

2023 EUROTOX Lecture Recipient Bruno Mégarbane



Professor Bruno Mégarbane is an intensivist and a clinical toxicologist with an outstanding contribution to research in toxicology. He has conducted numerous clinical studies to describe severe toxicities resulting from drug overdose, understand clinical variability of toxicity expression (based on PK/PD approaches and gene polymorphism), identify prognostic factors and report the effectiveness and safety of antidotes. More impressively, he contributed to an important set of works on cardiotoxicant poisonings helping defining refractoriness to the conventional pharmacological therapies and allowing the development of an extracorporeal membrane oxygenation (ECMO) program in his institution, which is probably the first program in the world dedicated to the poisoned patients with patient cannulation at the bedside. His works contributed in a decisive way to save lives of severely poisoned patients and encourage the development of such programs in other countries.

Professor Bruno Mégarbane has also developed important experimental works in toxicology using in vivo models aiming to better understand the mechanisms of drug toxicity and to solve clinical questions unsolved by the clinical approach. These models allow him to explore the physiological consequences involved in toxicity. More specifically, he developed multiple studies to understand the mechanisms of neuro-respiratory effects of various drugs including opioids (buprenorphine), baclofen, lithium, and cathinones, which have been responsible for important public health issues or outbreaks.

Additionally, Professor Bruno Mégarbane actively participated to international TOX registries (EuroDEN on recreational drug use), consensus committees (position papers of the American & European societies of clinical toxicology, coordination of the French guidelines of poisoning management), and working groups (EXTRIP, based on his important contributions to the hemodialysis indications in lithium poisoning and management of toxic alcohol poisonings with fomepizole). He chaired during three years the EAPCCT scientific committee, and contributed several times to lectures and symposium organization in the past EUROTOX congresses.