Speaker Biographies

6th Northeast Onsite Wastewater Treatment Short Course & Equipment Exhibition - April 2-4, 2019

Amador, Jose, Ph.D. | University of Rhode Island
Jose Amador has a BS in biochemistry, and MS and Ph.D. in soil science, all from Cornell University. He has been a faculty member at the University of Rhode Island for the past 26 years, where his research interests include the biochemistry and microbial ecology of onsite wastewater treatment systems.

Bélanger, Marie-Christine | Premier Tech Aqua
Marie-Christine Bélanger is the current Product Director and Government Relations at Premier Tech Aqua (PTA), a Canadian company and world leader in the Onsite Wastewater Treatment industry. She accumulated over five years of professional experience as a Project Manager for the development and implementation of decentralized wastewater treatment systems for GSI Environment before pursuing a career as Project Development Director at Group Celdex, a firm specializing in the development of integrated Waste Management programs in emerging countries. Ms. Bélanger joined PTA in 2002. Her functions at PTA have brought her to play key roles on several steering and advisory committees throughout North America, namely with the BNQ, CSA, NOWRA, NSF, local provincial and state organizations, etc. where she has taken part in the development and advancement of industry-wide regulations and standards leading to better protection of the environment and the public's health. Ms. Bélanger holds a Physics Engineering degree from Laval University and a Master's degree in Chemical Engineering from L'École Polytechnique de Montreal.

Bradley, Graham, Ph.D. | Vermont Department of Environmental Conservation
2017 – present, Program Hydrogeologist, Vermont Department of Environmental Conservation, Montpelier, Vermont, USA.
2012 – 2017, Assistant Professor of Geology, SUNY Oswego, NY, USA.
2007 – 2012, Ph.D. University College London, UK.
2001 – 2007, Senior Hydrogeologist, Golder Associates, Vancouver, Canada
1990 – 2001, Hydrogeologist, Golder Associates, Nottingham, UK
1989 – 1990, M.Sc. Engineering Geology, University of Leeds, UK
1985 – 1989, B.Sc. (Hons) 1ST Class, Joint Geology and Geography, University of St Andrews, UK

Buchanan, John, Ph.D. | University of Tennessee Institute of Agriculture
Dr. John R. Buchanan is an Associate Professor and is on the faculty of the Biosystems Engineering and Soil Science Department at the University of Tennessee. He has 29 years of teaching, research, and outreach experience in the areas of onsite and decentralized wastewater management, water supply, water quality and storm water engineering. Dr. Buchanan has B.S. and M.S. degrees in Agricultural Engineering and a Ph.D. in Civil Engineering, all from The University of Tennessee. John is a member of the Water Environment Federation, Soil and Water Conservation Society, NOWRA, and the American Society of Agricultural and Biological Engineers. He is a registered professional engineer in Tennessee.

Clark, Amanda | Connecticut Department of Public Health

Amanda Clark (BS, RS, Environmental Analyst 3) is a Registered Sanitarian working in the field of Environmental Health for the past 18 years and for the Connecticut Department of Public Health Environmental Engineering Program for the past 14. She is the grant coordinator for the program responsible for oversight and management of grants and contracts. She is the EPA Region 1 representative and past president of the State Onsite Regulators Association

Clark, Mary | Vermont Department of Environmental Conservation
Mary Clark has worked in the decentralized industry for over 40 years, as a regulator for small and large sized systems, a scientist evaluating potential impacts from onsite systems, a wastewater management consultant, and wastewater technology manufacturer's representative.

Cox, Alissa | University of Rhode Island
Ross, Bianca | University of Rhode Island
Wigginton, Sara | University of Rhode Island
Alissa Cox, Bianca Ross and Sara Wigginton are Ph.D. students in the Biological and Environmental Science program at the University of Rhode Island. Their work in URI's Laboratory of Soil Ecology and Microbiology covers various aspects of onsite wastewater treatment in southern New England: Alissa's research focuses on broad-scale impacts of climate change to onsite wastewater treatment systems along the southern Rhode Island coast; Bianca is evaluating the performance of proprietary nitrogen-removal OWTS in Charlestown, RI; and Sara is investigating the function and performance of non-proprietary layered drainfields in Cape Cod. All three assist in delivering outreach materials to wastewater professionals through the New England Onsite Wastewater Treatment Program.

Fritts, Tom | Residential Sewage Treatment Company, Inc.
Tom Fritts is vice-president of Residential Sewage Treatment Company, Inc. in Grandview, Missouri where they design, sell and service alternative onsite wastewater systems. Tom is past president of the Missouri Smallflows Organization (MSO), the Kansas Small Flows Association (KSFA) and the National Onsite Wastewater Recycling Association (NOWRA). He is an approved instructor for NOWRA, the Consortium of Institutes for Decentralized Wastewater Treatment and several states across the country. Tom is the 2016 recipient of the NOWRA "Dick Otis Industry Achievement Award" and the 2015 Kansas Small Flows Association "Raymond Peat Industry Achievement Award".

Healy, Dennis | Infiltrator Water Technologies
Dennis Healy has been an Area Sales Representative for Infiltrator Water Technologies for the past 3 years. Prior to Infiltrator, Dennis worked for an engineering consultant designing plumbing and fire protection systems. He also has 3 years experience installing and inspecting septic systems for an excavation contractor in Massachusetts. Dennis holds a Bachelor's degree in mechanical engineering.

Heger, Sara, Ph.D. | University of Minnesota
Dr. Sara Heger is an engineer, researcher and instructor at the University of Minnesota in the Onsite Sewage Treatment Program in the Water Resources Center and is an Adjunct Assistant Professor in the Bioproducts and Biosystems Engineering Department. For over 20 years, she has been conducting research and providing education and technical assistance to homeowners, small communities, onsite professionals and local units of government regarding onsite wastewater treatment. She presents at many local and national training events regarding the design, installation and management of septic systems and related research. Sara is the Vice President of the National Onsite Wastewater Recycling Association and is currently the education chair of the Minnesota Onsite Wastewater Association. Sara serves on the NSF International Committee on Wastewater Treatment Systems. She is also the chair of the Minnesota State Advisory Committee on Decentralized Systems. She has BS in Biosystems & Agricultural Engineering and a MS and a PhD in Water Resource Science.

Heindel, Craig | Waite-Heindel Environmental Management
Mr. Heindel [C.P.G.; Licensed Professional Geologist in N.H., N.Y.] is a Senior Hydrogeologist at Waite-Heindel Environmental Management, a hydrogeological and environmental consulting firm based in Burlington, Vermont.

He has forty years of experience in projects regarding wastewater and solid waste disposal, water supply, contaminant hydrogeology, surface water, groundwater flow and drainage, and water resources. He is a member of several professional organizations, he has been appointed to numerous commissions and task forces regarding Vermont's environment, and he is the chair of his town's conservation commission.

Heufelder, George | Barnstable County Department of Health and Environment
George Heufelder is the Co-Director of the Massachusetts Alternative Septic System Test Center, a division of the Barnstable County Department of Health and Environment. Since 1999, the Test Center has researched various aspects of onsite septic systems and tested products from nearly every major manufacturer of treatment products. He is the author of several grants and publications dealing with contaminants from onsite septic systems including viruses, Contaminants of Emerging Concern (CEC), phosphorus, nitrogen and others. He is a Certified Soil Evaluator, Registered Sanitarian and Class 4 Wastewater Treatment Plant Operator in the Commonwealth of Massachusetts. Recognizing the importance of excessive nutrient inputs to marine resources, George's recent efforts have focused on the investigation of non-proprietary and "passive" means for the removal of nitrogen from onsite septic systems. George has a B.S. in Biology from Kansas State University and a M.S. in Aquatic Biology from Eastern Michigan University.

Jobin, Justin | Suffolk County Department of Health Services
Justin Jobin, Director of Environmental Projects with the Suffolk County Department of Health Services, is a soil scientist and wastewater management expert. Working with a team of engineers, scientists and public health professionals to address the region's nitrogen pollution crisis, Justin is leading the pilot program evaluating onsite treatment systems for Suffolk County. He is also instrumental in the changes being made to Suffolk County's Sanitary Code. Justin previously served 13 years as the Wastewater Management District Coordinator for the Town of Jamestown, R.I., which is an island community and encompasses 1,835 homes with onsite wastewater systems. Nitrogen leaching from septic systems and cesspools has been directly linked with nutrient pollution in the Narragansett Bay, which surrounds Jamestown, similarly to how it has affected Suffolk County's ground and surface waters. Jobin has also authored several publications on wastewater management and developed curriculum for the New England Onsite Wastewater Training Program at the University of Rhode Island.

Lentz, David | Infiltrator Water Technologies
Dave Lentz manages Infiltrator Water Technologies' government affairs department, with responsibility for regulation of the company's chamber, EZflow, septic tank, and Delta Treatment Systems product lines. Nationally, Infiltrator is involved in rulemaking, legislation, and industry standards development supporting the onsite wastewater treatment system industry. Dave has 25 years of experience related to soil and groundwater systems. He holds a Bachelor's degree in structural engineering and a Master's degree in geotechnical engineering, and is a licensed professional engineer.

Lombardo, Pio | Lombardo Associates, Inc.
Pio Lombardo has a BS in Chemical Engineering cum laude and MS in Civil/Environmental Engineering along with 45+ years of experience with innovative water quality evaluation and restoration projects and wastewater management for unsewered communities projects. Pio has been the Engineer-of-Record for innovative decentralized wastewater with capital costs greater than $200 million that are operating throughout the United States. LAI is considered a national expert on decentralized wastewater management, alternative sewer systems and passive nitrogen and phosphorus removal techniques that have been determined by numerous independent parties that reliably achieve the limits of technology.

Pio Lombardo was the recipient of the prestigious American Consulting Engineer's Council Engineering Excellence Award for his work and an Engineering News Record Construction Man of the Year candidate. He has been the

Engineer of Record of a 900,000 gallons per day innovative wastewater treatment system in Chesapeake Bay using constructed wetlands for nutrient removal, 20+ cluster wastewater systems ranging in size from 2 to 200+ households, and over 200 individual conventional and advanced treatment OWTS.

Pio has authored or been a contributor to eight (8) US EPA manuals on decentralized wastewater management issues. Pio authored the 1st version of the US EPA water quality model HSPF which is widely used for Total Maximum Daily Load determinations to achieve water quality standards.

Miles, Randy, Ph.D. | University of Missouri College of Agriculture, Food & Natural Resources
Dr. Randy Miles is an Emeritus Faculty of the Soil Science program at the University of Missouri. He was Director of the Missouri Soil Health Assessment Center which has a laboratory with a budget of nearly $1 million annually. He was Director of the Missouri SmallFlows Wastewater Education/Research Training Center. He was Director of Historical Sanborn Field, the third oldest continuous research field in the world. He was also curator of the Historical Duley-Miller soil erosion plots. He also worked in the soil genesis, morphology and soil survey area. His major emphasis in these areas has been in soil landscape and fragipan formation. Additionally, he has worked with land application of biosolids and assessment of soil acidity and aluminum activity. He also is working on long-term soil health assessment indicators in various soil management systems. He also is principle owner of Randall J. Miles, LLC which provides soil assessments for many different land uses plus educational workshops and seminars for professional certification and continuing education.

Miller, Chris | Town of Brewster, MA
Chris Miller regularly presents to Town Boards in Brewster and has significant experience in public education and training.

Murphy, John | Massachusetts Department of Environmental Protection
John Murphy is an engineer with the Massachusetts Department of Environmental Protection since 2016. He is responsible for Wastewater Operator and Title 5 Certification and Training. He has his bachelor's degree in Civil Engineering from UMASS-Lowell.

Nelson, Mark | Horsley Witten Group, Inc.
Mark Nelson regularly provides wastewater planning and O&M trainings, including for decentralized systems for the U.S. EPA across the country and presented at the last conference in Taunton, MA.

Rhodes, Evelyn | Yale School of Forestry and Environmental Studies
A current Master of Environmental Science Candidate at Yale's School of Forestry and Environmental Studies, Evelyn is passionate about global sanitation and wastewater as a way to promote protection of both ecosystems and human health. Evelyn wants to engage diverse communities around appropriate wastewater treatment solutions and related conservation efforts for sustainable solutions. Her background is in evolutionary biology, environmental science, and community outreach and she loves to hike, run, and ski in her spare time.

Smith, Daniel, Ph.D. | AET Tech
Daniel Smith is President of AET Tech with thirty years' experience in wastewater treatment. Since 2006 he has been developing innovative treatment modules for the removal and recovery of nitrogen from onsite wastewater. His work has been supported by the State of Florida, NASA, the Massachusetts Clean Energy Center, EPA, and the National Science Foundation. Dr. Smith received a Ph.D. in Environmental Engineering and Science from Stanford University with a specialization in wastewater treatment. He is a registered Professional

Engineer and Board Certified. Two AET Tech projects have won Excellence in Environmental Engineering Awards from the American Academy of Environmental Engineers and Scientists.

Theroux, Maggie | US EPA Region 1
Maggie works for EPA's Office of Research and Development, National Health and Environmental Effects Research Laboratory. She is in the Atlantic Ecology Division (AED) located in Narragansett, Rhode Island. AED's research focuses on ecological effects of human activities on coastal waters and watersheds of the Atlantic seaboard. Maggie is the team leader for EPA's Advanced Septic System Nitrogen Sensor Challenge. EPA launched the Challenge on InnoCentive in January 2017. Her team is now testing sensor prototypes at the Massachusetts Alternative Septic System Test Center.

Maggie was previously in the Environmental Technology Innovation Cluster Development & Support Program located in the Office of the Assistant Administrator for EPA's Office of Research & Development. She has conducted research on technology business clusters and was a member of the EPA cluster team that facilitated the development of Confluence: Water Technology Innovation Cluster in Cincinnati, Dayton, Northern Kentucky and Southeastern Indiana. In 2013, EPA published her paper, "Building a Successful Technology Cluster". https://www.epa.gov/sites/production/files/documents/building_a_successful_technology_cluster.pdf

In conjunction with her work on water clusters, she has encouraged EPA, states and local communities to articulate their water problems in terms of business opportunities to attract private sector interest. She has also studied the commercialization process for water technologies and highlighted state and federal regulatory barriers. As a result of her work on nutrient water pollution with EPA Regions 1 and 2 and their states, she created the Advanced Septic System Nitrogen Sensor Challenge.

Prior to working for ORD, she was the Director of EPA Region 1's Center for Environmental Industry and Technology for 8 years. She was also a co-chair of EPA's Environmental Technology Council (ETC) from August 2004 - February 2008. The purpose of the ETC was to achieve improved, real world environmental results through the application of innovative technology.

Before joining EPA, she earned an MPA at Harvard University's Kennedy School of Government with a focus on environmental policy. Prior to the Kennedy School, she worked in the computer industry. Her experiences have included starting a chain of retail computer stores in the UK, computer consulting, and marketing with IBM. She attended the Kennedy School in order to combine her business and entrepreneurial expertise with her environmental interests. Maggie has an MBA from University of Massachusetts, Amherst and a BA in Economics from Connecticut College.

Woods, Erika | Barnstable County Department of Health and Environment
Erika A. Woods is an Environmental Specialist/ Sanitarian for the Barnstable County Department of Health and Environment. She received her Bachelor of Science degree in Biology from UMass Dartmouth and is a Registered Sanitarian, Certified Soil Evaluator and a Certified Title 5 System Inspector with over 12 years of experience in the field of Public Health.

Zegel, Ken | Suffolk County Department of Health Services
Mr. Zegel is an Associate Public Health Engineer with the Suffolk County Department of Health Services ("SCDHS") Office of Ecology and has over 18 years of experience in groundwater remediation and wastewater treatment. He currently serves as the project manager for the Suffolk County Subwatersheds Wastewater Plan (SWP) and the NYSDEC funded Septic/Cesspool Upgrade Program Enterprise ("SCUPE") grant which provides a significant funding contribution towards the development and implementation of the County-wide wastewater management program. In addition, Mr. Zegel serves as a member of the SCDHS Board of Review and manages

several commercial wastewater treatment pilot demonstration projects. Prior to his employment with the SCDHS, Mr. Zegel worked in consulting as a Senior Engineer and Technical Expert providing oversight and technical guidance on a variety of groundwater remediation projects nationwide.