26 MONDAY, OCTOBER 26 · POSTERS M-01 TO M-55

4:45 to 6:45 PM · Grand Ballroom, 3rd Floor

M-01 ★ Gigi Hewitt (OSU)
Large Scale Physical Aquifer Model for the In-situ Bioremediation Using Hydrogels

M-02 ★ Julie Cusack (USC)
PFAS, Proteomic Signatures, and Metabolic Syndrome across the Life Course in Hispanic Populations with a High Prevalence of Overweight and Obesity at Baseline

M-03 Koren Mann (McGill)
Arsenic-induced atherosclerosis in a humanized Arsenic (3) Methyltransferase hyperlipidemic mouse model

M-04 Joseph Hoover (Arizona)
Community Engagement with the Arizona DUST Center

M-05 ★ Aaron Romero (UNM)
Environmental Uranium Exposure Alters the Gut Microbiota in Mice and Humans

M-06 ★ Divya Yadav (Arizona)
Effect of Exposure Route and Sex on Arsenic-Induced Lung Fibrosis

M-07 ★ Alison Clark (OSU)
The spatiotemporal dynamics of vapor-phase PAH exposure: An integration of personal and environmental passive sampling

M-08 ★ Annika Gehl (OSU)
Illumination condition during development alters zebrafish transcriptomic, morphologic and behavioral responses to chemical stressors

M-09 ★ Kate Burgener (OSU)
Organic Contaminant Degradation in Biosolids-Amended Soil Using White-Rot Fungi

M-10 ★ Jiyeon Shin (Texas A&M)
Evaluating Compounded Flood and Contamination Risk in the Beaumont-Port Arthur Area, Texas

M-11 Jennifer Bare (OSU)
Investigation of Dichlorooctylisothiazolinone (DCOI) in Surface Water and Neurobehavioral Effects in Zebrafish (Danio rerio) Embryos

M-12 ★ Mario Ramirez (OSU)
Evaluating PAH Mixture Toxicity in Human Bronchial Epithelial Cells Utilizing Benchmark Dose Modeling

M-13 ★ Juan Salazar (UC Berkeley)
In situations chemical oxidation of non ionic and ionic compounds: the role of sorption on stoichiometric efficiency

M-14 ★ Breandon Taylor (Louisville)
Inhaled Benzene Exacerbates Atherogenesis and Promotes Plaque Instability in Male LDLR-/- Mice

M-15 ★ Lindsay Volk (MIT)
Neonatal Susceptibility to NDMA: Developmental Stage, DNA Repair, and Maternal Alcohol Exposure

M-16 Zhenjiang Li (USC)
Shared and life-stage-specific proteomic signatures of PFAS exposure across the life course

M-17 Yashar Aghaei (USC)
Characterization of Airborne PFAS at an Urban Site in Central Los Angeles

M-18 ★ Anu Sethuraman (Arizona)
Adapting after the Church Rock Mill Spill: a community-engaged groundwater quality investigation in a rural, Indigenous Arizona community

M-19 Noah Scovronick (Emory)
COAST Superfund Center Preview

M-20 ★ Tyler Durkin (Arizona)
Structure-dependent interfacial behavior of bioinspired glycolipid surfactants

M-21 ★ Joaquin Lugo (OSU)
Absence of the Gut Microbiome Sensitizes Hepatic Transcriptional Responses to PCB18 in a Sex-Specific Manner in hPXR-hCAR-CYP3A4-CYP3A7 Quadruple-Humanized Transgenic Mice

M-22 Tammy Dugas (LSU)
Exosomal miRNAs released by alveolar type II cells after exposure to environmentally persistent free radicals regulate nitric oxide release from lung endothelial cells

M-23 ★ Ibrahim Alshammari (Texas A&M)
Using Primary Human Renal Proximal Tubular Cells to Characterize Nephrotoxicity Hazard, Dose-Response, and Toxicodynamic Variability Across Individuals

M-24 Anna Mahony (MIT)
Pyrolysis of plastic and agricultural wastes for Sustainable Aviation Fuel (SAF)

M-25 ★ Eric Luera (OSU)
Investigating 161 PAHs in Water and Resident Aquatic Organisms from an Industrial Harbor Over Two Decades

M-26 ★ Ashley De La Torre (OSU)
Integrating Molecular Docking and Functional Assays to Identify Protein Targets of Alkyl Naphthalenes

M-27 ★ Weilun Zhao (Iowa)
Biochar and modified biochar facilitates revival of Dehalococcoides and improves ethene production rates in an anaerobic chlorinated ethene-dechlorinating consortium

M-28 ★ Zachary Smith (Michigan State)
2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) dose-dependent disruption of lipid metabolism alters ceramide and oxidized phospholipid levels in the mouse liver

M-29 ★ Nolan Gunter (UC Berkeley)
Aging out of the blue: Region-specific epigenetic clock calibration for a blue zone with the DNAm SuperLearner

M-30 Brandon Pearson (OSU)
Semi-comprehensive evaluation of cardiometabolic toxicity of chronic low-dose arsenic and uranium in mice

M-31 ★ Deven Narke (Baylor College of Medicine)
CYP1A2 Disruption Exacerbates Lung Injury and Alters Gene Expression, Metabolomic Profiles, and the Lung-Gut Microbiome Following Maternal Exposure to Polycyclic Aromatic Hydrocarbons (PAHs) and Postnatal Hyperoxia

M-32 ★ Spencer Stinson (OSU)
Utilizing Bulk RNA sequencing, Spatial Transcriptomics, and MALDI-MSI to better understand differential toxicity between B[a]P and an Alkylated Derivative

M-33 ★ Anna Wojtowicz (Michigan State)
Transcriptomic Responses to 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) in Human Hepatocyte-Only and Multicellular Liver Spheroids

M-34 ★ Shuer Li (Duke)
Can C. elegans Predict Toxicity Across Ecotoxicological Species?

M-35 ★ Nicole Garrido (UC Berkeley)
Evaluating Persulfate-Based Oxidation as a Measure of PFAS Precursor Chemical Accessibility in Solids-Containing Systems

M-36 ★ Mackenzie Allison (OSU)
Development of a Web-Based Risk Screening Tool for Indigenous Shellfish Consumption

M-37 ★ Safa Kalteh (Iowa)
Assessing the Impact of Sediment Remediation on Environmental and Personal PCB Exposure at the Portland Harbor Superfund Site

M-38 ★ Aaron Maynard (OSU)
Evaluation of Pyrene Degradation via Pure and Site Specific Microorganisms

M-39 ★ Kirankumar Pushpakumar (Michigan State)
Dissolved Organic Carbon Enhances TCDD Mass Transfer from Soils to Activated Carbon

M-40 Amber Neville (Rhode Island)
STEEP Research Translation & Community Engagement

M-41 ★ Mackenzie Connell (Wayne State)
Fate and transport of PFAS and volatile precursors across wastewater treatment and the nearshore environment

M-42 Stuart Levine (MIT)
The Payoff of FAIR

M-43 ★ Danielle Delp (Rutgers)
Spatial differentiation in organohalide respiring bacteria and the microbial community in dichlorobenzene enriched sediments from the Tittabawassee River, Saginaw River & Bay Superfund Site

M-44 Sascha Usenko (Baylor)
Analytical and Environmental Chemistry Core: Quantitative Chemical Identification and Quantification for the Baylor-Rice Superfund Research Program

M-45 ★ Jaeden Bannon (Baylor College of Medicine)
Superfund soil extracts from Portland Harbor and Vince Bayou, and PAH supermix induce CYP1A1 and 1B1 expression in human pulmonary cells

M-46 ★ Hang Wu (USC)
Paired household dust and drinking-water measurements reveal distinct PFAS profiles and exposure contributions in Southeast Los Angeles

M-47 ★ Madeleine Kemo (Rhode Island)
Tribal Perspectives, Concerns, and Information Preferences Around PFAS: feedback from a Talking Circle

M-48 David Degnan (PNNL)
OSU-PNNL Superfund Research Center Data Analytics Portal

M-49 Nabil Gyamfi (Rhode Island)
Evaluation of Fatty Acid Binding Protein (FABP) as a Key Mechanism for Emerging PFAS Distribution to the Liver In Vivo

M-50 Claire Hallmark (UTMB)
Building Capacity for Community-Engaged Research: Addressing Institutional and Community Barriers Through Competency-Based Training

M-51 Serhan Mermer (OSU)
Mapping PFAS Sources and Transport in the Columbia River Using Passive Samplers

M-52 Karleigh Duffield (Michigan State)
Listen, Learn, Act: Lessons from the Otsego Story Project for Community-Engaged Superfund Research

M-53 ★ Pranooha Veeramachaneni (Baylor College of Medicine)
Mice Lacking the NAD(P)H quinone oxidoreductase (NQO1 or NQO2) Genes are More Susceptible than Wild Type Mice to Hyperoxic Lung Injury in vivo: Protection by β-naphthoflavone (BNF) Treatment

M-54 ★ Hyun Yoon (UC Berkeley)
Environmental Context and Molecular Structure Jointly Govern PFAS Biotransformation: A Literature-Derived Machine Learning Analysis

M-55 ★ Kevin Patterson (Columbia)
Association of urine uranium with eGFR: Longitudinal evidence from the Multi-Ethnic Study of Atherosclerosis

27 TUESDAY, OCTOBER 27 · POSTERS T-01 TO T-54

4:45 to 6:45 PM · Grand Ballroom, 3rd Floor

T-01 ★ Erin Hudson (Arizona)
Evaluating Precipitation Methods for Remediation and Recovery of Metals in Mining-Impacted Waters

T-02 Timothy Mattes (Iowa)
Mitigating airborne PCB emissions from sediments with black carbon materials and PCB-degrading bacterial biofilms

T-03 ★ Eli Cowan (OSU)
A Multi-Scale Embryonic Zebrafish Approach to Identifying Sulfonamide-Specific Mechanisms of Four-Carbon PFAS Toxicity

T-04 ★ Shayan Shahriar (Baylor College of Medicine)
ARNT1 Drives AHR Transcriptional Response, While ARNT2 Selectively Regulates Repression

T-05 ★ Emily Hyman (Baylor College of Medicine)
Sexual dimorphism of human placental trophoblasts to polycyclic aromatic hydrocarbons toxicities

T-06 ★ Rene Walsh (Baylor College of Medicine)
Placental Responses to PAH Exposure: Implications for Preterm Birth

T-07 ★ Lara Amaral (Kentucky)
Advanced Enterosorbents as a Potential Intervention to Alleviate PFAS in Vivo

T-08 ★ Farah Chowdhury (Iowa)
Spatial Mapping of Airflow and Tracer Gas Dispersion in a Classroom Using Metal Oxide Gas Sensors

T-09 ★ Paige Haley (UNM)
Citric acid aided mobility of metals from a uranium mining legacy site

T-10 ★ Nicholas Perpetua (Arizona)
In-vitro Reduction of Hexavalent Chromium Produces Stable Cr-DNA Adducts

T-11 Yue Cui (OSU)
The Human Microbiome as a Mechanistic Driver of Variations in Xenobiotic Metabolism and Re-Toxification

T-12 ★ Barathkumar Baskaran (MIT)
Electrochemical formation of N-nitrosodimethylamine in nitrite-impacted waters

T-13 ★ Ethan Stoddard (PNNL)
Metabolism of alkyl-phenanthrenes in human liver microsomes

T-14 ★ Kalea Gurfield (OSU)
Investigating the Effects of Built Systems on Bioavailable Chemical Trends in the Columbia River

T-15 Clare Pace (UC Berkeley)
Household Drinking Water Sampling Study, California

T-16 ★ Taylor Jones (OSU)
Using Extracellular Vesicles to Better Understand Inflammatory Response to Disease and Chemical Exposure

T-17 ★ Jiang Zheng (Texas A&M)
Beyond Source Proximity: Historic Urban Fabric as a Predictor of Contemporary Surface-Soil Contamination

T-18 Carolyn Roman (UNM)
UNM METALS Superfund Center Overview: Environmental Health Research on Uranium Mine Waste Exposures in the Southwest

T-19 ★ Allison Spring (UNC)
Analyzing Associations Between Environmental Exposures and Community Resiliency on Hypertension Prevalence in North Carolina

T-20 Taylor Vogel (OSU)
Supporting Environmental Health Research Through Engagement, Translation, and Capacity Building

T-21 ★ Yerin Jung (USC)
Estimation of individual-level blood PFAS concentrations using a toxicokinetic model paired with environmental exposure doses: extension to non-legacy PFAS

T-22 Mike Barton (OSU)
Automating Superfund-Site, publication, and media data collection using Python-based scraping tools

T-23 ★ Caitlyn Arango (OSU)
Determination of fluorene transformation kinetics through fluorescence detection and PARAFAC modeling

T-24 ★ Sarah Glass (Rice)
Bridging Hazardous Waste Remediation Metrics and Toxicological Endpoints: A Framework for Thermal-Catalytic Soil Treatment

T-25 ★ Gurugowtham Ulaganathan (Duke)
Leveraging Human Mini-Brains to Assess Development Neurotoxicity

T-26 ★ Kaitlyn Krushefski (Arizona)
Co-Creating a Better Future: Outcomes of STEAM in Action Adult Environmental Health Education

T-27 Mallery Quetawki (UNM)
Communicating Culturally-Relevant and Community-Tailored Environmental Health Science Research to Partner Communities

T-28 ★ Ian Malone (UNM)
Mineralogy and Characteristics of the Aeolian Transport of Uranium-bearing Minerals from the Jackpile-Paguate Uranium Mine Superfund Site

T-29 ★ Aliyah Webster (Duke)
Elucidating the Systemic Toxicity and Developmental Neurotoxicity of the Emerging Lithium-Ion Battery PFAS Class "bis-FASIs" in C. elegans

T-30 ★ Mina Alaaldin (Arizona)
AI-Driven Dashboards Streamline Data Management and Visualization

T-31 ★ Jorge Gonzalez Mejia (Emory)
Human Exposure to Uncommon Industrial Toxicants Near Superfund Sites in Glynn County, Georgia

T-32 ★ Brandon Beck (OSU)
Transformation of Selected Alkylated Naphthalenes and Phenanthrenes by a Model Bacterium

T-33 ★ Kelly O'Malley (OSU)
Discovery, Characterization, and Risk Assessment of Vapor-Phase Chemical Exposure from Wildfire Smoke

T-34 ★ Chelsea Hughes (Duke)
Assessment of microbiome structure and renal phenotypes after benzo[a]pyrene ingestion in zebrafish

T-35 ★ Meredith Schervish (Texas A&M)
Community-driven cumulative health assessment in Northeast Houston, TX

T-36 ★ Xenia De Gracia Medina (Arizona)
Climate-Driven Weathering Controls Arsenic Speciation and Enrichment in Particulate Matter from Legacy Mine Tailings

T-37 Claire Wu (Wellesley)
Exposure to Nitrosamine Drug-Substance Related Impurities Lead to Replication Stress and Cell Cycle Arrest

T-38 ★ Grace Santos (Columbia)
Evaluation of Two HPLC-ICP-MS Methodologies for Urinary Selenium Speciation: Implications for Exposure Sciences and Epidemiology

T-39 ★ Nalu Martin (OSU)
Leveraging Biomimetic Chromatography and the Embryonic Zebrafish Model for Drug Development

T-40 ★ Sarah Black (Wayne State)
Are sick plants still chatty? Anthropogenic volatiles interference with plant-to-plant communication

T-41 Steve Chillrud (Columbia)
High-Resolution Groundwater Arsenic Prediction and Vulnerability Mapping for Private-Well Communities in Arizona

T-42 ★ Cameron Stopforth (Louisville)
Associations between volatile organic compound mixtures and allostatic load

T-43 ★ Akhila Moorthy (Baylor College of Medicine)
A community responsive studio to assess challenges and concerns facing people living near Superfund sites in Harris County

T-44 ★ Ellen Bannon (Columbia)
Evaluating Exposure to Lithium in the Northern Plains

T-45 ★ Binglin Guo (USC)
Acidic thermal activation of persulfate as total oxidizable precursor assay in enhancing PFAS precursor conversion

T-46 ★ Congying Wang (Michigan State)
TCDD Disruption of the Human Thyroid-Liver Axis In Vitro

T-47 Elizabeth Shapiro-Garza (Duke)
Chemical Contaminants in Soil and Well Water: A Summary of the Waccamaw Siouan Indigenous Science Initiative

T-48 ★ Brendan O'Leary (Wayne State)
Beyond the PDF: CLEAR-Extract and the Development of Environmental Health Datasets

T-49 ★ Mohammad Alayyoub (Yale)
Chronic 1,4-Dioxane Exposure at an Environmentally Relevant Concentration: Age-Associated Insulin Resistance and Hepatic Metabolic Responses in Mice

T-50 ★ Ozce Durak (Yale)
Advancing VOC Treatment with Novel Materials and Processes

T-51 ★ Tafazul Dar (Michigan State)
Functional Metagenomic Characterization of Genes Involved in Reductive Dehalogenation, Vitamin B12 Salvage, and Hydrogen Metabolism in Tittabawassee River Sediments

T-52 ★ Lily Hoefner (Baylor College of Medicine)
Loss of the Aryl Hydrocarbon Receptor Reduces 3-Methylcholanthrene-Induced Tumorigenesis in Mice

T-53 ★ Athina Lisgara (Yale)
MALDI-TIMS-MSI to Investigate 1,4-Dioxane-Induced Hepatic Responses

T-54 Lisa Bramer (PNNL)
Best practices for statistical analysis and integration of personal exposure and environmental sampling data