

## **Toxicology Section - 2016**

\*Presenting Author

## **K75** Postmortem Pediatric Forensic Toxicology

Robert A. Middleberg, PhD, NMS Labs, 3701 Welsh Road, Willow Grove, PA 19090; Nikolas P. Lemos, PhD, OCME, Forensic Lab Division, Hall of Justice, N Terrace, 850 Bryant Street, San Francisco, CA 94103; Tracey S. Corey, MD\*, OCME, 810 Barret Avenue, 7th Fl, Louisville, KY 40204; Alane Olson, MD\*, Clark County Coroner's Office, 1704 Pinto Lane, Las Vegas, NV 89106; Karen Cline-Parhamovich, DO\*, University of New Mexico, Office of the Medical Investigator, 1101 Camino del Salud, Albuquerque, NM 87016; Kenneth E. Ferslew, PhD\*, East Tennessee State University, Section of Toxicology, Box 70422, Johnson City, TN 37614; and Robert Kronstrand, PhD\*, National Board of Forensic Medicine, Dept of Forensic Toxicology, Artillerigatan 12, Linkoping SE 587 58, SWEDEN

After attending this presentation, attendees will better appreciate the challenges unique to toxicological findings in postmortem pediatric cases. Attendees will learn interpretive guidelines for pediatric cases involving forensic toxicology in both a general and case-specific sense.

This presentation will impact the forensic science community by further delineating the interpretive aspects of toxicological findings in the pediatric population.

In this 17<sup>th</sup> Annual Special Session within the Toxicology section, pediatric cases involving toxicological findings are discussed. As a relative dearth of interpretive information involving toxicological findings in the pediatric population exists, this session is a forum to help elucidate and clarify such issues. The format is a short case presentation, including pharmaco-toxicokinetic data and other relevant ancillary information followed by audience participation to provide interpretive clarity around the case-specific impact of the toxicological findings. This session, attended by various sections of the American Academy of Forensic Sciences, allows for diverse perspectives of case issues that lead to integrative consensus, or differing opinions, as to cause of death in children.

Four cases will be presented that highlight the difficulty in assessing the role of toxicants in each case. Tracey Corey, MD, Alane Olson, MD, and Robert Kronstrand, PhD, will be reviewing cases from their years of experience as forensic pathologists and toxicologist, respectively, that highlight the issues and confounders in the pediatric population.

Ken Ferslew, PhD, and Karen Cline-Parhamovich, DO, will be discussing a case tentatively titled "Pediatric Soda Death, Complicated by Potential Furosemide Ingestion." This case will highlight the less concept established by Paracelsus in the 1500s that the dose makes the poison, especially when it comes to substances generally considered benign.

The case studies presented reflect current-day findings in medicolegal investigations of childhood deaths. In years past, discussions of these types of cases have been educational and demonstrative of the issues in this special population. Only through these continued case studies and audience participation can there be shared perspectives on the meaning of the toxicological findings.

Pediatric, Postmortem, Toxicology

1149