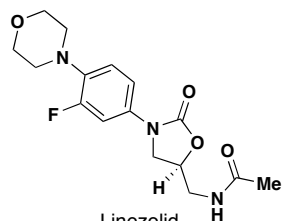
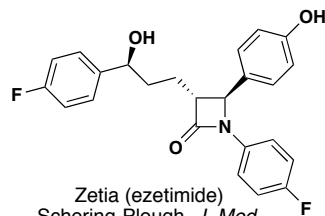
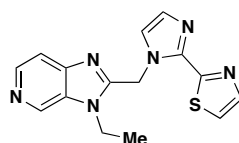
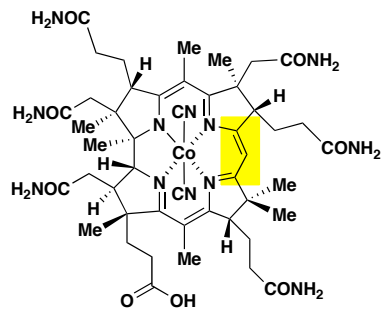
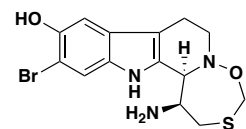
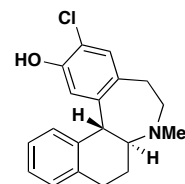
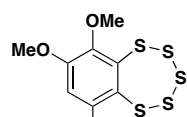
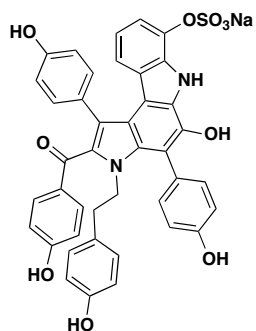


Wednesday, May 25th, 2011

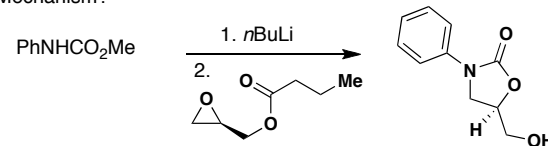
Background music: Chopin

Syntheses discussed:

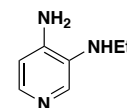
Linezolid
Pharmacia (Pfizer), *Angew. Chem. Int. Ed.* **2003**, *42*, 2010Zetia (ezetimibe)
Schering-Plough, *J. Med. Chem.* **2004**, *47*, 1GABA inverse agonist
Pfizer, *OPRD* **2006**, *10*, 257cobyrinic acid
Eschenmoser, *Classics I*, chapter 8Eudistomin C
Fukuyama, *JACS* **2005**, *43*, 15038SCH 39166
Schering-Plough, *OPRD* **1998**, *2*, 175NH₃•TFA
Varacin
Danishefsky, *JACS* **1993**, *115*, 7017dictyodendrin B
Fürstner, *JACS* **2005**, *127*, 11620; *JACS* **2006**, *128*, 8087
Fukuyama, *ACIE* **2010**, *49*, 5925

Problems of the Day:

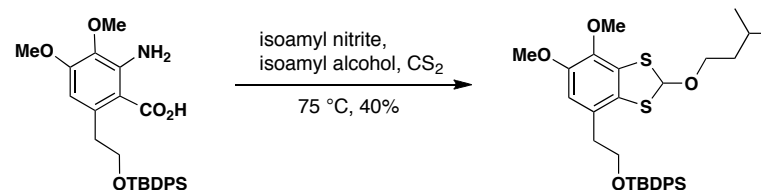
① Mechanism?



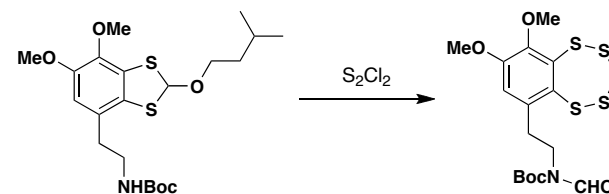
② Suggest a synthesis for the following simple heterocycle:



③ Mechanism?



④ Mechanism?

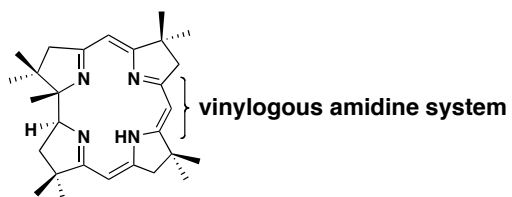


Reading assignment: Handouts

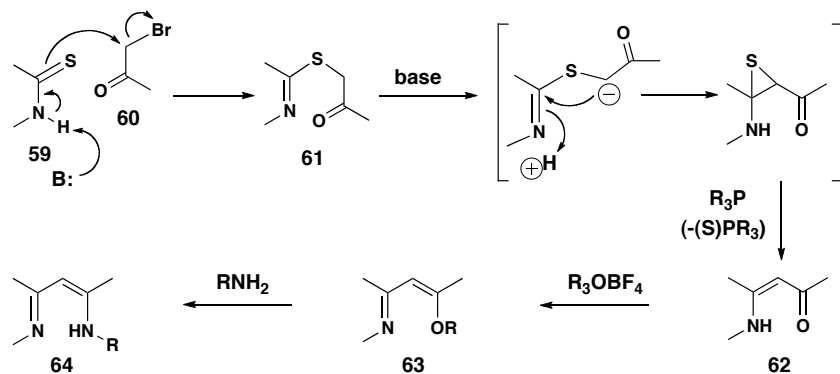
Partial list of concepts/transforms discussed:

Manninen reaction

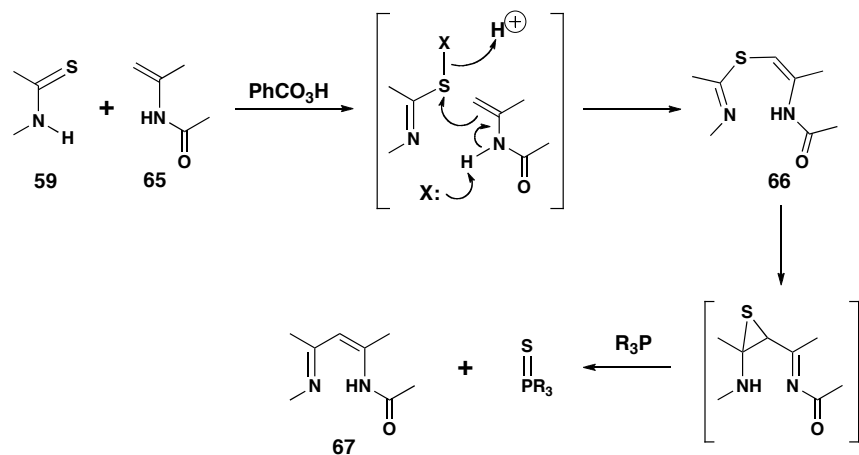
Eschenmoser sulfide contraction



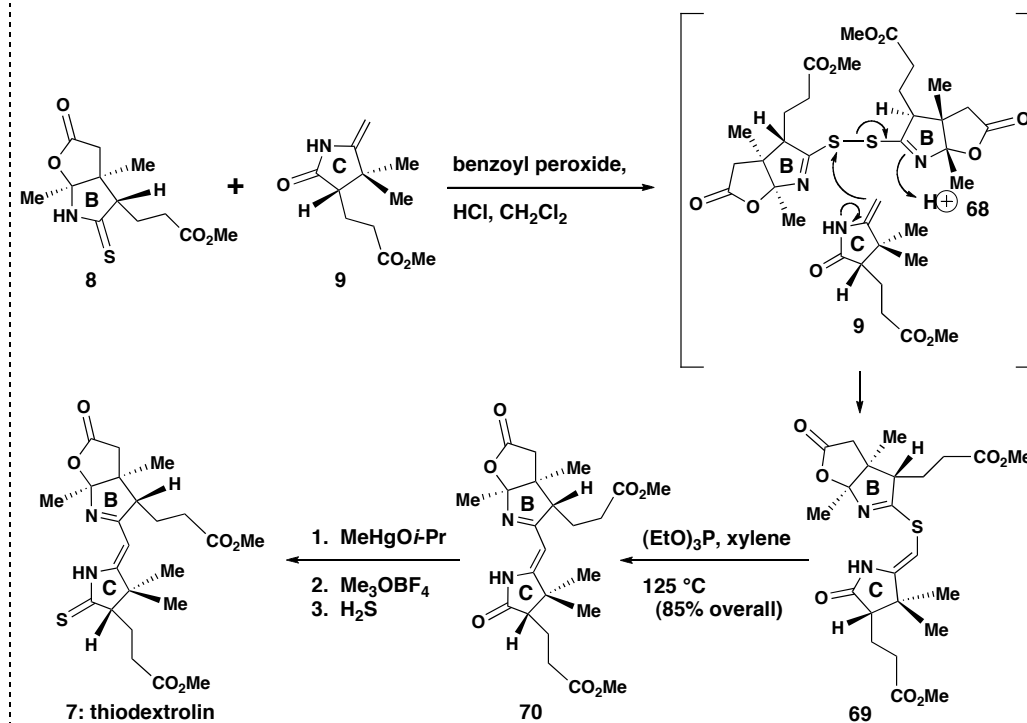
The sulfide contraction method via alkylative precoupling



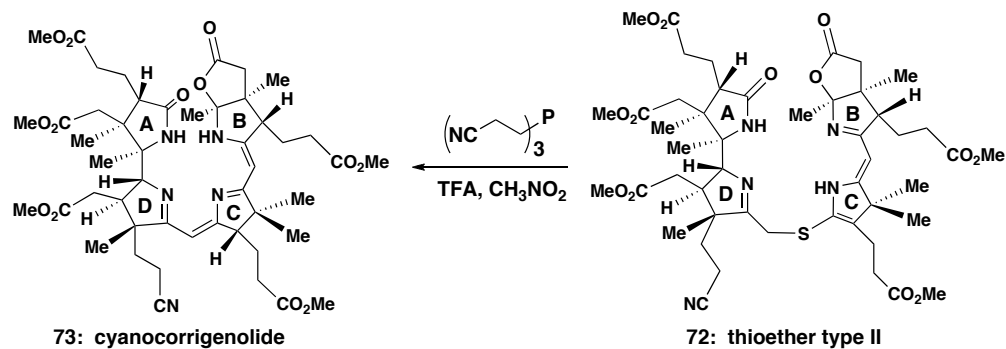
The sulfide contraction method via oxidative precoupling



Scheme 11. The Eschenmoser sulfide contraction.



Scheme 12. The Eschenmoser synthesis of thiodextrolin (7).



Scheme 13. The Woodward A-B cyclization strategy.