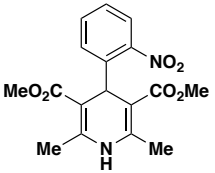
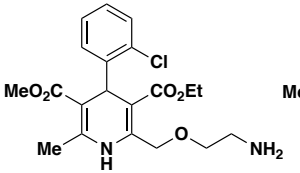
Study music: Mendelssohn, Symphony #4

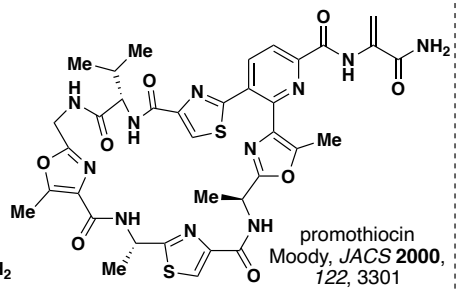
Syntheses discussed:



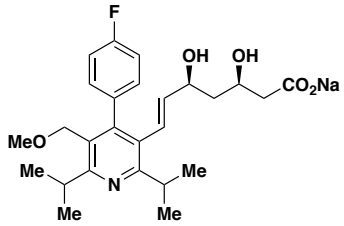
Procardia (nifedipine)
Pfizer



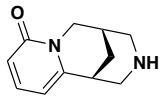
Norvasc (amlodipine)
Pfizer



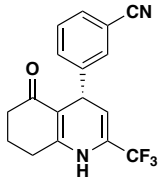
promothiocin
Moody, *JACS* **2000**, *122*, 3301



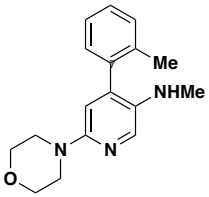
Lipobay and Baycol (cerivastatin)
Bayer (withdrawn in 2001)



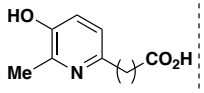
cytisine
van Tamelen *JACS* **1958**, *62*, 4659
Pfizer (Coe, *Org. Lett.* **2000**, *2*, 4205)
(O'Neill et al., *Org. Lett.* **2000**, *2*, 4201)



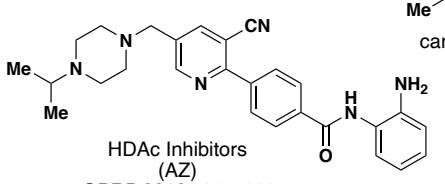
ZD0947
AstraZeneca, *Tetrahedron Lett.* **2002**, *43*, 4931



NK1 Receptor Antagonists
Roche, *JOC* **2006**, *71*, 2000.



carpyrinic acid



HDAc Inhibitors
(AZ)
OPRD **2012**, *16*, 1283

Reading assignment: HC chapter 8; PCC pyridine; O'Malley handout;

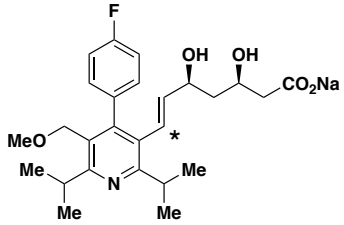
Partial list of concepts/transforms discussed:

Pyridine ring forming reactions:
- Hantzsch
- Guareschi-Thorpe
- Krohnke
- Bohlmann-Rahtz
- Boger cycloadditions: triazines and N-sulfonyl-1-aza butadienes
- Ciufolini type

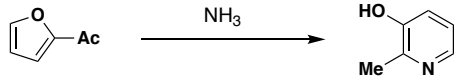
Hammick reaction

Problems of the day:

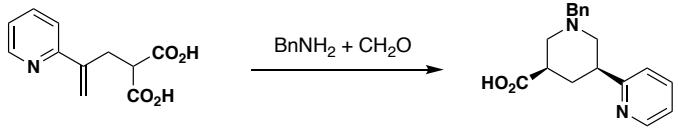
1 Propose a synthesis of Baycol and its ^{14}C labeled analog:



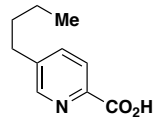
2 Explain:



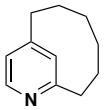
3 Mechanism:



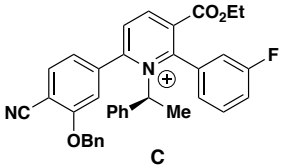
4 Provide routes to the following compounds:



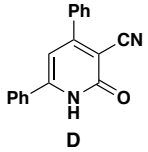
A (via ring synthesis)



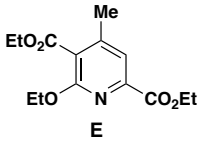
B



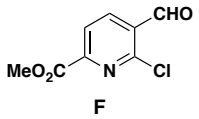
C



D



E



F

5 Disconnect from the vantage of medicinal chemistry and process chemistry.

