For two decades, Guy Weinberg, MD, has been recognized worldwide as an authority on the rare but potentially devastating condition of local anesthetic systemic toxicity, or LAST. Many physicians will never treat an episode of LAST, but the ones who do will probably treat those patients with the therapies developed by Dr. Weinberg. His Severinghaus Lecture will explore lipophilic drug toxicity and his years of research on the subject, which began quite tangentially: “My interest in LAST stems from a single patient encounter, and my talk will trace the unexpected and very circuitous route of identifying, then explaining, the basis of lipid therapy,” Dr. Weinberg said.

Guy Weinberg is currently a Full Professor in the Department of Anesthesiology at the University of Illinois, Chicago, and a physician at the Jesse Brown VA, where his lab was active until just last year. He has been a leading figure within the American Society of Regional Anesthesia and Pain Medicine (ASRA) for much of his career, having been awarded the ASRA Distinguished Service Award in 2011 and the ASRA Gaston Labat Lifetime Achievement Award in 2020. Dr. Weinberg is the current chair of the ASRA Working Group on Local Anesthetic Toxicity and was a Consultant on LA toxicity to the Association of Anaesthetists of Great Britain and Ireland. In 2019, he was honored with the Carl Koller Lifetime Achievement Award from the European Society of Regional Anaesthesia & Pain Therapy.

As reported in Anesthesiology in 2012, “It seems implausible that an injection of a simple, off-the-shelf, intravenous nutritional solution could be acutely life-saving for a patient with severe drug overdose (Anesthesiology 2012;117:180-7).” However, the efficacy of that unlikely treatment was supported by dozens of clinical case reports that followed Dr. Weinberg’s laboratory research. He showed in 1998 that infusion of a soybean oil emulsion facilitates resuscitation after cardiovascular collapse in a rat model of bupivacaine overdose.

Published reports in 2006 first confirmed the translation of Dr. Weinberg’s lipid resuscitation method into clinical practice. Since then, it has become an important component of standard treatment for LAST. This therapy also was shown to reverse neurological and cardiac toxicities related to overdose of local anesthetics and other agents. In 2010, Dr. Weinberg and colleagues published the first ASRA Practice Advisory on Local Anesthetic Systemic Toxicity, which has been updated several times since (Reg Anesth Pain Med 2010;35:152-61). Today, any physician can access the current Checklist for Treatment of LAST on the ASRA website or on the ASRA LAST mobile app (asamonitor.pub/3dCihDb; asamonitor.pub/3A3FO7h).

Alongside his reputation as a pioneering researcher in anesthesiology, Dr. Weinberg is known for his love of mentorship, humor, warmth, and desire to give back. His Severinghaus Lecture is sure to be as inspirational and engaging as his long career. “I’m honored to have been chosen as the Severinghaus Lecturer this year, and I’m excited to share my story with ASA colleagues,” Dr. Weinberg said. “LAST remains a deadly serious condition, and I look forward to recounting the arc of this unusual line of translational research and lessons learned along the way.”

Guy Weinberg, MD