Mysterious Deaths: the dark story of poisons and men

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Abstract
The story of poisons is weaved into human history, from the discovery of powerful natural toxins to the development of shameful manmade chemicals designed for biological or chemical warfare in the 20th century.

This micro seminar will take students through the tortuous and dark path of poisons by discussing first about plant extracts with astonishing healing and killing powers, which have captivated storytellers and writers for centuries. We will use these examples to illustrate the dangerously narrow window between poison and medication for some of these substances. The second session will focus on the modern misuse of toxic substances for criminal purposes, and in some cases for misguided initiatives putting large populations in danger.

The major goals and activities of forensic toxicology, the science behind resolving mysterious deaths, will be discussed, and explored through a mystery-case to resolve. Beyond the micro-seminar, students can learn more about poisons by taking the course "RXRS 304: Mysterious Deaths: Toxicology, Poisons & Literature". This course is designed for all undergraduate students (no science requirements), to teach them about poisons based on history and fictional stories, and introduce them to the basic concepts of forensic toxicology. https://web-app.usc.edu/soc/syllabus/20193/49248.pdf

Faculty Biography
Dr. Culty is Associate Professor at USC School of Pharmacy. She received her PhD in Molecular Chemistry from the University Grenoble Alpes, France; followed by postdoctoral trainings in Biochemistry and Endocrinology in Canada and Australia. She held successive faculty positions at Georgetown University and McGill University prior to moving to USC in 2016. Her research focuses on the impact of environmental chemicals and drugs on male reproduction, in relation to infertility and testicular cancer. She teaches graduate and undergraduate course in toxicology, endocrinology and reproduction. She has published numerous articles and presented her work in various institutions and meetings. She is Executive Council Member and Chair of committees of the American Society of Andrology, and serves in review panels of various funding agencies. Dr. Church is currently an Assistant Professor in Regulatory and
Quality Sciences at the University of Southern California, School of Pharmacy. He teaches in the undergraduate program of the Pharmacology and Drug Development (PDD) major. His areas of interest and expertise include biorepository regulation and ethics; drug addiction and regulation of controlled substances; regulatory practices for continuity and disaster planning; and policies and ethics of academic research.