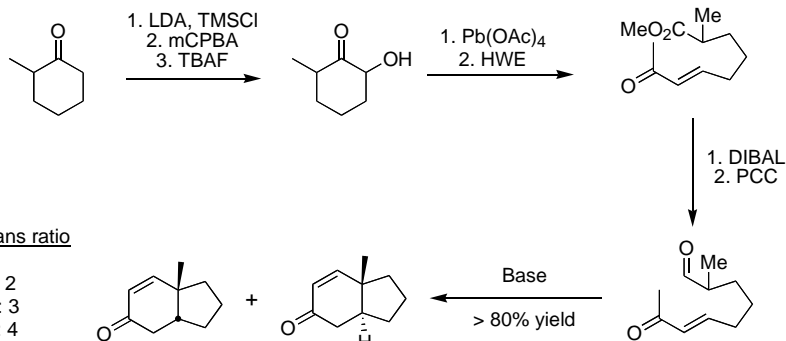


John Hendrix

Stork, Winkler 310

Methodology used towards synthesis of Adrenosterone on 3767

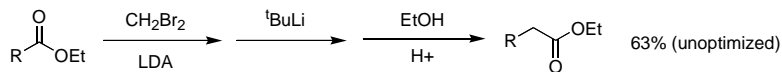
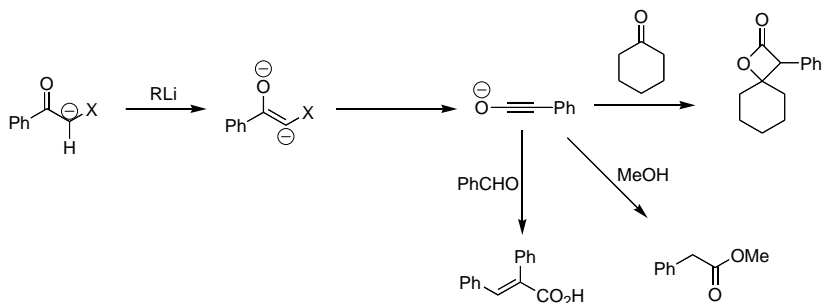


Base cis/trans ratio

KOH	1 : 2
NaOMe	1 : 3
LiOH	1 : 4
Zr(OPr) <sub>4</sub>	1 : 40

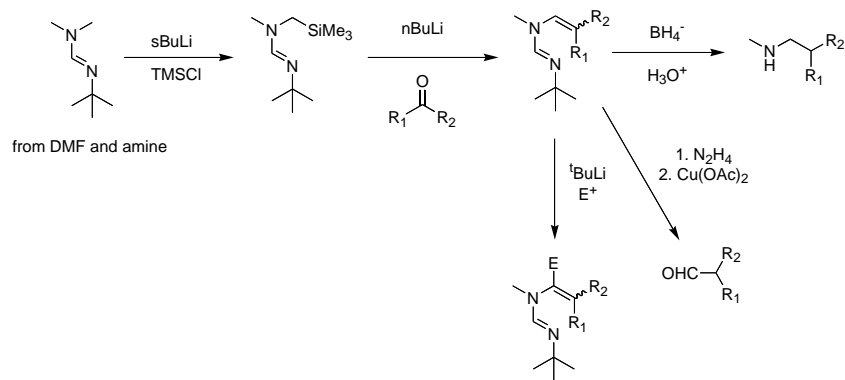
Kowalski, 321

Wacky carbon analog of Hofmann Rearrangement



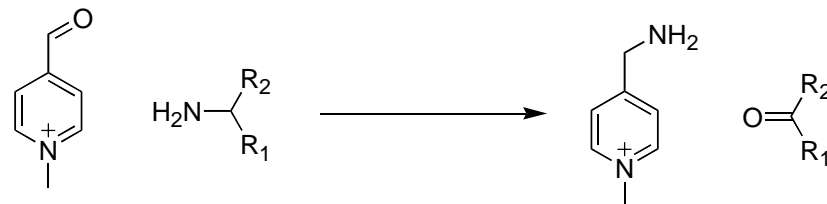
A.I. Meyers, 877

Enamides

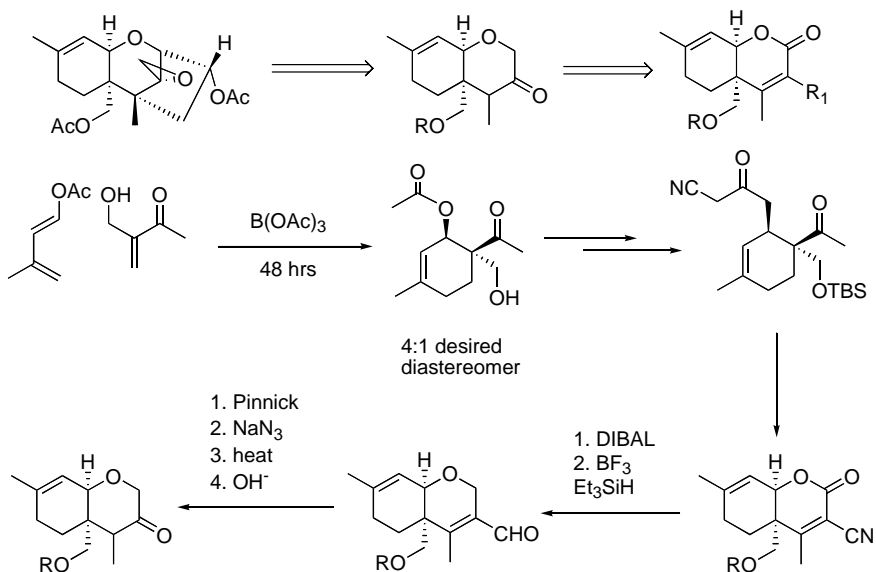


Rapoport, 4446

Biomimetic conversion of amines to carbonyls

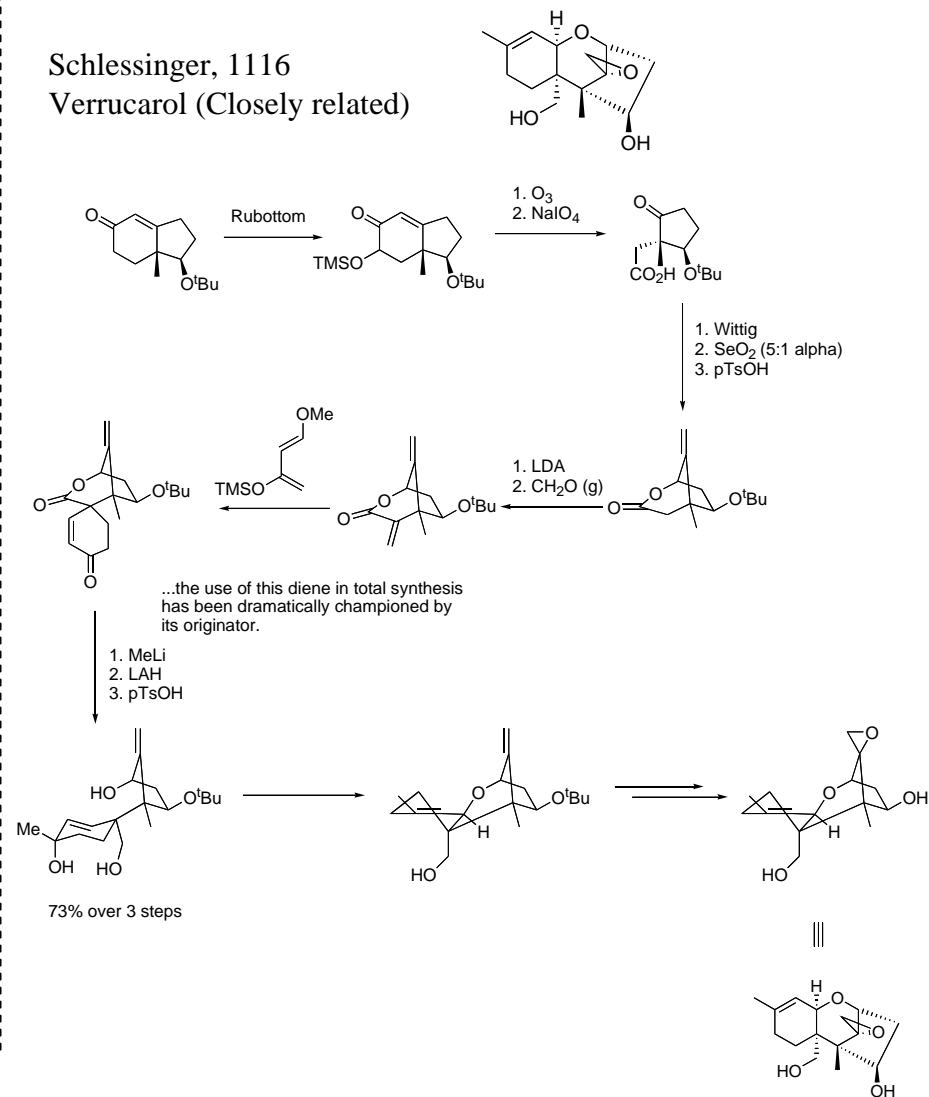


Kraus, 1114  
Calconetrin (trichothecene)



Direct acetate condensation after DA did not work.  
Stumbles around after making bicycle but good idea at start.  
Interesting Curtius --> enamine --> ketone transformation

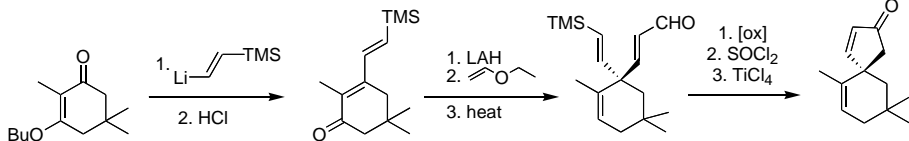
Schlessinger, 1116  
Verrucarol (Closely related)



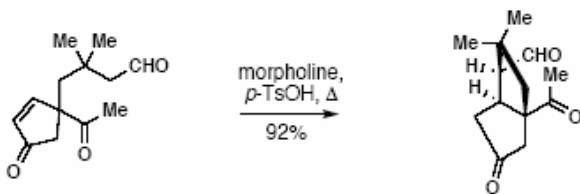
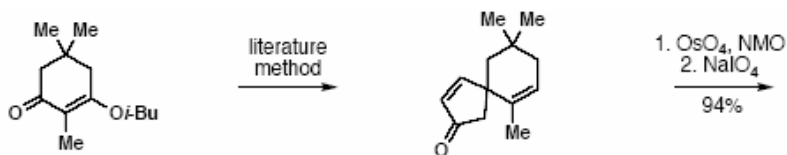
# JACS 1982

John Hendrix

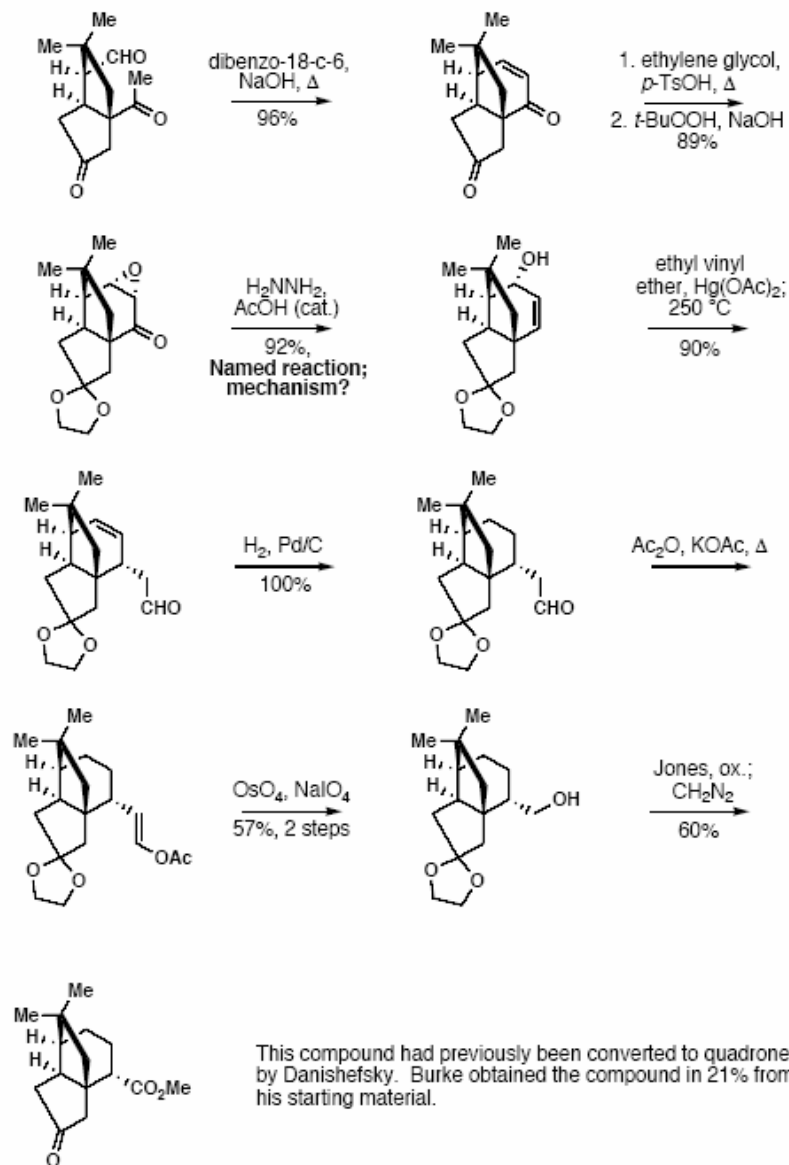
Burke, 872  
Vinyl silane --> Quadrone



Higher oxidation state Claisen rearrangements didn't work as well

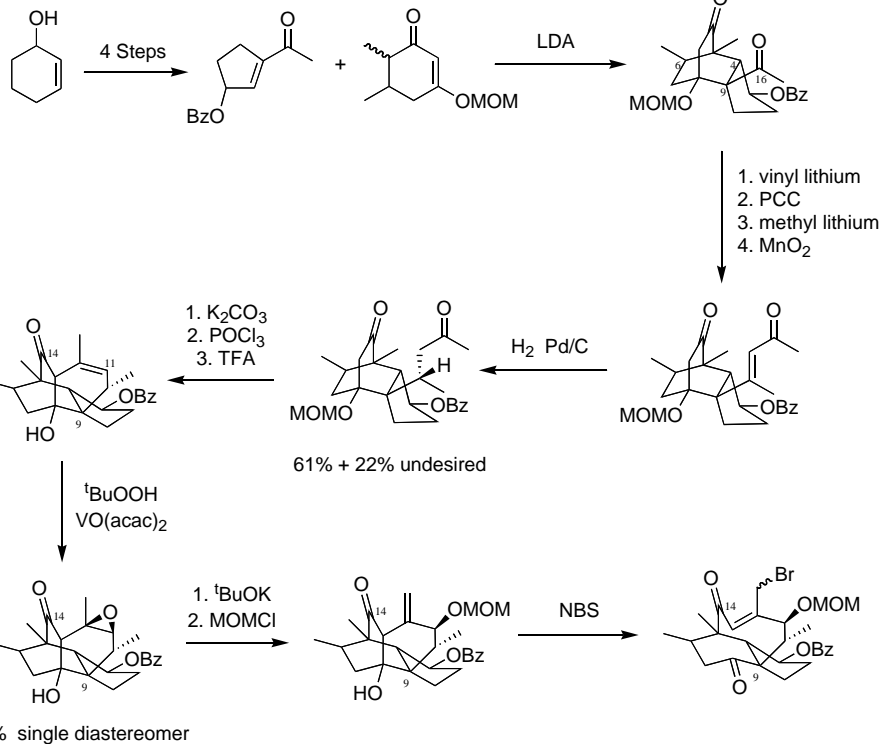
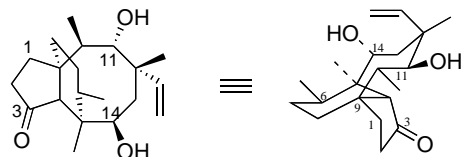


Conditions were found to effect all 3 possible aldol condensation products!!

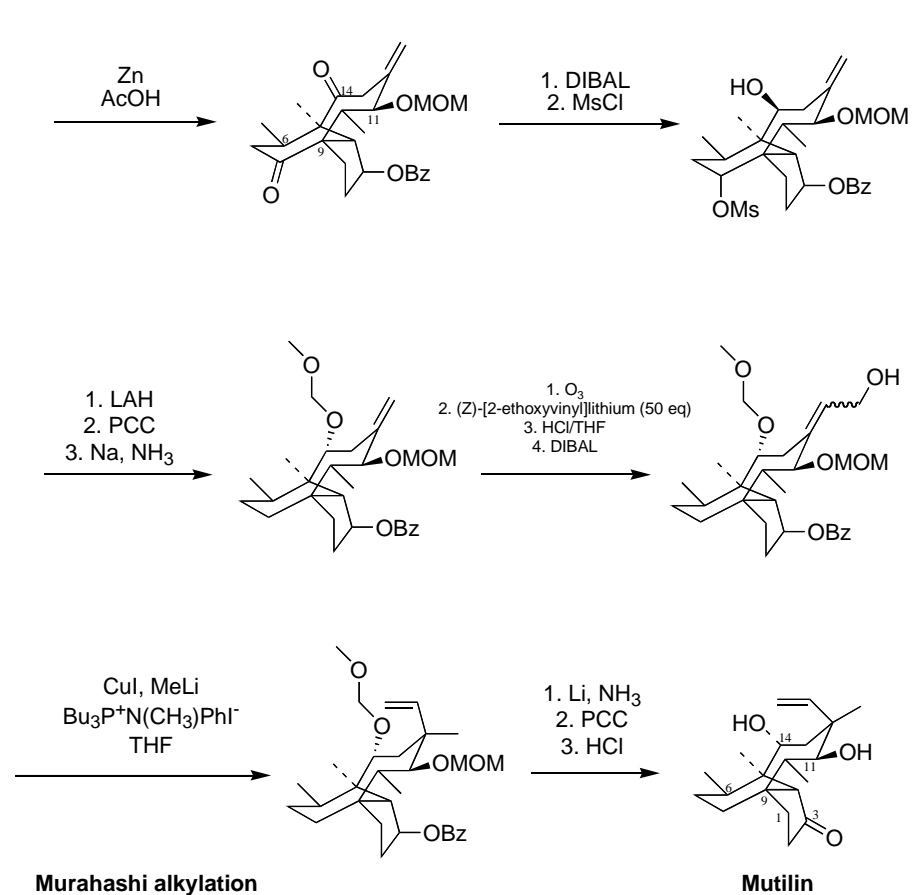


John Hendrix

Gibbons, 1767  
Mutilin/Pleuromutilin

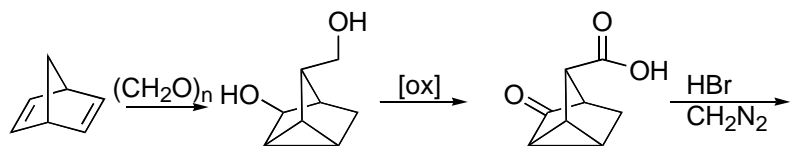


Tandem Michael reaction sets four of eight stereocenters in 62% yield as a single diastereomer (see *JOC*, **1980**, 1540)

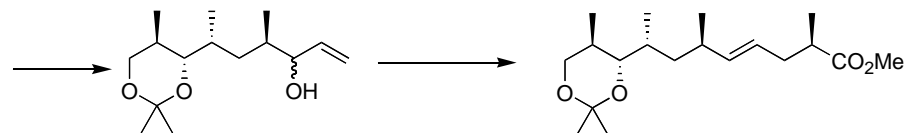
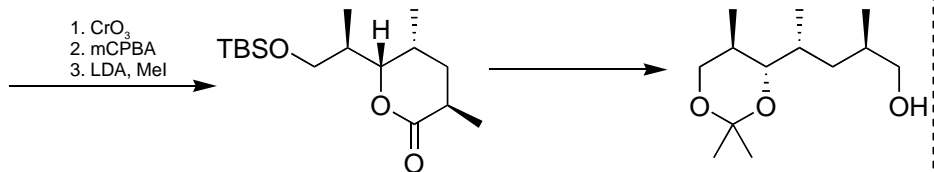
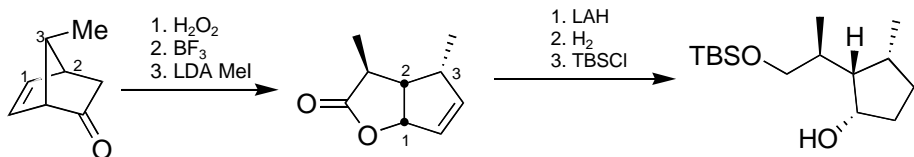
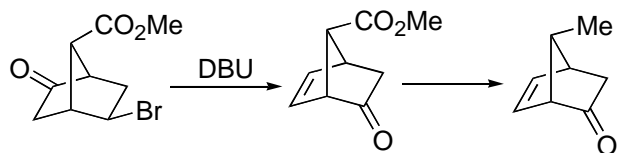


John Hendrix

## Grieco's Norbornadiene abuse - Part 1 Calcimycin, 1436



Chem Comm.



both diastereomers okay in Claisen  
depending on presence of HMPA

Further abuses can be found on pages:

4226 - helenalin

4233 - ambrosin and damsine

5781 - tylenolide

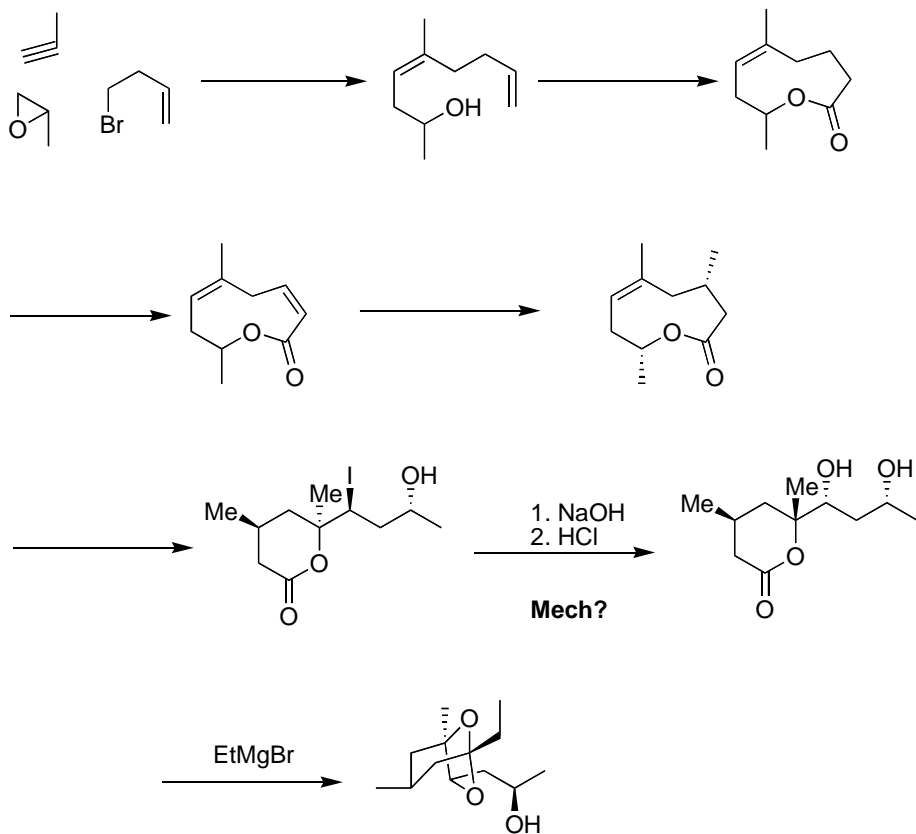
(the last one is particularly good/bad)

# JACS 1982

John Hendrix

W.C. Still, 1974

Part of Palytoxin.. That weird part.

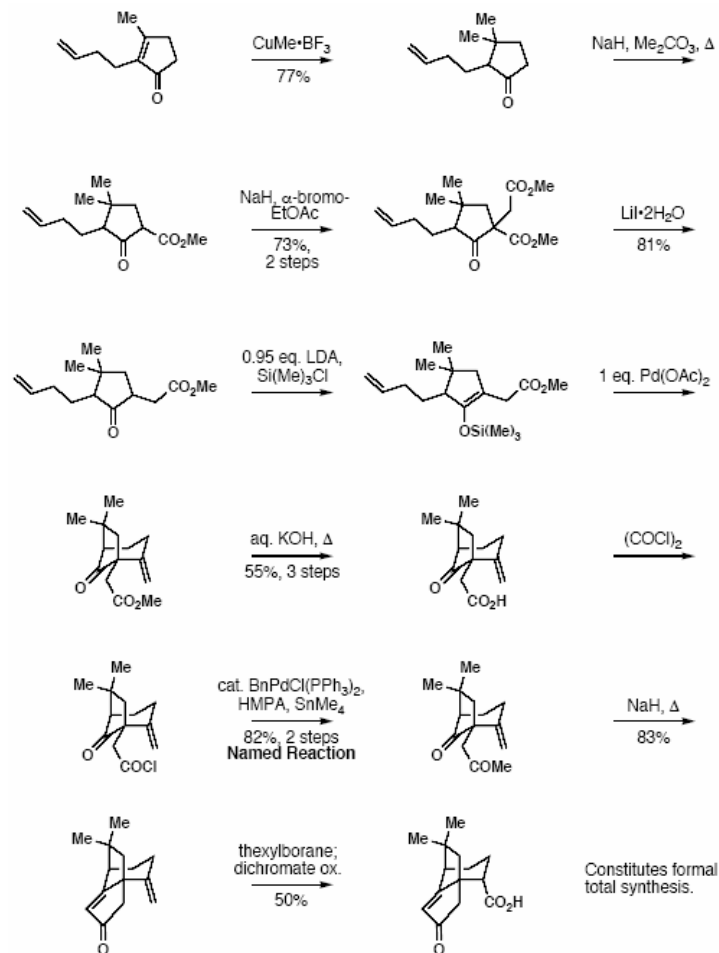


Kende, 1978

Unexpected Saegusa side product



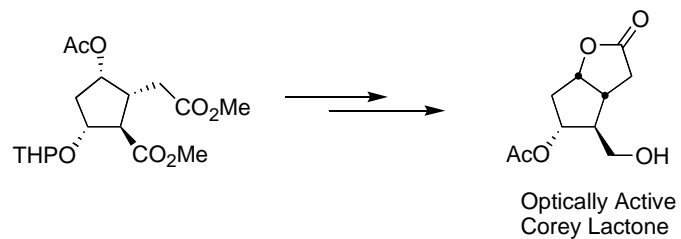
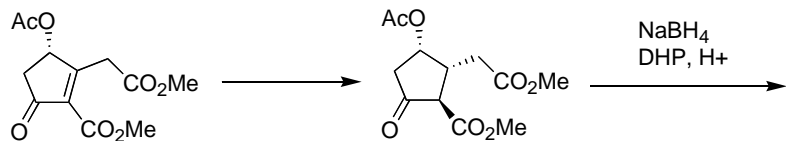
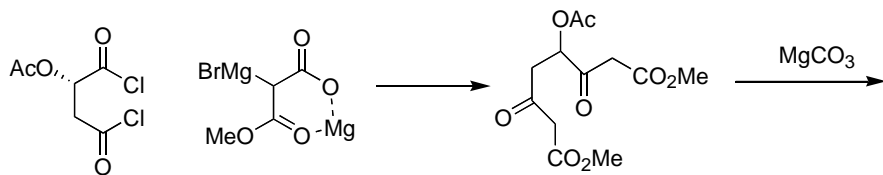
...leads to quadrone synthesis on 5808



John Hendrix

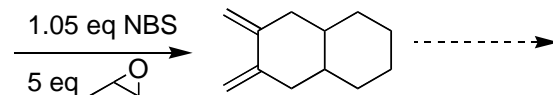
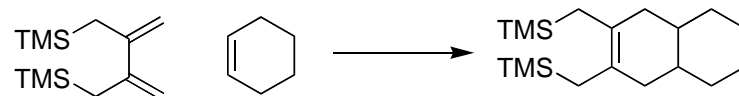
Johnson, 2190

1st optically active approach to PG

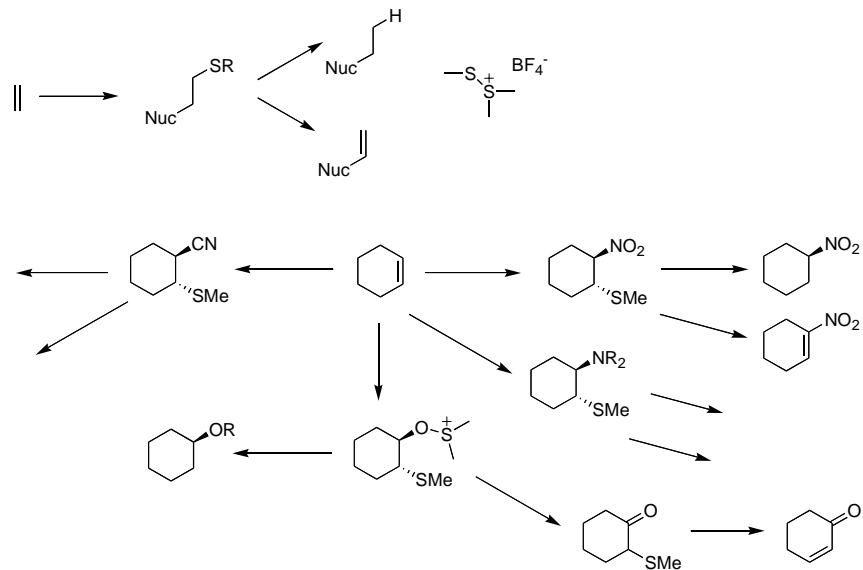


Trost, 4299

Double Diene Action

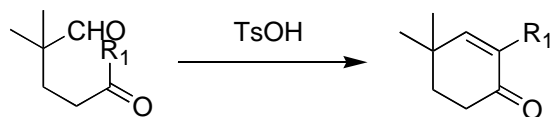
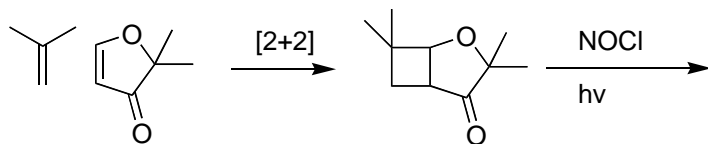


Trost, 3225, 3228



Baldwin, 4990

Fun with the Barton nitrite photolysis



Other notable achievements in synthesis:

1st Mobius Strip (Walba, 3219)

[1.1.1]-Propellane (Wiberg, 5239)

Dodecahedrane (Paquette, 4502)

Erythronolide (Stork, 4686)

Ansamycin (Masamune, 5528)

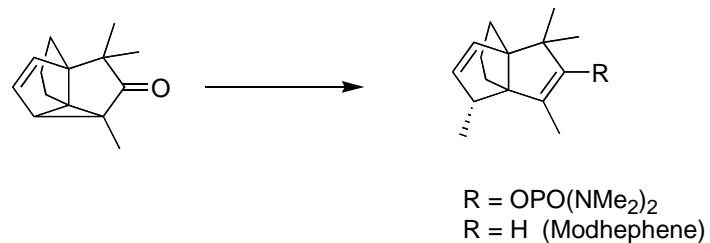
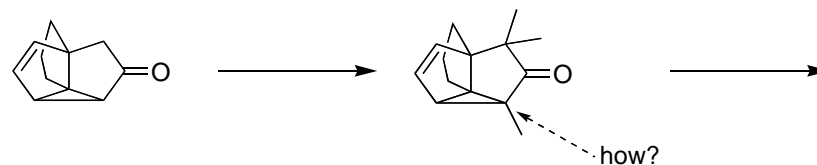
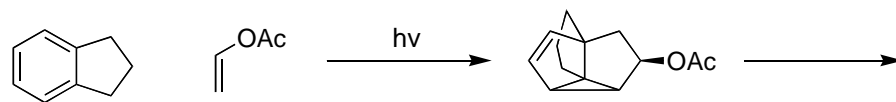
Confertin (crappy molecule, three crappy syntheses)

Endiandric Acid (Nicoloau, 5555)

Blade Runner was released in 1982

Wender, 5805

Modhephene



Alkylation via semi-bullvalene rearranged enolate