# **CURRICULUM VITAE (January 2025)**

# Thomas Joseph McDonald School of Public Health Department of Environmental and Occupational Health Texas A&M University

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### **PROFESSIONAL EXPERIENCE:**

- Regents Professor, Health Science Center, School of Public Health, Texas A&M System, September 2019 present.
- Assistant Dean for Academic Affairs, Health Science Center, School of Public Health, Texas A&M System, June 2014 December 2017.
- Interim Associate Dean for Academic Affairs, Health Science Center, School of Public Health, Texas A&M System, November 2015 – October 2016.
- Department Head, Environmental and Occupational Health, Health Science Center, School of Rural Public Health, Texas A&M System, September 2010 – May 2014.
- Interim Department Head, Environmental and Occupational Health, Health Science Center, School of Rural Public Health, Texas A&M System, July 2009 – August 2010.
- Associate Professor, Health Science Center, School of Rural Public Health, Texas A&M System, September 2006 August 2012.
- Assistant Professor, Health Science Center, School of Rural Public Health, Texas A&M System, September 2005 – August-2006.
- Lecturer, Health Science Center, School of Rural Public Health, Texas A&M University System, September 2001 – August 2005.
- TEES Associate Research Scientist, Department of Civil Engineering, Texas A&M University, August 1998 August 2002.
- Principal Chemist, TDI-BI. July 1996 present.
- TEES Assistant Research Scientist, Department of Civil Engineering, Texas A&M University, January 1996 August 1998.
- Manager, Mass Spectrometry Group, Geochemical and Environmental Research Group, Texas A&M University, September 1993 - January 1996.
- Assistant Research Scientist, Geochemical and Environmental Research Group, Texas A&M University, September 1989 - January 1996.
- Post-Doctoral Research Associate, Geochemical and Environmental Research Group, Texas A&M University, June 1988 - August 1989.
- Research Assistant, Department of Oceanography, Texas A&M University, November 1984 May 1988.

# FORMAL EDUCATION:

- Texas A&M University at Galveston, Department of Marine Science, Galveston, TX B.S. Marine Science, May 1980
- Texas A&M University, Department of Oceanography, College Station, TX M.S. Chemical Oceanography, May 1982 Thesis title: The Effects of Dispersants on Incorporation of Volatile Liquid Hydrocarbons into the Water Column.

 Texas A&M University, Department of Oceanography, College Station, TX Ph.D. Chemical Oceanography, May 1988 Dissertation title: Volatile Organic Compounds in Gulf of Mexico Sediments.

### SUMMARY:

A manager with 26 years of management experience in industry and 19 years of graduate academia experience. Highly experienced in the identification and quantitation of volatile and semi-volatile organic contaminants by Low Resolution Mass Spectrometry (LRMS) and Gas Chromatography-Flame Ionization Detection (GC/FID). Currently specializes in petroleum biological marker identification and quantitation for use in bioremediation studies. Has vast experience with all aspects of environmental and geochemical sample handling for trace organic analyses, including sample receipt, sample processing and extraction, extract analysis and final data reporting. Has been involved in numerous federal projects for NOAA, EPA, USFWS, and other agencies. Experience in field oriented sampling projects, including coordination of sampling activities, sample collection and preservation, and data archiving. Experienced Project Administrator, providing clients an essential customer-laboratory interface to ensure a defined scope of work, and provide pricing, turn around time criteria, QC requirements, and reporting requirements.

### **TECHNICAL STRENGTHS:**

- Has very good knowledge of organic geochemistry as it pertains to petroleum contamination of organisms, sediments/soils, and groundwater environments.
- Ability to operate and support various analytical equipment, including installation, operation, maintenance and repair.
- Ability to write concise technical reports, standard operating procedures, and analytical methods.

### **MANAGEMENT STRENGTHS:**

- Providing leadership for organizational growth, in terms of providing a vision of the future, developing a strategy for business approach, setting and achieving measurable goals, reviewing and rewarding successes.
- Identifying and leveraging core competencies of the organization.
- Seeing big-picture and relating issues to general management principles, in terms of organizational achievements, shortfalls, strengths, weaknesses, opportunities, and risks.
- Applying sound management principles to day-to-day activities.

# **TECHNICAL INTERESTS:**

- Environmental Chemistry
- Petroleum Geochemistry
- General Organic Geochemistry
- Development and application of new analytical methods to organic geochemistry and petroleum chemistry.

# SEELCTED MAJOR PROJECT EXPERIENCE:

- ONR ANWAP Projects, Arctic Nuclear Waste Assessment Projects-environmental assessment study, June 1993
   – Sept. 1996, ~ \$2.5 million. (Co-PI)
- EPA EMAP-NC Louisiana Province, Field sampling, analysis and interpretation of environmental data, Apr. 1991 Mar. 1994, ~\$0.86 million. (Co-PI)
- TX General Land Office NRI Study, Field sampling, analysis and interpretation of environmental data in Texas Estuaries, Jun. 1994 – Aug. 1995, ~ \$0.6 million/year. (Co-PI)
- US Fish & Wildlife Service Trace Organic Studies, Contaminant analytical services for analysis of tissues, sediments, plants and water, Jan. 1994 Jan. 1995, ~\$2.2 million. (Co-PI)
- TX General Land Office. Bioremediation Studies of petroleum contaminated coastal marshlands. Jan. 1996 August 2003. ~\$1.5 million/year. (Co-PI)

- EPA, Bioavailability and Risk Assessment of Complex Mixtures November 1996 November 1999. ~\$0.45 million. (Co-PI)
- TX General Land Office Analytical Support for Identifying the Source of Spilled Crude Oil and Refined Petroleum Products. September 1998 – August 2005. ~\$20,000/year. (PI)
- Chemical Land Holdings. "Passaic River Study Area Project." June 1999 January 2001. ~\$280,000. (PI)
- NOAA NS&T Mussel Watch Project, Field sampling, analysis and interpretation of environmental data, October 1999 – Oct.2009, ~\$0.5 million/year. (Co-PI)
- NIH Superfund Research Program, "Procedures to Assess the Hazards of a Superfund Site", April 2000 March 2005, ~\$75,000/year. (Co-PI)
- Entrix, Inc. "PEPCo Chalk Point Damage Assessment." April 2000 May 2010. ~\$500,000. (PI)
- Mineral Management Service, "Effects of Oil and Gas Exploration and Development" Jan. 2000– Jan. 2005, ~\$80,000. (Co-PI)
- USEPA, "Analysis of Multimedia samples." February 2002 December 2002. ~\$50,000. (PI)
- US Fish & Wildlife Service, "Trace Organic Studies, Contaminant analytical services for analysis of tissues, sediments, plants and water." Nov. 2002 – Oct. 2012, ~\$2.2 million. (Co-PI)
- Yukon-Kuskokwim Health Corporation, "The Cape Romanzof Contaminant Migration and Subsistence Receptor Study." June 2002 – August 2004. ~\$160,000. (PI).
- Environ, Inc. "AK Steel Middletown Ohio PCB Project." December 2004 May 2009. ~\$220,000. (PI).
- NIH Superfund Research Program, "Procedures to Assess the Hazards of a Superfund Site", April 2005 March 2010, ~\$80,000/year. (Co-PI).
- NIEHS/CERH, "Cumulative Exposure to Endocrine Disrupting Chemicals (EDCs) and Effects on Estrogenic/Anitestrogenic Activity and Gene Expression." April 2005 – March 2006. \$36,000/year. (PI).
- Mineral Management Service. Investigations of Chemosynthetic Communities on the Lower Continental Slope of the Gulf of Mexico. September 2005 – June 2009. (Co-PI).
- Texas Commission on Environmental Quality. August 2007 September 2009, \$100,000. Houston Air Toxics Biomarkers of Exposure Study (HATBES). (Co-PI).
- NOAA NS&T Mussel Watch Project, Field sampling, analysis and interpretation of environmental data, October 2009 October 2014, ~\$0.5 million/year. (Co-PI).
- DHHS-HRSA. Public Health Traineeship Program. 7/1/09 6/30/11. \$18,000/year (PI),
- DHHS-HRSA. Public Health Traineeship Program. 9/1/09 8/30/12. \$35,000 (total) (PI),
- CDC/ATSDR/DHHS. Border Health and Toxicology Educational Research Program. 9/1/2009 8/31/2012.
   \$250,000/year. (PI),
- DHHS-HRSA. Public Health Traineeship Program. 7/1/11 7/30/12. \$18,000/year (PI).
- USEPA- Office of Children's Health Protection. "Building Environmental Awareness for Teachers and Parents in Head Start Centers in Webb County, Texas". 10/1/11 – 9/30/12. \$100,000/year (PI).
- DHHS-HRSA. Public Health Traineeship Program. 7/1/12 7/30/13. \$17,000/year (PI)
- DOD-Army-Fort Sam Houston. University Affiliation for Principles of Military Preventative Medicine Program of Instruction. (Dr. Tony Rene PI) Role is a CO-I. 10/1/2012 – 9/30/2016. \$693,353 total award.
- DHHS-HRSA. Public Health Traineeship Program. 9/1/14 8/31/15. \$148,000/year (PI).
- DHHS-HRSA/RHRC. 9/1/2016-8/31/2018. \$700,000/year (Co-I).
- T32 Regulatory Science in Environmental Health-Training Program. NIEHS. 6/1/16-5/31/2021. \$255,000/year (Mentor).
- NIEHS Superfund Research Program (P42), "Comprehensive tools and models for addressing exposure to mixtures during environmental emergency-related contamination events." April 2017 – March 2022, \$58,000/year. (PI research Translation Core).
- NIEHS Superfund Research Program, "Comprehensive tools and models for addressing exposure to mixtures during environmental emergency-related contamination events." Supplemental funding - Hurricane Florence and Michael. December 2018 – March 2022, \$206,810 (total) (Co-PI).
- National Academy of Sciences, Engineering and Medicine, "Prioritizing Risks from Oil Spills: Supporting Decisions with Read-Across Using 21st Century Exposure and Toxicological Sciences." December 2018 – December 2019, \$14,910 (Co-PI).
- National Academy of Sciences, Engineering and Medicine, "NAS Early Career Fellowship Gulf Research Program." September 2020-August 2022. Mentor.

- National Academy of Sciences, Engineering and Medicine, "Development of Gulf Coast Resiliency Management Plan Using Sentinel Species and Natural Infrastructure." December 2020 - June 2024, \$75,000 (Co-PI).
- Texas A&M Research Development Fund. "mRAPID Mobile Responding to Air Pollutions Disasters" September 2020-August 2022, \$450,000 (Co-PI).
- NIEHS Superfund Research Program (P42), "Comprehensive tools and models for addressing exposure to mixtures during environmental emergency-related contamination events." April 2022 – March 2027, \$75,000/year1; \$90,000/year 2-5. (DR2 Core).

# **SELECTED ACTIVITIES AND AWARDS:**

- Environmental Toxicology and Chemistry's (ET&C) top 10 Exceptional Papers of 2023: Cordova et al. Environ Toxicol Chem 42(11):2336-2349, 2023
- Aggies Celebrate Teaching! Recognizing Transformational Learning. 2020
- Regents Professor, Texas A&M University 2019.
- Fellow, Institute for Sustainable Communities, Texas A&M University. 2018.
- The Association of Former Students of Texas A&M University, Distinguished Achievement Award at the College Level for Teaching, Fall 2015.
- Editorial Board Member, Regional Studies in Marine Science, Elsevier, July 2014 to present.
- Member of Advisory Council for the TTI "Center for Transportation Safety". Feb. 2011-Feb. 2013.
- Award for Excellence in Leadership and Service, Texas A&M Health Science Center, January 20, 2010.
- Member of San Jacinto Junior College Industrial Advisory Board. January 10, 2010- Present.
- Session Co-Chairperson: Geochemistry Session on Quantitative Determinations of Biological Markers, ACS National Meeting 1994.
- Outstanding Graduate Student Award Division of Environmental Chemistry, American Chemical Society 1988.
- Organic Geochemist, Ocean Drilling Project, Leg 104, 1985.
- Organic Geochemist, Deep Sea Drilling Project, Leg 84, 1982.

# **PROFESSIONAL MEMBERSHIPS:**

- Sigma XI Full Member
- American Chemical Society
- SETAC Member
- Delta Omega Alpha Tau

# PEER REVIEWED PUBLICATIONS:

ResearchGate https://www.researchgate.net/profile/Thomas Mcdonald12 Google Scholar https://scholar.google.com/citations?user=crxuuGEAAAAJ&hl=en&oi=ao Scholars@tamu https://scholars.library.tamu.edu/vivo/display/n407d0459 PubMed http://www.ncbi.nlm.nih.gov/sites/myncbi/thomas.mcdonald.1/bibliography/47799352/public/?sort=date&direction= ascending

Orcid: https://orcid.org/0000-0003-0057-0997

- Fawkes, L.S., Roh, T., McDonald, T.J., Horney, J., Chiu, W.A., Sansom, G.T., 2024. Using the 12-item shortform health survey (SF-12) to evaluate self-rated health in an environmental justice community. Archives of Public Health. 82: 186. https://doi.org/10.1186/s13690-024-01417-v
- Fawkes, L.S., Chiu, W.A., Roh, T., McDonald, T.J., Sansom, G.T. 2024. Human health risk assessment of heavy metals in residential soils - Houston, Texas. J. Exposure Science & Env. Epi. https://doi.org/10.1038/s41370-024-00713-7.

- Cordova, A.C., Dodds, J.N., Tsai, H-S., Lloyd, D.T., Roman-Hubers, A.T., Wright, F.A., Chiu, W.A., McDonald, T.J., Zhu, R, Newman G., Rusyn I. 2023. Application of Ion Mobility Spectrometry-Mass Spectrometry for Compositional Characterization and Fingerprinting of a Library of Diverse Crude Oils. Env. Toxicology and Chemistry. <u>https://doi.org/10.1002/etc.5727</u>. PMID: 37530422
- Marbaniang, C.V., Sathiyan, K., McDonald, T. J., Lichtfouse, E., Mukherjee, P., Sharma, V.K. 2023 Metal Ion-Induced Enhanced Oxidation of Organic Contaminants by Ferrate: A Review. Env. Chem. Letters 21 1729-1743. <u>https://doi.org/10.1007/s10311-023-01584-4</u>.
- Sansom, G.T., Fawkes, L.S., Thompson, C.M., Losa, L.M., McDonald, T.J., Chiu. W.A. 2023. Cancer Risk Associated with Soil Distribution of Polycyclic Aromatic Hydrocarbons within three Environmental Justice Neighborhoods in Houston, Texas. *Env. Geochem.* 45 (2), 333-342. https://doi.org/10.1007/s10653-022-01245-5.
- Cordova, A.C.; Ford, L.C.; Valdiviezo, A.; Roman-Hubers, A.T.; McDonald, T.J.; Chiu, W.A.; Rusyn, I. 2023. Dosing Methods to Enable Cell-Based In Vitro Testing of Complex Substances: A Case Study with a PAH Mixture. *Toxics* 2023, *11*, 19. <u>https://doi.org/10.3390/toxics11010019</u>.
- Kirsch, KR, Newman, GD, Zhu R, McDonald, TJ, Xu, X, Horney JA. 2022. Applying and Integrating Urban Contamination Factors into Community Garden Sitting. J of Geovisulization and Spatial Analysis. November 6:33. https://doi.org/10.1007/s41651-022-00129-7
- Fawkes LW, McDonald TJ, Roh T, Chiu WA, Taylor RJ, Sansom GT. 2022. A Participatory-Based Approach for Assessing Exposure to Lead-Contaminated Drinking Water in the Houston Neighborhood of the Greater Fifth Ward. Int J Environ Res Public Health. Jul 2;19 (13): 8135. PMID: 35805801; PMCID: PMC9265543.
- Stone KW, Felkner M, Garza E, Perez-Patron M, Schmit CD, McDonald TJ, Horney JA. 2022. Changes to Timeliness and Completeness of Infectious Disease Reporting in Texas. After Implementation of an Epidemiologic Capacity Program. Public Health Rep. Vol 1327(4) 679-686. PubMed PMID: 33930278, PMCID: PMC9257493.
- Bell J, Wen Y, Ma X, McDonald TJ, Huang CH, Sharma VK. 2022. Interaction of peracetic acid with chromium (III): Understanding degradation of coexisting organic pollutants in water. Journal of Hazardous Materials Vol 438, 129537. PMID: 35999741.
- Bell J, Ma X, McDonald TJ, Haung CH, Sharma VK. 2022. Overlooked Role of Chromium (V) and Chromium (IV) in Chromium Redox Reaction of Environmental Importance. ACS EST Water, 2: 932-942.
- Kirsch KR, McDonald TJ, Newnan GD, Horney JA. 2022. Surveys of community garden affiliates and soils in Houston, Texas. Environmental Monitoring and Assessment. Vol 194: 330. PMID: 35384492. PMCID: PMC9337712.
- Kahler W. Stone, Felkner, M, Garza E, Perez-Patron M, Schmit C, McDonald TJ, Jennifer A. Horney JA. 2022. Epidemiology surveillance and capacity improvement: A characterization of Texas, 2017. Disaster Med Public Health Prep. 16: 999-1006. PMID: 3372688
- Roman-Hubers AT, Cordova AC, Rohde AM, Chiu WA, McDonald TJ, Wright FA, Dodds JN, Baker ES, Rusyn I. Characterization of Compositional Variability in Petroleum Substances. Fuel (London). 2022 Jun 1; 317. doi: 10.1016/j.fuel.2022.123547. PubMed PMID: 35250041; PubMed Central PMCID: PMC8896784.
- Casillas GA, Johnson NM, Ramirez J, McDonald TJ, Horney JA. 2021. Polycyclic Aromatic Hydrocarbons in Houston Parks after Hurricane Harvey. Environ Justice. 2021 Aug 1; 14 (4):277-287. doi:

10.1089/env.2020.0073. Epub 2021 Aug 12. PubMed PMID: 34484557; PubMed Central PMCID: PMC8404169.

- 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. 2021 Aug; 277:130365. doi: 10.1016/j.chemosphere.2021.130365. Epub 2021 Mar 24. PubMed PMID: 34384193.
- Roman-Hubers AT, Cordova AC, Aly NA, McDonald TJ, Lloyd DT, Wright FA, Baker ES, Chiu WA, Rusyn I. 2021. Data Processing Workflow to Identify Structurally Related Compounds in Petroleum Substances Using Ion Mobility Spectrometry-Mass Spectrometry. Energy Fuels. 2021 Jul 1;35 (13):10529-10539. doi: 10.1021/acs.energyfuels.1c00892. PubMed PMID: 34366560; PubMed Central PMCID: PMC8341389.
- Camargo KM, Foster M, Buckingham B, McDonald TJ, Chiu WA. 2021. Characterizing baseline legacy chemical contamination in urban estuaries for disaster-research through systematic evidence mapping: A case study. Chemosphere. Oct; 281:130925. doi: 10.1016/j.chemosphere.2021.130925. Epub 2021 May 22. Review. PubMed PMID: 34289609; PubMed Central PMCID: PMC8298901.
- Aly NA, Casillas G, Luo YS, McDonald TJ, Wade TL, Zhu R, Newman G, Lloyd D, Wright FA, Chiu WA, Rusyn I. 2021. Environmental impacts of Hurricane Florence flooding in eastern North Carolina: temporal analysis of contaminant distribution and potential human health risks. J Expo Sci Environ Epidemiol. Apr 24; doi: 10.1038/s41370-021-00325-5. PubMed PMID: 33895777.
- Jang S, McDonald TJ, Bhandari S, Rusyn I, Chiu WA. 2021. Spatial and temporal distribution of surface water contaminants in the Houston Ship Channel after the Intercontinental Terminal Company Fire. J Expo Sci Environ Epidemiol. 2021 Jun 2; doi: 10.1038/s41370-021-00343-3. PubMed PMID: 34079063.
- Tölgyesi, Á. Farkas, T. Bálint, M. McDonald, T.J., Sharma, V.K. 2021. A Dilute and Shoot Strategy for Determining Alternaria Toxins in Tomato-Based Samples and in Different Flours Using LC-IDMS Separation. Molecules 26 (4) 1017. PMID: 33671906.
- Roman-Hubers AT, McDonald TJ, Baker ES, Chiu WA, Rusyn I. 2021. A comparative analysis of analytical techniques for rapid oil spill identification. Environ Toxicol Chem. 40(4) 1034-1049. PMID: 33315271.
- Hearon SE, Wang M, McDonald TJ, Phillips TD. 2021. Decreased bioavailability of aminomethylphosphonic acid (AMPA) in genetically modified corn with activated carbon or calcium montmorillonite clay inclusion in soil. J Environ Sci (China). Feb; 100:131-143. PMID: 33279026; PMCID: PMC7719843.
- Pan B, Feng M., McDonald TJ, Manoli K, Wang C, Huang C, Sharma VK. 2020. Enhanced ferrate (VI) oxidation of micro-pollutants in water by carbonaceous materials: Elucidating surface functionality Chemical Engineering Journal. 398:125607.
- Camargo K, Sericano JL, Bhandari S, Hoelscher C, McDonald TJ, Chiu WA, Wade TL, Dellapenna TM, Liu Y, Knap AH. 2020. Polycyclic aromatic hydrocarbon status in post-hurricane Harvey sediments: Considerations for environmental sampling in the Galveston Bay/Houston Ship Channel region. Mar Pollut Bull. 27:111872. doi: 10.1016/j. marpolbul. 2020.111872. (PMID: 33256967).
- Aly NA, Luo YS, Liu Y, Casillas G, McDonald TJ, Kaihatu JM, Jun M, Ellis N, Gossett S, Dodds JN, Baker ES, Bhandari S, Chiu WA, Rusyn I. 2020. Temporal and spatial analysis of per and polyfluoroalkyl substances in surface waters of Houston ship channel following a large-scale industrial fire incident. Environ Pollut. 265 (Pt B):115009. (PMID: 32574947).

- 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. (PMID 32443222).
- Nickodem CA, Menon R, McDonald TJ, Taylor BD. 2020. Circulating Short-Chain Fatty Acids in Preterm Birth: A Pilot Case-Control Study. Repo Sciences. 27: 1181-1186. (PMID 32046422).
- Stone KW, Felkner M, Perez-Patron M, Schmit C, McDonald TJ, Horney JA. 2019. How Do Infectious Disease Epidemiologist Positions Increase Public Health Capacity? Results from a Qualitative Study of Local Health Departments. Health Security. 17(6) 454-461. (PubMed PMID: 31770039).
- Onel M, Beykal B, Ferguson K, Chiu WA, McDonald TJ, Zhou L, House JS, Wright FA, Sheen DA, Rusyn I, Pistikopoulos EN. 2019. Grouping of complex substances using analytical chemistry data: A framework for quantitative evaluation and visualization. PLoS One. 14(10): e0223517. (PMID: 31600275, PMCID 6786635)
- Stone, KW, Casillas, GA, Karaye, I, Camargo, K, McDonald TJ, Horney JA. 2019. Using Spatial Analysis to Examine Potential Sources of Polycyclic Aromatic Hydrocarbons in an Environmental Justice Community. After Hurricane Harvey. Environ. Justice. 12(4) 194-203. (PMID 31770039).
- Sharma, VK, Yu, Z, McDonald, TJ, Jinadatha, C, Dionysiou, DD, Feng, M. 2019. Elimination of antibiotic resistance genes and control of horizontal transfer risk by UV-based treatment of drinking water: A mini review. Front Environ Sci. Eng. 13(3) 37-45. doi: 10.1007/s11783-019-1122-7: PMID: 32133212
- Sansom, GT, Berke, P, McDonald, TJ, Shipp E, Horney, J. 2019. Evaluating the Impact of Race and Gender on Environmental Risk Perceptions in the Houston Neighborhood of Manchester. Environ. Justice 12(3) 92-98. PMID 31871531, PMCID 6927678).
- Trueblood AB, Ross JA, Shipp EM, McDonald TJ. (2019). Feasibility of Portable Finger Stick Cholinesterase Testing in Adolescents in South Texas. J Prim Care Community Health 10 1-6. (PMID: 30929548, PMCID 6444767).
- Sansom, GT, Kirsch, KR, Stone, KW, McDonald, TJ, and Horney JA. (2018). Domestic Exposures to Polycyclic Aromatic Hydrocarbons in a Houston, Texas, Environmental Justice Neighborhood. Environ. Justice 11(5) 183-191. (PMID 30464781; PMCID6241524)
- Feng, M, Jinadatha, C. McDonald, TJ, and Sharma, VK. (2018). Accelerated oxidation of organic contaminants by ferrate (VI): The overlooked role of reducing additives. Env. Sci. & Tech. 52(19) 11319-11327. (PMID 30187746; PMCID6300057)
- Tölgyesi, À, Giri, A, Barta, E., McDonald, TJ, and Sharma VK. 2018. Determination of Thyreostats in Urine using supported liquid extraction and mixed-mode cation-exchange solid-phase extraction: Screening and confirmatory methods. J Chromatogr Sci. (PMID 29878072).
- Mendoza-Sanchez I, Autenrieth RL, McDonald TJ, Cunningham JA. 2018. Biological Limitations of Dechlorination of cis-Dichloroethene during Transport in Porous Media. Environ Sci Technol. 2018 Jan 16; 52 (2):684-691. (PMID: 29236483).
- Horney JA, Casillas GA, Baker E, Stone KW, Kirsch KR, Camargo K, Wade TL, McDonald TJ. (2018). Comparing residential contamination in a Houston environmental justice neighborhood before and after Hurricane Harvey. PLoS One. Feb; 13(2). (PMID: 29420658).

- Brewster CS, Sharma VK, Cizmas L, and McDonald TJ. (2018). Occurrence, distribution and composition of aliphatic and polycyclic aromatic hydrocarbons in sediment cores from the Lower Fox River, Wisconsin, US. Environ Science Pollution Res Int. Feb 13; 25 (5) 4974-4988. (PMID 29204943).
- Tölgyesi, À, Barta E, Simon, A, McDonald, TJ, and Sharma VK. 2017. Screening and confirmation of steroids and nitroimidazoles in urine, blood, and food matrices: Sample preparation methods and liquid chromatography tandem mass spectrometric separations. J Pharm Biomed Anal. 145: 805-813. (PMID 28822347).
- Sansom G., Parras, J., Parras, A., Nieto, Y., Arellano, Y., Berke, P., McDonald T.J, Shipp, E, and Horney, J.A. 2017. The Impacts of Exposure to Environmental Risk on Physical and Mental Health in a Small Geographic Community in Houston, TX. Journal of Community Health. 42(4). (PMID: 28289913).
- Sharma V.K., McDonald T.J., Sohn M., Anquandah G.A.K., Pettine M., and Zboril R., 2017 Assessment of toxicity of selenium and cadmium selenium quantum dots: A Review. Chemosphere. (188) 403-413. (PMID 28892773).
- Luo, Y.S., Cichocki, J.A., McDonald, T.J., and Rusyn, I. 2017. Simultaneous detection of the tetrachloroethylene metabolites S-(1,2,2-trichlorovinyl) glutathione, S-(1,2,2-trichlorovinyl)-L-cysteine, and N-acetyl-S-(1,2,2-trichlorovinyl)-L-cysteine in multiple mouse tissues via ultra-high performance liquid chromatography electrospray ionization tandem mass spectrometry. J Toxicol Environ Health A. 80(9): 513-524. (PMID 28696834).
- Sharma, V.K., Yang, X., Cizmas, L., McDonald, T.J., Luque, R., Sayes, C.M., Yuan, B., and Dionysiou, D., 2017. Impact of metal ions, metal oxides, and nanoparticles on the formation of disinfection byproducts during chlorination. Chem. Eng. Journal. (317) 777-792.
- Cichocki, J.A., Furuya, S., Venkatratnam, A., McDonald, T.J., Knap, A.H., Wade, T.L., Sweet, S., Chiu, W.A., Threadgill, D.W., and Rusyn, I. 2017. Characterization of Variability in Toxicokinetics and Toxidynamics of Tetrachloroethylene Using the Collaborative Cross Mouse Populations. Envrion. Health Perspect. 125(5) 057006-1 057006-12. (PMID 28572074).
- Telesford-Checkley, J.M., Mora, M.A., Gentry, T.J., McDonald, T.J., Boellstorff, D.E., 2017 Impacts of Hormones on Water Quality as Evaluated through *Escherichia coli* and Fecal Sterol Analyses. Water Environ. Res. 89(6): 508-518. (PMID 28545602).
- Cichocki, J.A., Furuya, S. Konganti, K., Luo, Y.S., McDonald, T.J., Iwata, Y., Chiu, W.A., Threadgill, D.W., Pogribny, I.P., and Rusyn, I. 2017. Impact of nonalcoholic fatty liver disease on toxicokinetics of tetrachloroethylene. J. Pharmacol Exp. Ther. 361: 17-28. (PMID 2814637).
- Sansom G., Berke P., McDonald T.J., Shipp E., and Horney J. 2016. Confirming the Environmental Concerns of Community Members Utilizing Participatory-Based Research in the Houston Neighborhood of Manchester. Int. Journal Environ Research Public Health. 13(9). (PMID: 27563915).
- Trueblood, A.B., Rincon, R., Perales, R., Hollingsworth, R., Miller, C., McDonald, T.J. and Cizmas, L.H. 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 Immig and Min Hlth. 18(1) 135-142. (PMID 25538003).
- Sharma, V.K., Johnson N, Cizmas L.H., McDonald T.J., and Kim H. 2016. A review of the influence of treatment strategies on antibiotic resistant bacteria and antibiotic resistance genes. Chemosphere Vol. 150; 702-714. (PMID 26775188).

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- Kennicutt, M.C. II, Brooks, J.M., McDonald, T.J., and Kvenvolden, K.A. (1985). Nonvolatile organic matter at Sites 565-570, Deep Sea Drilling Project Leg 84. In: Initial Reports of the Deep Sea Drilling Project, Vol. 84, pp. 705-717, (R. von Huene, J. Aubouin, et al., editors), U.S. Govt. Printing Office, Washington.
- McDonald, T. J., Brooks, J.M. and Kennicutt II, M.C. (1984). The effects of dispersants on incorporation on of volatile liquid hydrocarbon into the water column. In: T. E. Allen (Ed.) Oil Spill Dispersants: Research, Experience, and Recommendations. STP 840 American Society for Testing and Materials, Philadelphia, pp. 203-223.

### **SELECTED CONFERENCE PROCEEDINGS:**

 Gray, N.R., McMillen, S.J., Requejo, A.G., Kerr, J.M., Denoux, G.J., and McDonald, T.J. (1993). Rapid characterization of PAH's in oils and soils by Total Scanning Fluorescence. First SPE/EPA Joint Conference, SPE/EPA Exploration and Production Environmental Conference 1993. pp. 465-475.

- Wade, T.L. Jackson, T.J., McDonald, T.J., Wilkinson, D.L., and Brooks, J.M. (1993). Oysters as biomonitors of the Apex Barge oil spill. In: International Oil Spill Conference (Prevention, Preparedness and Response). pp. 313-317.
- Kennicutt, M.C. II, Sweet, S.T., McDonald, T.J., and Denoux G.J. (1991). Oil spills in polar climates: The Bahia Paraiso accident. Proceedings 23rd Offshore Technology Conference, pp. 239-247.
- Wade, T.L., Brooks, J.M., Kennicutt, M.C. II, McDonald, T.J., and Denoux G.J. (1991). Oysters as biomonitors of oil in the ocean. Proceedings Offshore Technology Conference, pp. 275-280.
- Kvenvolden, K.A. and McDonald, T.J. (1986). Organic Geochemistry aboard the <u>JOIDES Resolution</u> An Assay. Technical Note #6 pp. 147.
- Kvenvolden, K. A., McDonald, T.J., (1982). Gas hydrates in continental margin sediments of the Middle America Trench - Summary of results from DSDP/IPOD Leg 84: Methane Hydrates Workshop, Technical Proceedings, DOE/METC/82-49, pp. 82-91.

### SELECTED POSTERS AND PRESENTATIONS:

- "Gulf Coast Resilience: Nature Based Solutions to Mitigate Toxic Flooding". W. Chiu, S. Cunniff, J. Kaihatu, T. McDonald, L. Padilla, and L. Scobel. Florida Climate Week, 2024.
- "Soil Contamination in Houston Ship Channel: Unveiling Hidden Health Risks in Vulnerable Communities". R. Hernandez, T. Mims, B. Dixon, N. Johnson, J. Maddock, T. McDonald, G. Newman, G. Sansom. Superfund Program Annual Meeting, Albuquerque, NM. 2023.
- "Human Health Risk Assessment of Heavy Metals in Residential Soil from the Greater Fifth Ward Neighborhood in Houston, Texas". L.S. Fawkes, W.A. Chiu, T. Roh, T.J. McDonald, G. Sansom. ASA, CSSA International Annual Meeting, St. Louis MO. 2023
- "Rapid Hazard Identification Using Innovative High-Throughput Bioactivity and Chemical Profiling Assays: A Case Study of a Hypothetical Spill of a Complex Substance" A.T. Roman-Hubers, Z. Chen, T. McDonald, K. Tuttle, W. Chiu, and I. Rusyn. Society of Toxicology National Meeting in San Diego, CA 2022.
- "Dosing Methods to Enable Cell-Based In Vitro Testing of Environmental Mixtures and Complex Substances" Cordova, A., Roman-Hubers, A., Valdiviezo, A., McDonald, T. Chiu, W., and Rusyn I. Society of Toxicology National Meeting in San Diego, CA 2022.
- "Historical spatial and temporal distribution of legacy contaminants in Galveston Bay and the Houston Ship Channel (GB/HSC) a systematic evidence map. Camargo, K., Foster, M., Buckingham, B., McDonald, T. and Chiu, W. SRP Annual Meeting, College Station, TX Dec 2020.
- "Developing Passive Dosing Methods to Enable in Vitro Testing of Environmental Samples and Complex Mixtures." Cordova, A., Roman-Hubers, A., Valdiviezo, A., McDonald, T. Chiu, W., and Rusyn I. SRP Annual Meeting, College Station, TX Dec 2020.
- "Identification of polycyclic aromatic hydrocarbons (PAHs) in complex mixtures using non-target high throughput analysis using ion mobility spectrometry-mass spectrometry (IMS-MS). Roman-Hubers, A. Cordova, A. Rhode A, McDonald, T., Baker, E., Lloyd, D., Wright, F., Chiu, W, and Rusyn, I. SRP Annual Meeting, College Station, TX Dec 2020.

- "Spatial and temporal distribution of surface water quality contaminants after the Intercontinental Terminal Company Fire." Jang, S., McDonald, T., Bhandari, S., Rusyn, I. and Chiu W. SRP Annual Meeting, College Station, TX Dec 2020.
- "Environmental impacts of Hurricane Florence flooding in Easter North Carolina: Temporal analysis of contaminant distribution and potential human health risks. Aly, N. Casillas, G., Luo, Y-S., McDonald, T., Wade, T., Chiu, W., and Rusyn, I. SRP Annual Meeting, College Station, TX Dec 2020.
- "Temporal and Spatial Analysis of Poly/perfluoroalkyl Substances in Houston Ship Channel Following Firefighting Foam Deployment at the Intercontinental Terminal Company Fire". Aly, N., Luo, Y.S., Liu, Y., Casillas, G., McDonald, T., Kaihatu, J., Jun, M., Ellis, N., Gossett, S., Dodds, J., Baker, E.S., Chiu, W.A. and Rusyn, I. SRP Annual Meeting, Seattle, WA. Nov 2019.
- "Passive dosing methods for in vitro testing of UVCB substances". Roman-Hubers, A. Chen, Z., Liu, Y., McDonald, T., Wade, T., Lyon, D., Chiu, W., and Rusyn, I. SRP Annual Meeting, Seattle, WA. Nov 2019.
- "A multi-tissue organotypic human in vitro model for rapid identification of environmental chemicals and mixtures". Chen Z, Yanagisawa L, Liu Y, Camargo K, Casillas G, McDonald TJ, Horney JA, Chiu WA, Rusyn 58th Annual Meeting of the Society of Toxicology; 2019 Baltimore Maryland, March
- "Enhanced Oxidation of Organic Pollutants in waster by activated Ferrate ((VI): Electron-transfer versus oxygen-atom transfer reductants. Mingbao Feng, C Jinadatha, T.J. McDonald, V.K. Sharma. 2019. American Chemical Society National Meeting, Orlando, Florida, March 3-9,
- "Assessing Environmental Justice Neighborhood Soils for Contamination after Hurricane Harvey Flooding". Jennifer Horney, Gaston A Casillas, Kahler W. Stone, Thomas J. McDonald. 2019. Soil Science Society of America International Meeting. January, San Diego, California.
- "A longitudinal assessment of PAHs in Houston parks after Hurricane Harvey". Gaston Casillas, Kahler Stone, Thomas McDonald, Jennifer A. Horney. 2018. NIEHS Superfund Annual Meeting, Sacramento CA, November.
- "Post-Hurricane Harvey Sediments: PAH Distributions and Relative Sources". Krisa M Camargo, Anthony H Knap, Timothy M Dellapenna, Thomas J McDonald, Weihsueh A Chiu. 2018. NIEHS Superfund Annual Meeting, Sacramento CA, November.
- "Grouping Complex Substances and Mixtures using Untargeted Expsomics Data". Melis Onel, Burcu Beykal1, Kyle Ferguson, John House, Thomas J. McDonald, Rajib Mukherjee, Lan Zhou, Fred A. Wright, Ivan Rusyn, Efstratios N. Pistikopoulo. 2018. NIEHS Superfund Annual Meeting, Sacramento CA, November.
- "Environmental Sampling Strategies for Disasters: Lessons Learned from Hurricane Harvey Response". Krisa Camargo, Mikyoung Jun, Jennifer Horney, Ivan Rusyn, Weihsueh Chiu, Thomas J. McDonald, and Anthony Knap. 2017. NIEHS Superfund Annual Meeting, Philadelphia PA December.
- "Titanium Dioxide and Zinc Nano-particles: Disinfection byproduct formation in synthetic freshwater." Leslie Cizmas, Cole Gray, Virender K. Sharma, and Thomas J. McDonald. 2017. American Chemical Society, San Francisco, April 2017.
- "Validation of novel biomarkers of traffic-related ambient air pollution exposure in a susceptible south Texas population." Jairus Pulczinski, Krystal Rychlik., Tara Ramani, Thomas McDonald, Genny Carrillo-Zuniga, Kirsten Koehler, Josias Zietsman, and Natalie Johnson. American Chemical Society, Philadelphia, PA, 2016. (Invited Talk)
- "Inter-individual variability in the relationship between toxicokinetics and toxicodynamics of tetrachloroethylene." Joseph A. Cichocki, Shinji Furuya, Grace Chappell, Abhishek Venkatratnam, Stephen

Sweet, Terry Wade, Anthony Knap, Thomas McDonald, Weihsueh Chiu, David Threadgill, Ivan Rusyn. 2016 Society of Toxicology National Meeting in New Orleans, LA.

- "Public Health and the Environment" T.J. McDonald. 2013. Chemistry Department –University of California Chemistry Career Seminar Series.
- "Neuromotor Function and Work Injury Risk among Hispanic Adolescent Farmworkers: Pilot test Findings."
   E.M. Shipp, A. Bhattcharya, C. Cox, S. Maindale, L. Jiang, Y. Morado, and T.J. McDonald." 2013 ASHCA National Conference, Minneapolis MN.
- "DNA Damage in Cichlid fish and Environmental Forensic Analysis of the Origin of PAHs at a Guatemalan oil Field." C.W. Theodorakis, J.W. Bickham, K.C. Donnelly, T.J. McDonald, and P. Wilinik. 2013 SETAC National Meeting, Nashville, TN
- "Distribution of Oil Seepage in the Northern Gulf of Mexico." T.J. McDonald, J. M. Brooks, M.C. Kennicutt, II, and B.B. Bernard. 2012 ACS Spring National Meeting, San Diego California.
- "Selected Topics in Environmental Health Applied to Family Medicine." T.J. McDonald, L. Cizmas, and J. Ross. 2011 Society of Toxicology National Meeting in Washington DC.
- "Border Environmental Health Toxicology and Education Research Program" T.J. McDonald, L. Cizmas. 2011 UTHSC-San Antonio CME Conference in Laredo Texas.
- "MC 252 Riser Fluid: Change in Chemical Composition after Deep Water Release in the Gulf of Mexico". R. Barrick, A. Jeffrey, and T. J. McDonald 2010 SETAC Annual Meeting, Portland Oregon.
- "Integrating Health Promotion into Biomarker Studies". K.C. Donnelly, S. Safe, R.L. Autenrieth, L. Cizmas, and T.J. McDonald. 2009 SOT Annual Meeting, Salt Lake City, UT
- "A SPME-based passive sampler for sediment quality assessment of regulated organic contaminants: lab and field studies. K. Maryu, D. Tskuda, W. Lao, V Raco-Rands, D. Greenstein, D. Diehl, M. Kelley, B. Duncan, and T.J. McDonald. 2009 SETAC Annual Meeting, New Orleans, LA.
- "Methods for Monitoring Environmental Contamination in Central and Eastern Europe." T.J. McDonald, Lingenfelter, R., Z. Naufal, C. Naspinski, , R.L. Autenrieth, A. Islamzadeh, K.C. Donnelly. AECEH Bi-Annual Meeting, Istanbul Turkey. March 2008.
- Lingenfelter, R., Z. Naufal, L. Cizmas, C. Naspinski, L.Y. He, G.D. Zhou, T.J. McDonald, G. Denoux, R.L. Autenrieth, A. Mektiev, A. Islamzadeh, K.C. Donnelly. (2006). Measurement of exposure to complex mixtures of polycyclic aromatic hydrocarbons in human populations. The Toxicologist. 90(1): 255
- Naufal, Z., R. Finnell, G.D. Zhou, T.J. McDonald, L. Zhu, L. Zhiwen, L.J. Pei and K.C. Donnelly. 2006. Estimation of Genotoxic Exposures in Children with Birth Defects in Shanxi, China. The Toxicologist. 90(1): 255
- "Sediment and Tissue Hydrocarbons Effects of oil and gas exploration development." T.J. McDonald, J.M. Brooks and A.D. Hart. MMS ITM Meeting, January 2005 (New Orleans, LA).
- "Long-term temporal and spatial patterns of environmental contaminants at NOAA National Status and Trend sites." S. J. McDonald, E.N. Powell, J.A. Ramirez, T.J. McDonald, D.S. Frank, R.R. Fay and J. M. Brooks SETAC Annual Meeting November 2004 (Portland Oregon).

- "Contaminants in environmental samples from residential areas in Sumgayit, Azerbaijan." T.J. McDonald, K.C. Donnelly, J. Bickham, and R.L. Autenrieth. NIEHS Conference – Central and Eastern European Environmental Health Conference (October 2004 – Prague Czech Republic).
- "Genotoxicity assessment of wood-preserving waste contaminated sediment and groundwater undergoing bioremediation." S. Garcia, K.C. Donnelly, T.J. McDonald, R.L. Autenrieth, and D. L. Golden). NIEHS Conference on Bioremediation, June 2002.
- "Genotoxicity and chemical analysis of wood-preserving waste." (L. Cizmas, K.C. Donnelly, T. J. McDonald, and R. Barhoumi). SETAC, April 2001.
- "Differential biodegradation of polynuclear aromatic hydrocarbons." (T.J. McDonald, S. Aldrett, J.S. Bonner, R.L. Autenrieth, and P.M. Morris). Fourth International Battelle - In-Situ and On-Site Bioremediation Symposium, New Orleans, Louisiana, April 1997.
- "Macroseepage of oil and gas on the west Africa margin." (J. M. Brooks, W.R. Brumbaugh, M. Brandau, S.W. Brown, W.R. Bryant, and T.J. McDonald). London, England, February 1997.
- "Petroleum degradation by a defined microbial microbial community." (P.J. Morris, R. Frontera-Suau, F.D. Bost, R. Samuel, A. Stack, and T.J. McDonald). ACS 211th National Meeting, New Orleans, Louisiana, March 24-28, 1996.
- "Extensive biodegradation of fossil fuels extracted from soil and sediments." (P. J. Morris, M.E. Shelton. T.J. McDonald and P.J. Chapman). Gordon Research Conference on Applied Microbiology, Plymouth, New Hampshire, 2-7 July 1995.
- "Assessing bioremediation of crude oil in soils and sludges." (S. J. McMillen, N. R. Gray, J. M. Kerr, A. G. Requejo, T. J. McDonald and G.S. Douglas). Third International In Situ and On-Site Bioremediation Symposium. San Diego, California April 1995.
- "Characterization of contaminant sources in marine sediments using multivariate analysis: An approach to an environmental assessment." (A. G. Requejo, T. J. McDonald, G. J., Denoux, M. C. Kennicutt, II, and R. Sassen).
   4th Latin American Congress on Organic Geochemistry, Bucaramanga, Colombia, 1994.
- "Significance of two- and three-ring aromatic hydrocarbon distributions on northern Gulf of Mexico oils." (A. G. Requejo, R. Sassen, M. C. Kennicutt, II, T. J. McDonald, G. J., Denoux, and J. M. Brooks.) 4th Latin American Congress on Organic Geochemistry, Bacaramanga, Colombia, 1994.
- "Origin of high sulfur oils, Gulf of Mexico continental slope." (R. Sassen, A. G. Requejo, T. J. McDonald, M. C. Kennicutt, II, and J. M. Brooks.) GCAGS-GCS/SEPM Annual Convention, Austin Texas 1994.
- "Quantitation of Saturated and Aromatic Biological Markers by GC/MS." (T. J. McDonald, M. C. Kennicutt, II, A. G. Requejo, and G. J. Denoux.) ACS National Meeting, Washington D.C., August 1994.
- "Quantitation of Aromatic Hydrocarbons in Petroleum: A New Look at an Old Approach." (A. G. Requejo, N. R. Gray, T. J. McDonald, G. J. Denoux, R. Sassen, and J. M. Brooks.) ACS National Meeting, Washington D.C., August 1994.
- "Utility of Biological Markers and Aromatic Hydrocarbons in Correlating Submarine Seeps and Assessing Their Origin and Maturation Level." (A. G. Requejo, R. Sassen, T. J. McDonald, M. C. Kennicutt, II, G. J. Denoux, and J. M. Brooks.) AAPG Hedberg Conference on Near Surface Expression of Hydrocarbon Migration, Vancouver British Columbia, April 1994.

- "Quality assurance/quality control of large litigation sensitive data sets: Examples from the Exxon Valdez oil spill." (T. L. Wade, J. M. Brooks, M. C. Kennicutt, II, T. J. Jackson, T. J. McDonald, and G. J. Denoux.) ASTM Meeting, Atlanta, Georgia 1993.
- "Quantitative determination of steranes, triterpanes, and aromatized steranes in petroleum." (Thomas J. McDonald., M. C. Kennicutt. II, T. J. Jackson, G. J. Denoux, P. A. Comet and J. M. Brooks). ASMS 39th National Meeting, Nashville, TN, June 1991.
- "Oil spills in polar climates: The Bahia Pariso accident." (M. C. Kennicutt, II, S. T. Sweet, T. J., McDonald, and G. J. Denoux.). Offshore Technology Conference, Houston Texas 1991.
- "The effects of the 1990 Galveston Bay oil spill on hydrocarbon contamination in aquatic organisms." (J. M. Brooks, T. L. Wade, S. J. McDonald, D. L. Wilkinson, M. C. Kennicutt, II, and T. J. McDonald). Offshore Technology Conference, Houston, Texas 1991.
- "Oysters as biomonitors of oil in the ocean." (T. L. Wade, J. M. Brooks, M. C., Kennicutt, II, T. J., McDonald, and G. J. Denoux). Offshore Technology Conference, Houston, Texas 1991.
- "Biomarker Abundance's and Fingerprints as Paleodepositional Signals in Extensively Altered Oils from Sarita, Eugene Island-330, and South Marsh Island-128 Fields, Gulf of Mexico Region". (J. K. Rafalska, P. A. Comet, M. C. Kennicutt, II, T. J. McDonald, and J. M. Brooks). GSA National Meeting, Dallas Texas, October 1990.
- "Source and maturity of organic matter in selected Prydz Bay sediments Site 739C and Site 741A, ODP Leg 119".
   (T. J. McDonald, M. C. Kennicutt II, and J. K. Rafalska), Southern Regional Geochemistry Meeting, May 1990.
- "Quantitative Determination of Hopanes, Steranes, and Aromatized Steranes by GC/MS" (T. J. McDonald, M. C. Kennicutt II, J. M. Brooks, and P. A. Comet), Invited Paper ASTM Meeting on Gas Chromatography, Houston, Texas, October 1989.
- "Hydrocarbons in Bering Sea Sediments" (M. C. Kennicutt II, J. M. Brooks, and T. J. McDonald), Poster Session at the 4th International Meeting on Organic Geochemistry, Paris, France, September 1989.
- "Volatile Organic Compounds in Gulf of Mexico Sediments" (T. J. McDonald, M. C. Kennicutt II, J. M. Brooks, and R. R. Fay), Poster Session at the National GSA Meeting, Denver Colorado, November, 1988.
- "Relationship between oil and gas seepage and gas hydrates in the Gulf of Mexico" (J. M. Brooks, H. B. Cox, T. J. McDonald, and M. C. Kennicutt II), 12th Organic Geochemistry Meeting, Julich, Germany, Sept. 1985.
- "Thermogenic Gas Hydrates in the Gulf of Mexico" (M.C. Kennicutt II, J. M. Brooks, R. R. Fay, T. J. McDonald, and R. Sassen). Poster session at the Gordon Research Conference on Organic Geochemistry, Plymouth, New Hampshire, 20-24 August 1984.
- "Gas Hydrates of the Middle America Trench DSDP/IPOD Leg 84" (K. A. Kvenvolden and T. J. McDonald). DOE Meeting on Gas Hydrates, Morgantown, West Virginia, 1983.
- "Volatile Organic Compounds in the Marine Environment" (T. J. McDonald, J. M. Brooks and M. C. Kennicutt II). Southern Regional Organic Geochemistry Meeting, 19 April 1983.
- "The Effects of Dispersants on Volatile Hydrocarbon Incorporation into the Water Column" (T. J. McDonald, J. M. Brooks and M.C. Kennicutt II). Symposium on Oil Spill Dispersant: Five Years of Research, Miami, Florida, 12-13 October 1982.
- "Gas hydrates of the Middle America Trench Region: DSDP/IPOD Leg 84" (T. J. McDonald, J. M. Brooks, M. C. Kennicutt II, and K. A. Kvenvolden). Southern Regional Geochemistry Meeting, April 1982.

 "Volatile Organic Studies in Gulf of Mexico Estuarine and Coastal Ecosystems" (J. M. Brooks, M. C. Kennicutt II, T. J. McDonald, and J. K. Kim). Joint AGU and ASLO Meeting, San Antonio, Texas, 16-19 February 1982.

#### **GRADUATE STUDENT COMMITTEES:**

#### **Doctoral Level Candidates:**

Michael A. Steinberg Marc A. Mills Cheryl A. Page Joyanto Routh William Reeves Katherine Springman Shannon Garcia Leslie Cizmas Gary Barbee Erica D. Bruce Tracie D. Phillips Petros Dimitriou-Christidis Annika Parr Christine Naspinski Ziad Naufel Matthew Kelly John Griesenbeck Sanghyun Kim Christopher Duncan Gabriela Morales Ishan Desai Christopher Fuller Judlyn Merium-Telesford Kun-Ching Cho (Ted) Do Gyun Lee Myung-Hee Kim Ann Vuong Mayura Shinda Heather Riddick Garett Sansom Amber Trueblood Melisabel Munoz Urriola Kahler Stone Jeff Levin Yu-Syuan Luo Nathan Gardiner Gaston A. Casillas Cole M. Gray Benika C. Dixon Katie Kirsch Zunwei Chen Krisa Camargo Sara E. Hearon Alexander Blanchette Noor Alaa Aly

Ph.D. Toxicology Ph.D. Civil Eng. Ph.D. Civil Eng. Ph.D. Geology Ph.D. Vet. Med. Ph.D. Toxicology Ph.D. Vet. Med. Ph.D. Vet. Med. Ph.D. Toxicology Ph.D. Civil Eng. Ph.D. Toxicology Ph.D. Civil Eng. Ph.D. Toxicology Ph.D. Toxicology Ph.D. Toxicology Ph.D. Toxicology Ph.D. Epidemiology Ph.D. Civil Eng. Ph.D. Food Toxicology Ph.D. Food Toxicology Ph.D. Civil Eng. Ph.D. Civil Eng. Ph.D. WFSC Ph.D. Civil Eng. Ph.D. Civil Eng. Ph.D. Civil Eng. DrPH Epidemiology DrPH Epidemiology DrPH Environmental DrPH Epidemiology DrPH Environmental Ph.D. Civil Eng. **DrPH** Epidemiology DrPH Environmental Ph.D. Toxicology Ph.D. Geology Ph.D. Toxicology DrPH Environmental DrPH Epidemiology DrPH Epidemiology Ph.D. Toxicology Ph.D. Toxicology Ph.D. Toxicology Ph.D. Toxicology Ph.D. Toxicology

December 1996 August 1997 August 2000 May 1999 May 2000 December 2000 May 2001 August 2003 May 2004 May 2007 December 2006 August 2005 August 2006 December 2008 August 2008 May 2010 August 2008 August 2010 December 2010 December 2011 December 2013 May 2011 August 2014 December 2013 August 2012 December 2012 December 2013 December 2013 May 2015 August 2016 August 2016 December 2017 May 2018 August 2018 August 2018 May 2019 August 2019 May 2020 August 2020 August 2020 December 2020 May 2021 August 2021 August 2021 December 2021

Member Member Member Co-Chair Member Member Member Member Member Member Member Member Member Co-Chair Member Chair Member Chair Member Member Member Member Chair Member Member Member Member Member Member Member Co-Chair Member Member Member

Alina Roman-Hubers	Ph.D. Toxicology	May 2022	Member
Leanne Fawkes	DRPH PHLS	August 2022	Co-Chair
Nicholas Drury	Ph.D. Toxicology	August 2022	Member
Alexander Estrada	Ph.D. Chemistry	December 2022	Member
Shubhangi Vasudeo	DrPH Epidemiology	December 2022	Member
Alan C. Valdiviezo-Medellin	Ph.D. Toxicology	December 2022	Member
Shih H. Yang	Ph.D. Civil Engineering	December 2022	Member
Whitlee Migl	DrPH Environmental	May 2023	Co-Chair
Laura G. White	Ph.D. Archeology	August 2023	Member
Toriq A. Mustapha	Ph.D. Toxicology	August 2023	Member
Alexandra C. Cordova	Ph.D. Toxicology	August 2023	Member
Hsing-Chieh Lin	Ph.D. Toxicology	May 2024	Member
Xiara Favorite	Ph.D. Toxicology	May 2024	Member
En-Hsuan Lu	Ph.D. Toxicology	August 2024	Member
Ruiren Zhou	Ph.D. WMHS	August 2024	Member
Kelly Rivenbark	Ph.D. Toxicology	August 2024	Member
Ramiro Chavez Mota	Ph.D. WMHS	December 2024	Member
Michael Sipowicz	Ph.D. FSTC	In Progress	Member
Jacquita Johnson	<b>DrPH Environmental</b>	In Progress	Member
Jacquita Johnson Haley Moyer	DrPH Environmental Ph.D. Toxicology	In Progress In Progress	Member Member
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Haley Moyer	Ph.D. Toxicology	In Progress	Member
Haley Moyer Marianna Saitas	Ph.D. Toxicology Ph.D. Toxicology	In Progress In Progress	Member Member
Haley Moyer Marianna Saitas Christopher Marbaniang	Ph.D. Toxicology Ph.D. Toxicology DrPH Environmental	In Progress In Progress In Progress	Member Member Co-Chair
Haley Moyer Marianna Saitas Christopher Marbaniang Kalyn Dinh	Ph.D. Toxicology Ph.D. Toxicology DrPH Environmental Ph.D. Toxicology	In Progress In Progress In Progress In Progress	Member Member Co-Chair Member
Haley Moyer Marianna Saitas Christopher Marbaniang Kalyn Dinh Ibrahim Alshammari	Ph.D. Toxicology Ph.D. Toxicology DrPH Environmental Ph.D. Toxicology Ph.D. Toxicology	In Progress In Progress In Progress In Progress In Progress	Member Member Co-Chair Member Member
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Masters Level Students:

Katherine A. Allan	M.S. Geology	December 1996	Member
Jeffrey L. Bauguss	M.S. Civil Eng.	May 1997	Member
Robert Graham	M.S. Geology	August 1999	Member
Cydney A. Bizzell	M.S. Civil Eng.	December 1999	Member
Christy Gomez	M.S. Toxicology	December 2002	Member
Heath S. Bookman	MSPH Env. Occ. Hlth.	May 2002	Member
Julie A. Hall	M.S. Education	August 2002	Member
Rebecca Lingenfelter	MSPH Env. Occ. Hlth.	August 2002	Member
Suzanne Weid	MSPH Env. Occ. Hlth	December 2004	Co-Chair
Tejaswi Bhari	MSPH Env. Occ. Hlth	December 2004	Member
Stephen A. Boulware	MSPH Env. Occ. Hlth	August 2005	Member
Cynthia Hart	MSPH Env. Occ. Hlth.	May 2006	Member
Hedy Chawsheen	MSPH Env. Occ. Hlth.	May 2006	Member
Xavier Gonzales	MSPH Env. Occ. Hlth.	December 2006	Member
Sophia Johnson	MSPH Env. Occ. Hlth.	December 2006	Chair
Rebecca P. Kohn	MSPH Env. Occ. Hlth.	May 2007	Chair
Mark Kelinske	MSPH Env. Occ. Hlth.	May 2007	Chair
Matthew Smith	MSPH Env. Occ. Hlth.	August 2008	Member
Cecelia Oberman	MSPH Env. Occ. Hlth.	December 2008	Chair

Jeffrey Bowman	MSPH Env. Occ. Hlth.	May 2010	Chair
Danielle Donnelly	MSPH Env. Occ. Hlth.	May 2009	Co-Chair
Jalyn Stineman	MSPH Env. Occ. Hlth.	May 2009	Member
Sinem Artan	M.S. Geology	December 2010	Member
Clint Daily	M.S. Food Toxicology	December 2012	Member
Daniel Brooks	M.S. Oceanography	May 2014	Member
Chase Brewster	MSPH Env. Occ. Hlth.	August 2015	Chair
Jairus Pulczinski	MSPH Env. Hlth.	August 2016	Member
Christopher Sandoval	M.S. WFSC	August 2017	Member
Lark Heston	M.S. WFSC	August 2021	Member
Samantha Goodman	MS Toxicology	December 2021	Member
Jackson Malone	MWM WMHS	May 2022	Member
Ryan Marrero-Vila	MWM WMHS	May 2022	Member
Joshua Bell	MS WMHS	May 2022	Member
Xiao Min Matthew Ooi	MS WMHS	August 2022	Member
Sam B. Pence	MNR NRDV	December 2022	Member
Alicia Lin	MS Toxicology	May 2023	Member
Henry Harrington	MWM WMHS	December 2023	Chair
Michelle Wood-Ramirez	MWM WMHS	December 2023	Chair
Azzah Kurdi	MWM WMHS	December 2023	Chair
Nigar Maharramova	MWM WMHS	May 2024	Chair
Lauren Salcido	MWM WMHS	May 2024	Chair
Layne Wells	MWM WMHS	May 2024	Chair
Ayooluwabami Odusote	MWM WMHS	May 2024	Member
Evan Ledet	MWM WMHS	December 2024	Chair
Norberto Barragan	MWM WMHS	December 2024	Chair
Yancy Felps	MWM WMHS	December 2024	Chair
Jennifer Poole	MS Toxicology	In Progress	Member
Cash Kinsey	MWM WMHS	In Progress	Chair
Morgan Kassabian	MSPH PHPM	In Progress	Member
Melena Desai	MWM WMHS	In Progress	Chair
Lois Williams	MWM WMHS	In Progress	Co-Chair
Chloe Rodriguez	MWM WMHS	In Progress	Member
Mallary Stroh	MWM WMHS	In Progress	Chair
Asia Cavazos	MWM WMHS	In Progress	Chair
Anna Christiansen	MWM WMHS	In Progress	Chair
Emily Zhang	MWM WMHS	In Progress	Chair

### **SERVICE ACTIVITIES:**

### TAMHSC/Texas A&M University

HSC Research Advisory Committee (2007 to 2009). Appointed HSC EHS committee (2008 to 2009). Appointed HSC Research Facilities Advisory Committee (2011 to 2014). Appointed HSC RCR Allegation Review Committee (May to August 2011). Appointed HSC CAFRT Committee (2008 to 2012). Elected HSC Compliance Committee, 2013 to August 2021. Appointed HSC Environmental Management System, 2013 to December 2017. Appointed TAMU Faculty Advisor for Student SETAC Organization. 2015 to 2017 TAMU Faculty Senate. January 2018 to September 2021. Elected TAMHSC College of Pharmacy Search committee for Associate Dean for Academic Affairs. 2020. Appointed TAMU Chair - Committee for Chairs and Professorships-College of Geosciences. 2018- 2022 HSC APT Review Committee for Pharmacy, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023. Appointed. TAMU Faculty Advisor for Beta Theta Pi. 2016 to present TAMU Faculty Advisor for Iron Spikes. 2020 to present TAMU Faculty Advisor for Freshman Aggies in Medicine. 2024 to present TAMU CAFRT Committee (2016 to present). Elected TAMU CAFRT Chair (Jan 2023 to present). Appointed TAMU IRB Review Board Member. 2016 to present. Appointed/Elected TAMU University Disciplinary Appeals Panel (UDAP). 2018 to present. Appointed.

### **School of Public Health**

SRPH Nominations Committee (member) (2004-2008). Appointed
SRPH Curriculum Committee (member) (2005-2009). Appointed
SRPH APT Committee (member) (2006-2009). Elected
SRPH Faculty Leadership Council (secretary) (2008-2009). Elected.
SPH Faculty Advisor for the Student Rural Public Health Organization (2007 to May 2012). Appointed
SRPH Research Advisory Committee (2006-2009). Appointed
SPH Dean Search Committee (2014). Elected
SPH Faculty HPCHS Department Head Search Committee (2014) Appointed
SPH Chair of the search committee for BSPH Department Head (2014). Appointed
SPH Chair of the search committee for HPM Department Head (2020). Appointed
SPH HPM Faculty Search Committee (2021-2022) Appointed
SPH APT Committee (Chair, non-voting) (2019-2024). Appointed
SPH Health and Behavior Faculty Search Committee (2023-2024). Appointed
SPH Health Policy and Management APT Committee (2024). Appointed

# **Environmental and Occupational Health Department**

Faculty EOH Search Committee (2007-2008) Appointed Faculty EPI/Biostatistics Search Committee (EOH Representative) (2007-2008) Appointed Chairman EOH Industrial Advisory Committee (2009 to 2014) Appointed

### **State and Regional**

Member of San Jacinto Junior College Industrial Advisory Board. January 10, 2010-2023. Appointed from San Jacinto College.

Member of the Advisory Council for the Center for Transportation Safety of the Texas Transportation Institute. January 2011 to January 2012. Appointed from TTI.

### National and International

Certified CEPH Site Visitor, July 2011. Recertified March 2017 (new criteria).

### **Professional Service**

**Editorial Review Board, Regional Studies in Marine Science. July 2014 to present.** NSF, MRI Review Panel April 2010 NIEHS Deepwater Horizon Disaster: Impacts on Human Health April 2011 NIEHS SRP Review Panel, November 2012 GOMRI Theme 5 Panel Review. July 2017.

# Current Graduate Courses where I am the instructor of record:

PHEO 605 CHEMICAL HAZARD RISK ASSESSMENT (Chemical and biological methods for testing hazardous chemicals and complex mixtures; chemical analysis; microbial bioassays; developmental toxicity; enzyme induction; mammalian cell culture.) (Fall 2018, Fall 2019, Fall 2020, Fall 2021, Fall 2022, Fall 2023, Fall 2024)

**PHPM 604 Population and Public Health for Health Professionals** (Public health and its concentration areas; examination of how the federal, state and local health care and public health system/infrastructure has evolved; public health problems, diseases and risk factors; role of public health in preventing/alleviating same; reviews the core functions of public health, Executive MHA only) (Fall 2018, Fall 2019, Fall 2020, Fall 2021).

# Graduate Courses where I am the instructor of record (taught in the past):

**PHEO 615** Environmental Measurements (Theory and practice of analytical methods used in the study of environmental sciences; data quality of objectives, instrumental and wet chemical techniques used in measurement of environmental quality parameters and contaminants).

**PHEO 650 RISK ASSESSMENT** (Introduction to the general methodology of Quantitative Risk Assessment; introduction to methods of modeling exposure and selection of toxicity values, as well as risk characterization. Students utilize case studies to learn the general methods of risk assessment; also reviews the importance of and methods for risk communication and management.)

**PHEO 617 ENVIRONMENTAL/OCCUPATIONAL ASSESSMENT.** This course is designed to provide students with an understanding of occupational exposure assessment. Students will gain experience in sample collection for occupational settings and occupational exposure analysis.

# These classes are provided to students as necessary to fulfill graduation requirements.

PHEO 685 DIRECTED STUDY Student investigation of a topic not covered by other formal courses.

PHEO 791 Research for doctoral dissertation.

# Current Undergraduate Courses where I am the instructor of record:

PHLT 330 The Environment and Public Health (Environmental exposures and population health; public health core knowledge; includes methods for defining environmental contamination; identifying contaminants, pathogens and toxins; assessing risks and causality; determining health impact; methods to decrease exposures). (Fall 2018, Spring 2019, Summer I 2019, Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2021, Spring 2022, Fall 2022, Spring 2023, Fall 2023, Spring 2024, Fall 2024, Spring 2025).

**PHLT 445 Applications of Public Health.** Combines knowledge and skills related to public health experience and coursework to address public health issues; process of developing, implementing and evaluating public health interventions; role assignment and responsibilities in group assignments and presentations (Spring 2020, Spring 2021, Fall 2021, Spring 2022, Fall 2022, Spring 2023, Fall 2023, Spring 2024, Fall 2024, Spring 2025).

# Undergraduate Courses where I am the instructor of record (taught in the past):

**PHLT 303 Social Context of Population Health** (Exploration of social determinants of population health and the socio-cultural roots of health improvement; socio-economic, behavioral and other factors that impact human health and contribute to health improvement and health disparities). (Summer II 2018).

# I provide/provided lectures in the following graduate and undergraduate classes.

**VIBS 432 PUBLIC HEALTH PRACTICES.** (Study of various diseases, causes and methods of prevention; epidemiology of disease; social and behavioral sciences; health policy and management; environmental and occupational health).

**PHEO 610 Toxicology in Public Health** Concepts of toxicology in public health; 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.

**LCSE 002-514: One Health Learning Community:** (This Learning Community is designed to give students a focused, high-impact series of exposures to the disciplines that interact within the framework of One Health. One Health is a conceptual framework that encompasses animal management and production, veterinary health and science, food production and processing, human health and the medical sciences, public health and epidemiology, as well as other fields of study or research. This class is part of the Regent Scholar Learning Community Program).

**PHEO 600 PRINCIPLES OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH:** (Overview of nature and magnitude of environmental and occupational disease; sources of exposure, methods of monitoring and modeling exposure; review of target organs and potential effects of specific chemicals; discussion of workplace hazards and monitoring programs).

**VIBS 641 Principles of Human Health Risk Assessment of Chemicals.** Principles of toxicology and environmental health with the basic concepts and approaches for conducting human health risk assessment of chemicals; use of different types of data and analysis approaches to conduct both qualitative and quantitative assessments of exposure, human health hazard, dose-response, and risk from chemicals in the environment; introduction to how risk assessment informs risk management decisions such as pollution regulations or hazardous waste cleanups. (Fall 2017, Fall 2018, Fall 2019, Fall 2020).