Novel Synthetic Opioid Detection: Analytical and Other Challenges Webinar: Speaker Biographies

Hosted by the Chemical Sciences Roundtable

Monday May 11th, 2020

12:00pm-1:30pm EDT

Speakers:

Jonathan McGrath serves as Senior Policy Analyst with the National Institute of Justice (NIJ) in the Office of Investigative and Forensic Sciences located in Washington, DC. In this role, he supports several forensic science initiatives, including the NIJ Forensic Technology Center of Excellence program, the NIJ Forensic Laboratory Needs Technology Working Group, and the NIJ Drug and Crime Program. He led the publication of the 2019 NIJ report on the "Department of Justice Needs Assessment of Forensic Laboratories and Medical Examiner and Coroner Offices" and serves as a vice co-chair for the Federal Medicolegal Death Investigation Working Group. Dr. McGrath also served as the Designated Federal Officer for the National Commission on Forensic Science from 2015 to 2017. Before joining NIJ in 2015, he served as a forensic scientist from 2007 to 2011 with the U.S. Customs and Border Protection's Laboratories and Scientific Services Directorate (CBP LSSD) at the Southwest Regional Science Center in Houston, TX. At the CBP regional field laboratory, he performed examinations of imported merchandise and forensic evidence, including digital evidence, latent prints, and controlled substances and frequently conducted mobile field operations and trainings. He was promoted to the CBP LSSD headquarters office in Washington, DC where he worked from 2011 to 2015 supporting CBP's trade, forensic, and WMD operations programs. Dr. McGrath holds a Ph.D. in Analytical Chemistry from Georgia Tech, M.S. in Forensic Science from the University of Illinois at Chicago, and B.S. in Chemistry from the University of Dallas.

Barry K. Logan is Senior Vice President of Forensic Sciences, and Chief Scientist at NMS Labs, and Executive Director at the Center for Forensic Science Research and Education (CFSRE) at the Fredric Rieders Family Foundation in Willow Grove, Pennsylvania. Dr. Logan is a Fellow of the American Board of Forensic Toxicologists (ABFT), and has over 140 publications and over 500 presentations in forensic toxicology and analytical chemistry, including work on the effects of illicit and prescription drugs on drivers, and drug caused and related death. His recent work has focused on the analytical and interpretive toxicology and chemistry of novel psychoactive substances, founding www.NPSDiscovery.org in 2018. Dr. Logan's other appointments include Executive Director of the Robert F. Borkenstein course at Indiana University, and at Arcadia University and Thomas Jefferson University in Philadelphia. In recognition of his work and contributions, Dr. Logan has received numerous national and international awards, and in 2013-14 served as President of the American Academy of Forensic Sciences (AAFS).

Marcela Najarro is responsible for driving the strategic direction and execution of the Forensic Science Research Program within the National Institute of Standards and Technology's Material Measurement Laboratory. In this role she utilizes her technical and leadership experience to manage the forensic science research program across the Drugs & Toxins and Trace Evidence portfolios. Through close collaboration with federal, state, and local stakeholders, her portfolio helps strengthen the scientific foundation of multiple forensic disciplines. With over 15 years of experience, she has made meaningful scientific contributions at and beyond the lab bench in the forensics and national security fields. Mrs. Najarro has led the development of measurement tools aimed to improve the reliability and validity of forensic chemical analysis. Her research publications have enabled forensic laboratories to implement improved analytical methods and standards for the identification of drugs, fire debris, and explosives.

Mrs. Najarro was awarded a Silver Medal by the Department of Commerce for the development of trace explosives and narcotics standards to validate instrument detection performance for counterterrorism and drug enforcement applications.

Moderator:

Linda Broadbelt, NAE, is Sarah Rebecca Roland Professor in the Department of Chemical and Biological Engineering (ChBE) and Associate Dean for Research of Engineering at Northwestern University. She was Chair of the Department of ChBE from 2009-2017. Her research and teaching interests are in multiscale modeling, complex kinetics modeling, catalysis, novel biochemical pathways, and polymerization/depolymerization kinetics. She served as the Past Chair, Chair, First Vice Chair and Second Vice Chair of the Catalysis and Reaction Engineering Division of the American Institute of Chemical Engineers (AIChE), and also served on the Executive Board of the National Program Committee of AIChE. She is currently an Associate Editor for *Industrial &Engineering Chemistry Research*. Her honors include selection as the winner of the R.H. Wilhelm Award in Chemical Reaction Engineering from AIChE, the E.V. Murphree Award in Industrial Chemistry and Engineering from the American Chemical Society, the Dorothy Ann and Clarence Ver Steeg Award, a CAREER Award from the National Science Foundation, and an AIChE Women's Initiative Committee Mentorship Excellence Award, and selection as a Fellow of the American Association for the Advancement of Science, a Fellow of AIChE, a Fellow of AIMBE, and a Fulbright Distinguished Scholar. She was elected to the National Academy of Engineering in 2019.