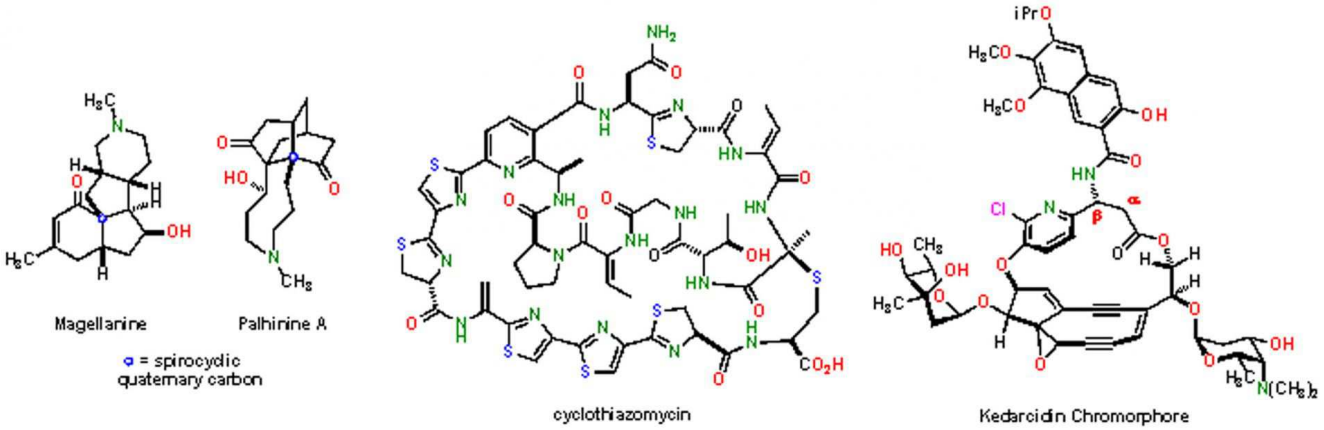
Seminar

Friday, 17 October 2014

12:00 Pursley Hall Room 211



"Organic Synthesis in Pharmaceutical Research Incorporating Long Lived Radioisotopes."

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Radioactivity is the spontaneous emission of radiation from an unstable nucleus. Since the discovery of radioactivity by Becquerel, Sklodowska-Curie, and Curie (Physics Nobel Laureates in 1903) scientists have utilized radiation for biomedical research. Long lived radioisotopes such as tritium (t1/2 12.3 years) and carbon-14 (t1/2 5730 years) are powerful tools used to evaluate the potential of preclinical drug candidates for commercial development. The intrinsic properties of each isotope make them uniquely useful for determining different absorption, distribution, metabolism and excretion (ADME) properties of a drug. In this seminar, I will discuss my experiences as a synthetic organic chemist handling radioactive materials and describe the importance of such materials in a pharmaceutical research environment. Matthew Donahue is currently an assistant professor of organic chemistry at the University of Southern Mississippi. Prior to that he was a synthetic chemist in the Isotope Synthesis group in Janssen R&D in Spring House, PA. He has held similar radiosynthesis positions at Wyeth Research (now Pfizer) and Boehringer Ingelheim. He earned his Ph.D. from The Ohio State University and did postdoctoral study at Vanderbilt University.