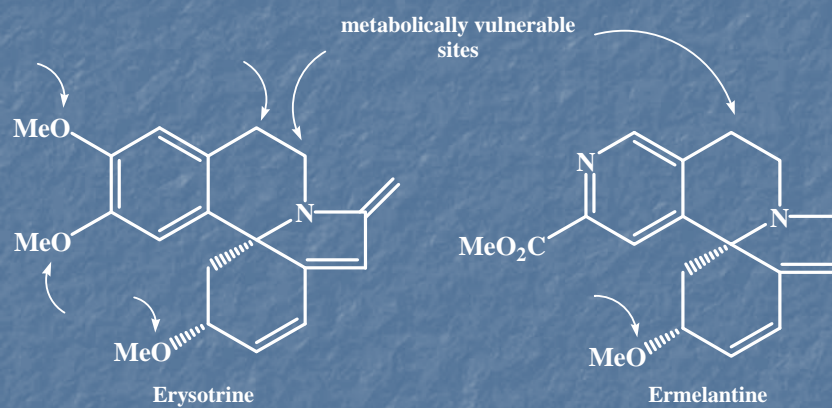


Synthesis of novel heterocycles based on the structures of erythrina alkaloids

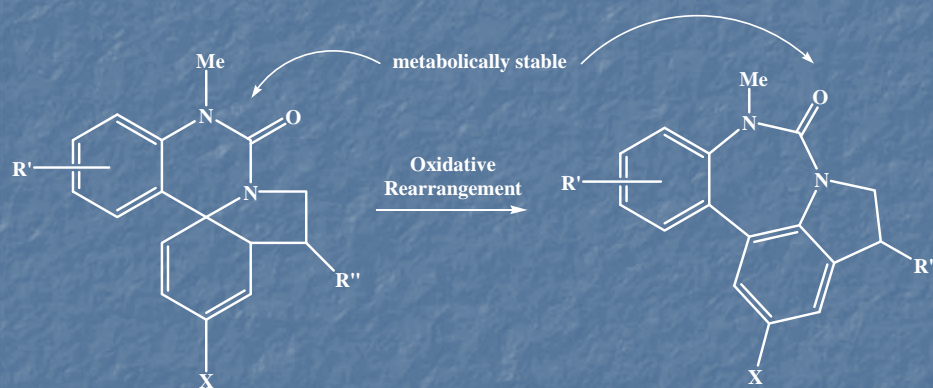
Danielle Caroccia
May 5, 2009

Erythrina Alkaloids

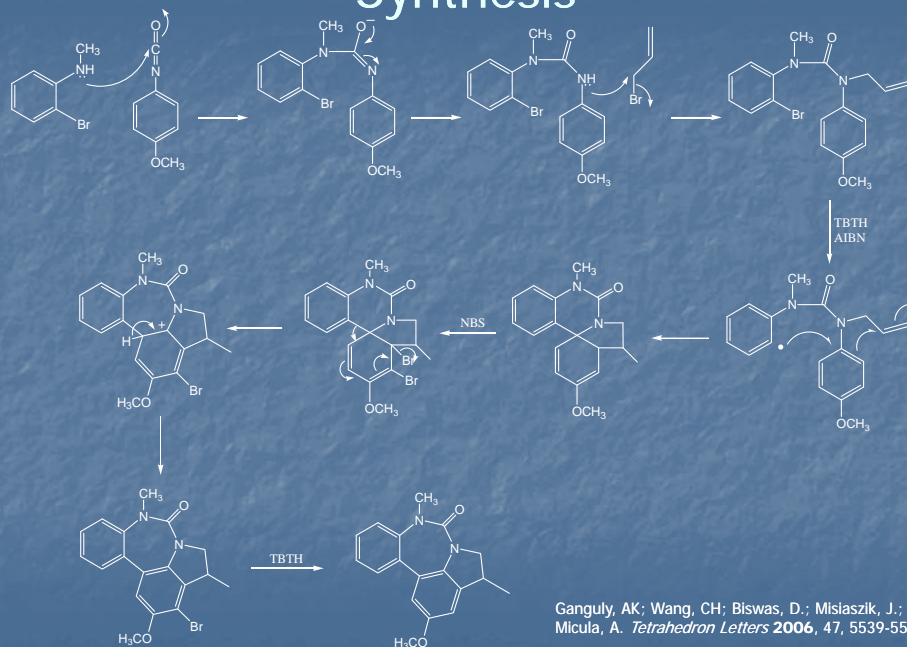


Natural products with potent CNS activity

Designed Novel Heterocycle

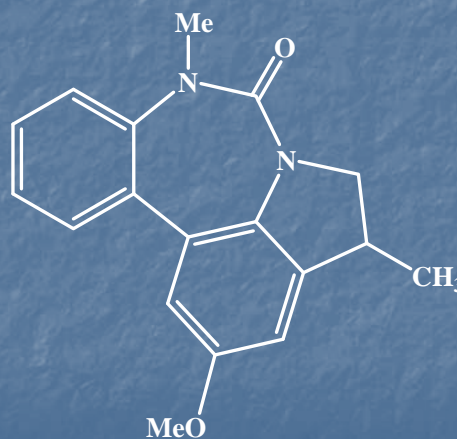


Synthesis

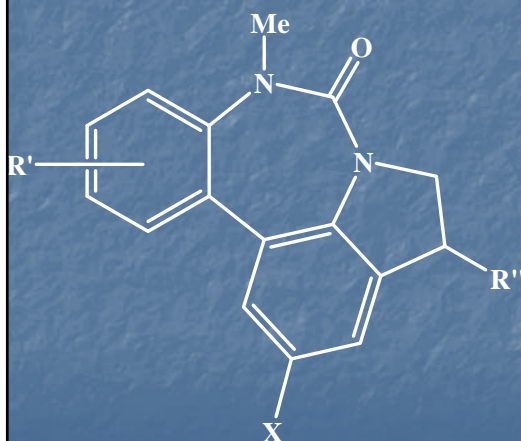


PI3 Kinase Inhibition

- PI3 kinase is involved with suppressing apoptosis, promoting cell growth, and driving cell proliferation
- Our compound was found to inhibit PI3 kinase and may therefore have some anticancer activity



Library of Compounds



- X = -OCH₃, -OCH₂CH₃, -CH₃, -F, -CF₃, -OCF₃
- R' = -parafluoro
- R'' = -CH₃, dimethyl, -CH₂-Ph