Cizmas L, Ross J, Miller C, Rincon R, Perales R, Tamez H, Ginez A, Taylor J, McDonald TJ. Border Environmental Health Toxicology and Education Research Program, Presented March 5, 2011 to representatives of the CDC and Florida A&M University, Washington, DC.
- Cizmas L, Carrillo G, Donnelly KC. Pesticide Exposures among Children in *Colonias* on the Texas-Mexico Border. Texas Public Health Association meeting, April 22, 2010, South Padre Island, TX.
- Cizmas L, Donnelly KC, et al. The Program for Public Health and Water Research at SRPH. Annual meeting of the Board of Directors of the Institute for Public Health and Water Research, October 23, 2008, San Diego, CA.
- Cizmas L, McDonald TJ, McDonald S. From Site to Shop: QA/QC Issues in Field Studies. L. Cizmas, T. McDonald, S. McDonald. US EPA QA/QC Conference, October, 2005, Dallas, TX.
- Cizmas L, Islamzadeh A, Lingenfelter R, Donnelly KC. Assessment of Chemical Exposure and Biomarkers Among Populations in Azerbaijan. First Biennial Central and Eastern European Environmental Health Conference, October 24-27, 2004, Prague, Czech Republic.

### **Research Presentations by Students or Collaborators**

- Gray C, Cizmas L, Sharm VK, Yan B. Disinfection byproduct formation in synthetic drinking water: effects of ferrate and nanoparticles. Presented at the American Chemical Society national meeting, New Orleans, LA, March 20, 2018.
- Cizmas L, Sharma VK. Genotoxicity of Complex Environmental Polycyclic

Aromatic Hydrocarbon Mixtures. Presented at the 33<sup>th</sup> International conference of the Society for Environmental Geochemistry and Health (SEGH 2017), July 2, 2017, Guangzhou, China.

- Richardson SD, Liberatore HK, Plewa MJ, Cizmas LH, Vanbriesen JM. Impacts of hydraulic fracturing on drinking water: high resolution-MS uncovers new chemical by-products of concern. Presented at the American Chemical Society national meeting, San Francisco, CA, April 4, 2017.
- Richardson SD, Liberatore HK, VanBriesen J, Cizmas LH. Hydraulic Fracturing Impacts on Drinking Water: High Resolution-MS Uncovers New Chemical By-Products. Presented at the American Society for Mass Spectrometry conference, June 5-9, 2016, San Antonio, TX.

### **Research Poster Presentations**

- Jaggi C, Gray C, Sharma VK, Chen L, Cizmas L. Cytotoxicity of Drinking Water Disinfection By-Products Produced by Ferrate, Chlorine, and Monochloramine. Poster presented at the 251<sup>st</sup> American Chemical Society National Meeting & Exposition, March 13-17, 2016, San Diego, CA.
- Trueblood AB, Forrester MB, Han D, Shipp EM, Cizmas L. Pesticide- Related Poison Center Exposures in Children in Texas, 2000-2013. Awarded first place in the 2016 Student Research Poster Contest, April 2, 2016, Texas A&M School of Public Health.
- Gray CM, Trueblood AB, Sharma V, McDonald T, Cizmas L. Adverse Reproductive Outcomes of Brominated Disinfection By-Products in Epidemiological Studies: A Review. Presented at the Gordon Conference: Drinking Water Disinfection By-Products, August 9-14, 2015, South Hadley, MA.
- Cizmas L, Gray C, Sharma V, McDonald TJ, Chen L. A Research Plan for Assessing the Toxicity of Drinking Water Disinfection By-Products following Chlorination, Chloramination or a Novel Ferrate Disinfection Process. Presented at the Gordon Conference: Drinking Water Disinfection By- Products, August 9 – August 14, 2015, South Hadley, MA.
- Sharma VK, Yang X, Cizmas L. Role of Ferrate in Controlling Disinfection Byproducts. Presented at the Gordon Conference: Drinking Water Disinfection By-Products, August 9 – August 14, 2015, South Hadley, MA.
- Trueblood AB, Rincon R, Perales R, Hollingsworth R, Miller C, Taylor J, McDonald T, Cizmas LH. Environmental Knowledge and Behaviors among Head Start Employees and Parents following Environmental Health Training in Webb County, TX. Presented at the Texas A&M School of Rural Public Health 9th Annual Research Poster Symposium and Student Poster Contest, April 7-11, 2014.

- Ross JA, Cizmas LH, Rincon R, McDonald TJ. Assessment of knowledge, attitudes, and behaviors following a pesticide education intervention in Webb County, TX. Presented at the Texas A&M School of Public Health (SPH) poster competition, April 1, 2013 and winner of 1<sup>st</sup> place in SPH student poster competition. Accepted for the 2013 Delta Omega poster session at the annual meeting of the American Public Health Association (APHA). Presented by DrPH student Jennifer Ross at the APHA meeting in November, 2013.
- Ross JA, Rincon R, McDonald TJ, Perales RB, Miller C, Taylor J, Cizmas LH. Comparison of attitudes and behaviors following a pesticide education intervention in two Hispanic communities. Presented by DrPH student Jen Ross at The Pacific Basin Consortium's 15<sup>th</sup> Annual Conference titled "*Environmental Exposure in Indigenous Communities*" in Honolulu, Hawaii, September 24 - 27, 2013.
- Trueblood AB, Cizmas LH, Hollingsworth R, Rincon R, Perales R, Miller C, Taylor J, McDonald T. Environmental Knowledge and Behaviors among Head Start Employees and Parents following Environmental Health Training in Webb County, TX. Presented by DrPH student Amber Trueblood at The Pacific Basin Consortium's 15<sup>th</sup> Annual Conference titled "*Environmental Exposure in Indigenous Communities*" in Honolulu, September 24 - 27, 2013.
- Ross JA, Tamez H, Ginez A, Rincon R, Perales R, Miller C, Cizmas LH, McDonald TJ. Assessment of Changes in Knowledge, Attitudes, and Behavior Following Pesticide Health Education in Colonias of Webb County, TX. Texas A&M University Toxicology Forum, Aug. 23, 2011 and TAMHSC SRPH Public Health Week, April 2-6, 2012.
- Cizmas L, McDonald TJ, Donnelly KC. A Comparison of Two Similar Complex Mixtures using Biological and Chemical Analysis. Poster presented at the Society of Environmental Toxicology and Chemistry (North America) 24<sup>th</sup> Annual Meeting, November 9-13, 2003, Austin, TX.
- Cizmas L, Zhou G-D, McDonald T, Safe S, Zhu L, Donnelly KC. Effects of Complex PAH Mixtures and 7H-Benzo[c]fluorene on DNA Adduct Formation in Mice. Poster presented at the Society of Toxicology 42<sup>nd</sup> Annual Meeting, March 9-13, 2003, Salt Lake City, UT.
- Cizmas L, Donnelly KC, McDonald TJ, Barhoumi R. Genotoxicity and Chemical Analysis of a Wood Preserving Waste. Poster presented at The Society of Environmental Toxicology and Chemistry (North America) 22<sup>nd</sup> Annual Meeting, November 11-15, 2001, Baltimore, Maryland, and at the Superfund Basic Research Program Annual Meeting, December 10-12, 2001, Gainesville, Florida.

### **Invited Lectures**

- Cizmas L. Municipal Wastewater Reuse in Agriculture: Do Chemical Contaminants Pose Human Health Risks? Presented at the College of Civil Engineering and Architecture, Zhejiang University, Hangzhou, 310027, China on September 17, 2017.
- Cizmas L. Municipal Wastewater Reuse in Agriculture: Do Chemical Contaminants Pose Human Health Risks? Presented at School of the Environment, Nanjing University, Jiangsu, Nanjing 210023, China, September 12, 2017.
- Cizmas L. Drinking Water Disinfection By-Products: Could Use of Ferrate Reduce Toxicity? Baylor University Environmental Science Seminar Series, December 1, 2015, Waco, TX.
- Cizmas L. Health Implications of Water Reuse. Invited speaker, Texas A&M AgriLife Conference, Session on Concepts to Increase Global Water Supplies, Presenter and Panelist. College Station, Texas, January 9, 2017.
- Cizmas L, Donnelly KC, Tamez H, Ginez A. Role of Lay Health Workers (*Promotoras*) in Health Research and Interventions in Underserved Communities Near the Texas-Mexico Border. American Public Health Association meeting, November 9, 2009, Philadelphia, PA.

### **Other Seminars/Lectures**

- Cizmas, L. What's in Your Water? Partially funded by a National Science Foundation grant, and presented as a day-long workshop at the Texas A&M Summer Institute, a K-12 Teacher Training Conference in Kerrville, Texas Kerrville, Texas, July 24, 2019.
- Environmental Health Management in Schools. Presentation for school nurses and counselors, approved for Continuing Nursing Credit, given to 71 participants in Huntsville, TX, May 3, 2013 through the School of Public Health Office of Special Programs.
- Environmental Health Management in Schools. Presentation for school nurses and counselors, approved for Continuing Nursing Credit, given to 280 participants in McAllen, TX, July 31, 2013 through the School of Public Health Office of Special Programs.
- Environmental Health: The Impact of Science on Daily Life. 12<sup>th</sup> Annual Environmental Health Sciences Summer Institute, July 19, 2012, Austin, TX.
- Keeping Children Healthy. Presented to over 200 Webb County, TX Head Start administrators, teachers, and other employees, April 3 and April 4, 2012,

Laredo, TX.

- Conservando la Salud de los Niños (Keeping Children Healthy). Presentation in Spanish to Webb County Head Start parents, April 3 and 4, 2012, Laredo, TX.
- Selected Topics in Environmental Health Applied to Family Medicine. Presentation on environmental health for physicians and other medical professionals at Environmental Medicine and Toxicology Conference, University of Texas Health Science Center – San Antonio's Laredo campus, Sept. 10, 2011, Laredo, TX.
- Health, the Environment, and Humans. Lecture for Duke Talent Identification Program, June 2007, College Station, TX.

### Completed Research Support

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6. Congleton (PI)      1 T01OH0009410-01A1      7/1/2009-6/30/2014 NIOSH  
*Texas A&M Health Science Center Occupational Safety and Health Training Program*  
 Provides focused training in occupational safety and health for Master's level (MPH and MSPH) students.  
 Role: Co-Investigator
  
7. McDonald (PI)      1U 01TS000107-01      9/30/2009-9/29/2013  
 U.S. Centers for Disease Control and Prevention - Agency for Toxic Substances and Disease Registry  
*Border Environmental Health and Toxicology Educational Research Program*  
 The primary goal of the proposed program is to increase awareness in health care professionals and community members regarding the impact of the environment on health. Although the program will focus on issues relevant to the Texas-Mexico border region, educational opportunities will be made available to interested stakeholders nation-wide. The curriculum focuses on describing the interactions between genetics, nutrition and the environment and their impact on health.  
 Role: Co-Principal Investigator
  
8. McDonald (PI)      CH-83510401-0      10/1/2011-9/30/2012  
 U.S. Environmental Protection Agency  
*Building Environmental Awareness for Teachers and Parents in Head Start Centers in Webb County, TX*  
 Over 240 Head Start school employees and parents received interactive training in Spanish or English on specific environmental health topics of concern in Webb County. The training included specific steps they could take to reduce children's environmental exposures. Changes in the knowledge and behaviors of the training participants were evaluated before and after the training, to assess training effectiveness.  
 Role: Co-Principal Investigator
  
9. Carrillo-Zuniga (PI)      TAA09-051      9/23/2009-3/22/2011 Border Environment Cooperation Commission  
*Environmental Education in Asthma and Pesticides in the US Mexico Border*  
 The overall goal of this proposal was to promote healthy indoor environments, with a focus on asthma and pesticide exposure among low-income Mexican-American elementary and middle schools and families living in border *colonias* and other communities in Hidalgo and Starr counties in Texas  
 Role: Co-Investigator

10. Donnelly (PI)                      200-2008-M-27883                      9/1/08 – 8/31/09  
 U.S. Centers for Disease Control and Prevention  
*Longitudinal Variability of Urinary Pesticide Metabolites Among Children (II)*  
 Provided additional support for the *Border Environmental Health Coordination* study listed below.  
 Role: Research Associate
  
11. Donnelly (PI)                      6 U55RH06350                      09/01/05-1/31/09  
 DHHS-HRSA  
*Border Environmental Health Coordination*  
 Study investigated the utility of health education as an intervention method to reduce childhood exposure to pesticides.  
 Role: Co-Investigator
  
12. Donnelly (PI)                      X4-96608801-0                      10/01/05-09/30/06  
 US Environmental Protection Agency  
*Childhood Exposure & Susceptibility to Pesticides in Texas/Mexico Border Region*  
 Study to measure the relationship between single nucleotide polymorphisms in paraoxonase (PON) gene and elimination of pesticides in children.  
 Role: Co-Investigator
  
13. Donnelly (PI)    200-2005-M-15106 and 200-2005-M-12814    06/30/05-07/07/06  
 U.S. Centers for Disease Control and Prevention  
*Longitudinal Variability in Urinary Pesticide Metabolites Among Children*  
 Studies to evaluate the utility of three types of urine samples, including first morning void, spot sample and 24-hour composite, for evaluating pesticide exposure in children.  
 Role: Research Associate
  
14. Donnelly (PI)                      X4-97672601-0                      10/01/04-09/30/05  
 US Environmental Protection Agency  
*Measurement and Reduction of Childhood Exposure to Pesticides: Texas/Mexico Border*  
 Two separate measurements of pesticide exposure matrices in 20 children.  
 Role: Research Associate
  
15. Donnelly (PI)                      4D-5646-NAEX                      02/05/04-09/03/05  
 US Environmental Protection Agency  
*Children's Neurodevelopmental Assessment Project*  
 Pilot testing in a Hispanic community of an instrument for measuring neurobehavioral development.  
 Role: Research Associate