FRTR Spring 2023 Meeting Speaker Biographies

Ian Bowen Ian is a hydrogeologist for EPA Region 8 based in Denver, Colorado where he primarily supports the Superfund Program. He joined EPA in July 2015 after five years with the U.S. Army Corps of Engineers in Kansas City, where he performed similar duties. Ian has extensive experience with field data collection, data analysis and groundwater modeling. He and his wife, Karla, moved to Colorado to be nearer the mountains where they enjoy hiking, hunting, camping and scenic views.

Fred Day-Lewis Fred Day-Lewis joined PNNL in 2021 as a Chief Geophysicist and Lab Fellow in the Environmental Subsurface Science Group within the Earth Systems Science Division. Prior to starting at PNNL, Fred worked for the U.S. Geological Survey for 18 years as a Research Hydrologist. Fred has worked on a variety of applied-research projects related to subsurface characterization and monitoring, groundwater remediation, groundwater/surface-water exchange, geophysical inverse problems, thermal methods, and hydrologic parameter estimation. Fred currently serves as an associate editor for the journal Groundwater. He previously served as an associate editor for Water Resources Research, Geosphere, and Hydrogeology Journal. Fred is a past president of the American Geophysical Union Near Surface Geophysics Section. He was elected Fellow of the Geological Society of America in 2015 for seminal contributions to hydrogeophysics. He is a 2023 recipient of the Harold Mooney Award from the Society of Exploration Geophysicists for contributions to the near-surface geophysics community. He received a PhD from Stanford University and BA and BS from the University of New Hampshire.

Doug Garrie is a senior geophysicist at SkyTEM Canada Inc. where he is processing data and working with clients, field crews and business development teams providing technical support for time domain electromagnetic and magnetic data and airborne survey techniques. He has experience with mineral exploration programs, regional mapping surveys, hydro-geophysical studies, environmental and geotechnical projects.

Dr. Kent Glover has been involved in groundwater and vadose zone remediation since the early 1980s. Currently, he is the Air Force Subject Matter Expert (SME) for Remediation Systems and provides technical leadership in remedy selection, implementation, performance evaluation and optimization. He also provides expertise in numerical modeling of contaminant fate and transport, and remediation of non-aqueous phase liquids. Before coming to the Air Force in 2010, he was a Principal Scientist for several engineering firms providing consulting services to private sector and governmental clients. From 1976 until 1989, he served in the U.S. Geological Survey as a hydrologist for groundwater contamination

and water resources projects across the western United States. He holds a Ph.D. and M.S. in Environmental Science and Engineering from Colorado School of Mines and a B.S. in Watershed Science from Colorado State University.

Dr. Jen Huckett is a data scientist and statistician. Her technical work is focused on research and development of statistical methods to further PNNL's strategic capabilities in nuclear decommissioning, emergency response, and risk modeling and optimization. She collaborates with other data scientists, software developers, and subject matter experts to:

- Develop risk models incorporating threat, vulnerability, and consequence metrics for the purposes of assessment and resource optimization.
- Review, recommend, and develop methods for subsurface survey design and geospatial analysis included in Visual Sample Plan.
- Provide data quality objectives (DQO) guidance and processes that enable sponsors and stakeholders to adhere to government guidance (e.g., EPA G-4 and G-9) to identify data requirements for making defensible decisions in environmental assessments, ensuring systematic planning and statistically defensible sampling plans meet project objectives, and facilitating stakeholder engagement and transparency.
- Develop methodologies and models to infer system confidence from data collected through integrated monitoring and verification measures applied in a nuclear enterprise for Arms Control.

Dr. Huckett holds Ph.D. and M.S. degrees in Statistics from Iowa State University and a B.S. in Mathematics from New Mexico Institute of Mining and Technology.

Ramona Iery is a Physical Scientist in the Environmental Restoration Division of the Naval Facilities Engineering and Expeditionary Warfare Center (NAVFAC EXWC). She has more than 10 years' experience in the field of environmental remediation. Her areas of expertise include fate and transport, site characterization, long term monitoring and remediation of contaminants like chlorinated solvents, petroleum hydrocarbons and emerging contaminants such as 1,4-dioxane and PFAS. She has been working with PFAS for the past five years in areas of site characterization, granular activated carbon treatment and regeneration and researching remedial technologies. Dr. Iery has published on PFAS treatment, taught workshops of PFAS, chaired PFAS sessions at conferences and served on the steering committee of the Emerging Contaminants Symposium. She is a member of the ITRC PFAS team.

Michael Klosky is a professional engineer with over 30 years of experience and is the project manager for the Lake City Army Ammunition Plant task order.

Colby Lubanowski is a Project Geologist with Weston Solutions, Inc. (Weston), and has been working in the environmental industry for 7 years. Prior to Weston, Colby received his B.S. in Geology and Geography from Northern Illinois University, worked as a petroleum well-site geologist for 2 years, and then completed his M.S. in Geology shortly after. After he received his education and dipped his toes into 80+ hour work weeks, he and his family moved to beautiful Colorado to begin his environmental career with Weston. He worked as an Emergency Responder for Region 8 EPA (START) while also beginning his path into the groundwater remediation realm. Colby quickly became a subject matter expert [SME] for In-Situ Chemical Oxidation [ISCO] remediation. He designed, constructed, operates, and maintains a dynamic pneumatically powered closed-loop injection-extraction recirculation remediation system that incorporates a subsurface conveyance network to 75+ wells as to preserve land use. In his spare time, Colby likes to spend time with my family and friends outdoors (camping, mountain biking, snowboarding, hiking, gaming), in his woodshop, and with his exotic plants and minerals.

Tamzen Macbeth is a Vice President at CDM Smith out of Helena, Montana. She has worked for CDM since 2009. Previously, she worked for 7 years at North Wind Inc. Tamzen is an environmental engineer with an interdisciplinary academic and research background in microbiology and engineering. She specializes in the development, demonstration and application of innovative, cost-effective technologies for contaminated groundwater. Specifically, she is experienced in all aspects of remedies from characterization to remediation for DNAPLs, dissolved organic, inorganic, and radioactive contaminants under CERCLA and RCRA regulatory processes. She has expertise in a variety of chemical, biological, thermal, extraction and solidification/stabilization remediation techniques as well as natural attenuation. Her current work focuses developing combined technology approaches, and innovative characterization techniques such as mass flux and mass discharge metrics. Since 2004, Tamzen has contributed to the ITRC as a team member and instructor for the ITRC's Bioremediation of DNAPLs, Integrated DNAPL Site Strategy, Molecular Diagnostics and DNAPL Characterization teams. Tamzen earned a bachelor's degree in Microbiology in 2000 and a master's degree in Environmental Engineering in 2002 both from Idaho State University in Pocatello, Idaho, and a doctoral degree from in Civil and Environmental Engineering in 2008 from the University of Idaho in Moscow, Idaho.

Lisa Newburn is a Senior Computer Scientist within the National Security Directorate at Pacific Northwest National Laboratory (PNNL) and Team Lead for the Models for Natural Sciences Team. She has 18 years of experience developing and delivering end-user software, and leading design and development of statistical decision-making tools. Her specialty is working with domain experts to identify relevant statistical and analytical methods, apply those methods to their particular problems, and develop simple and clear documentation to support confident decision-making. She received a B.S. in Computer Science and Mathematics from Utah State University.

Colin Plank has 24 years of experience in the study of geomorphology, physical processes, and stratigraphy in both professional and academic settings. He holds a Master of Science in Geology from the University of South Carolina, though he is a product of the Midwest having also attended Grand Valley State University and University of Minnesota. He currently lives in west Michigan. His experience as a stratigrapher for groundwater remediation projects across the country has led to expertise in evaluating data to understand aquifer continuity, heterogeneity, and geometry in a manner that is process-based and geologically defensible. Mr. Plank has been instrumental in developing and applying Environmental Sequence Stratigraphy (ESS), a system for stratigraphic interpretation based on petroleum industry techniques and now widely recognized as an industry best practice. In recent years Mr. Plank has expanded upon this experience to become an industry leader in the development of digital Conceptual Site Models (CSM), using a Web-Application Based approach to share and update all CSM elements (geologic, hydrologic, analytical, and sources/receptors).

Randy St. Germain developed much of Dakota Technology Inc.'s underlying time-resolved laser-induced fluorescence (LIF) systems while pursuing a M.S. Chemistry degree at North Dakota State University from 1987 to 1991. Randy and his colleagues have commercialized a series of direct push deployable site characterization systems for high-resolution delineation of petroleum, coal tar, and creosote NAPLs in the subsurface. From early AFCEE-supported research field trials of LIF at U. S. Air Force bases in 1992, through subsequent commercialization of the ROST, UVOST®, TarGOST®, and the DyeLIF™ system for solvent DNAPLs, Randy has spent the 30 years characterizing NAPL releases with LIF.

Dr. Mark Stapleton has 27 years of experience in the field of environmental remediation/restoration and is a Senior Environmental Remediation Engineer at Noblis. He is currently providing innovative solutions for chlorinated solvents, petroleum hydrocarbons and emerging contaminant sites, conducting performance evaluation and optimization, designing remedial systems, fate and transport modeling, providing litigation and environmental restoration support to the Air Force Civil Engineer Center in San Antonio, TX. His areas of expertise are in Investigation and Remediation; Groundwater Assessment and Remediation and specializes In Situ and Ex-Situ Treatment Technologies. He holds a bachelor's in Chemical Engineering from the University of Maryland, College Park, a master's in Civil and Environmental Engineering and a doctorate in Environmental Engineering, Biochemistry and

Microbiology from Michigan Technological University. He is a licensed Professional Engineer in 9 states and is a Board-Certified Environmental Engineer as a Hazardous Waste and Site Remediation Specialist.

Jesse Wright is a Senior Engineer at Arcadis with over 20 years of experience and is a core member of Arcadis' High-Resolution Site Characterization (HRSC) team. Mr. Wright has extensive experience utilizing the latest HRSC techniques to identify zones of contaminant mass flux, by integrating relative permeability mapping, classical hydrostratigraphy interpretation, and high-density groundwater and soil concentration data.

Dr. Christopher Zevitas is a nationally-recognized subject matter expert with over 36 years of experience in the Departments of Defense and Transportation managing and directing comprehensive environmental assessment, mitigation, and restoration activities. He serves as a senior technical advisor to the Federal Aviation Administration's National Environmental Cleanup Program with a focus on evaluating the impact of pollutants at airports and other complex sites. Dr. Zevitas also leads major inter and intra agency initiatives addressing the nation's top priorities concerning novel pollutants and emerging threats to human health and the environment through his participation in expert committees, such as the White House Joint Subcommittee on Environment, Innovation, and Public Health, the Transportation Research Board, Federal Remediation Technology Roundtable, and the Interstate Technology and Regulatory Council.

Dr. Zevitas holds a Doctor of Science (Sc.D.) degree in Environmental Health from the Harvard T.H. Chan School of Public Health, an M.S. in Civil and Environmental Engineering from Northeastern University, and a B.S. in Electrical Engineering from the University of Massachusetts – Lowell.