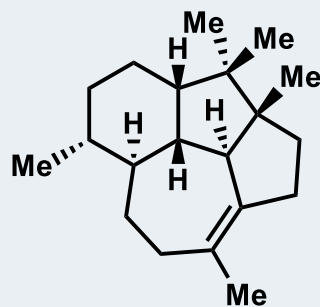




Venezuelaene A Problem Set
Biegasiewicz Group Meeting
 Septemeber 24, 2026

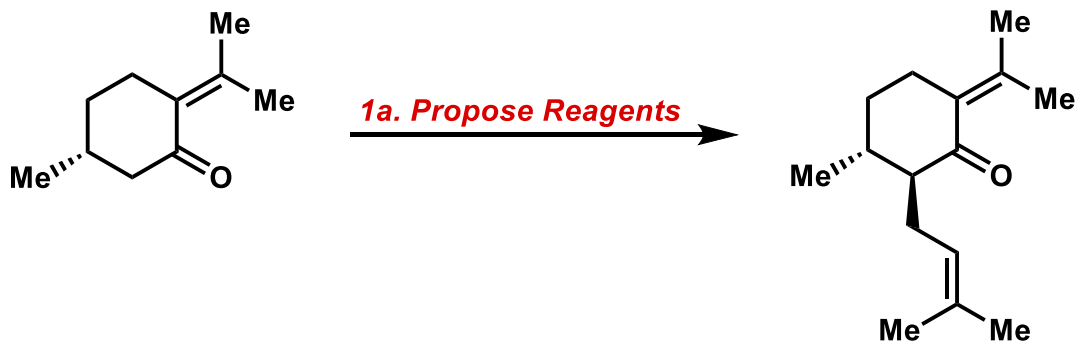


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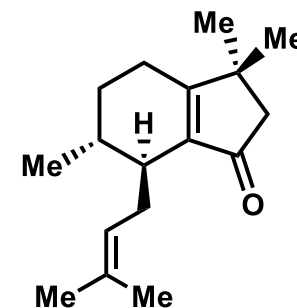
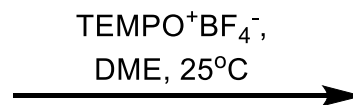
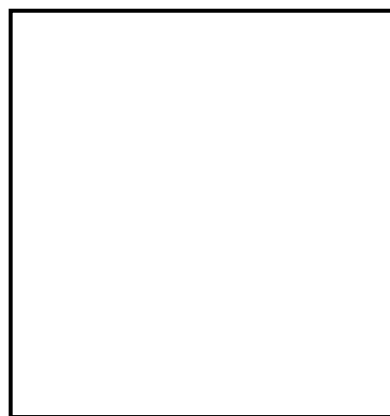
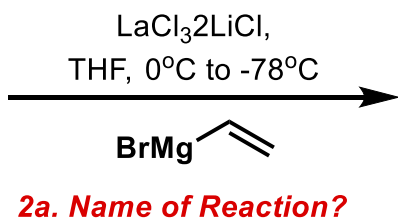
Article

Asymmetric Total Synthesis of Venezuelaene A via TEMPO⁺BF₄⁻-Mediated Oxidative Nazarov Cyclization and Cascade Metathesis

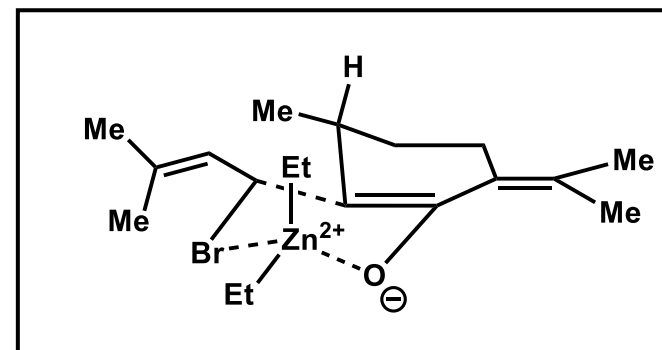
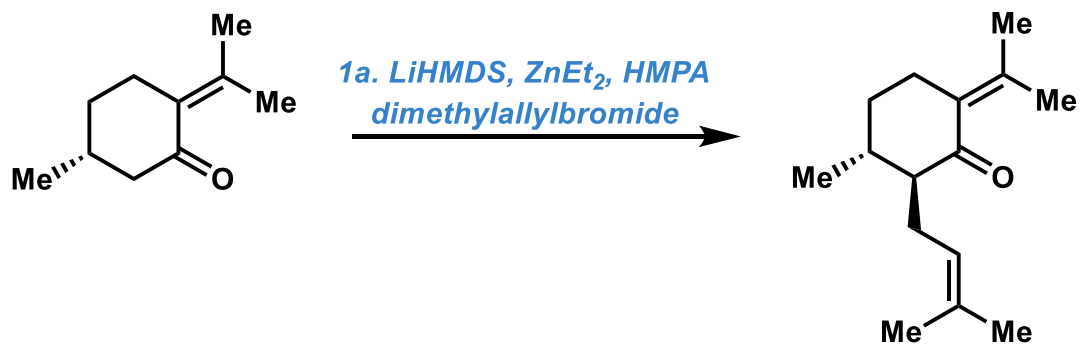
Sujun Xie, Axiao Tao, Qian Wang, Jia-Dong Yu, Chengqing Ning,^{*} and Jing Xu^{*}



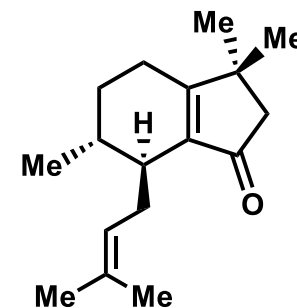
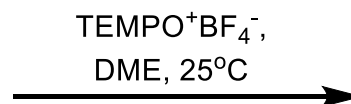
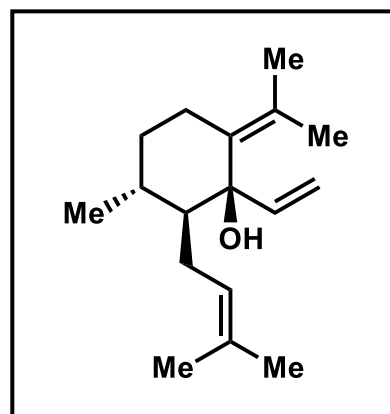
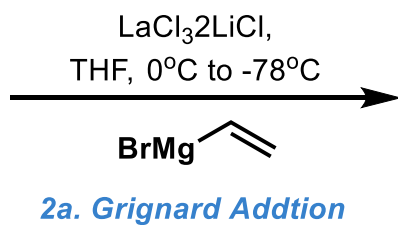
1b. Justify stereochemistry

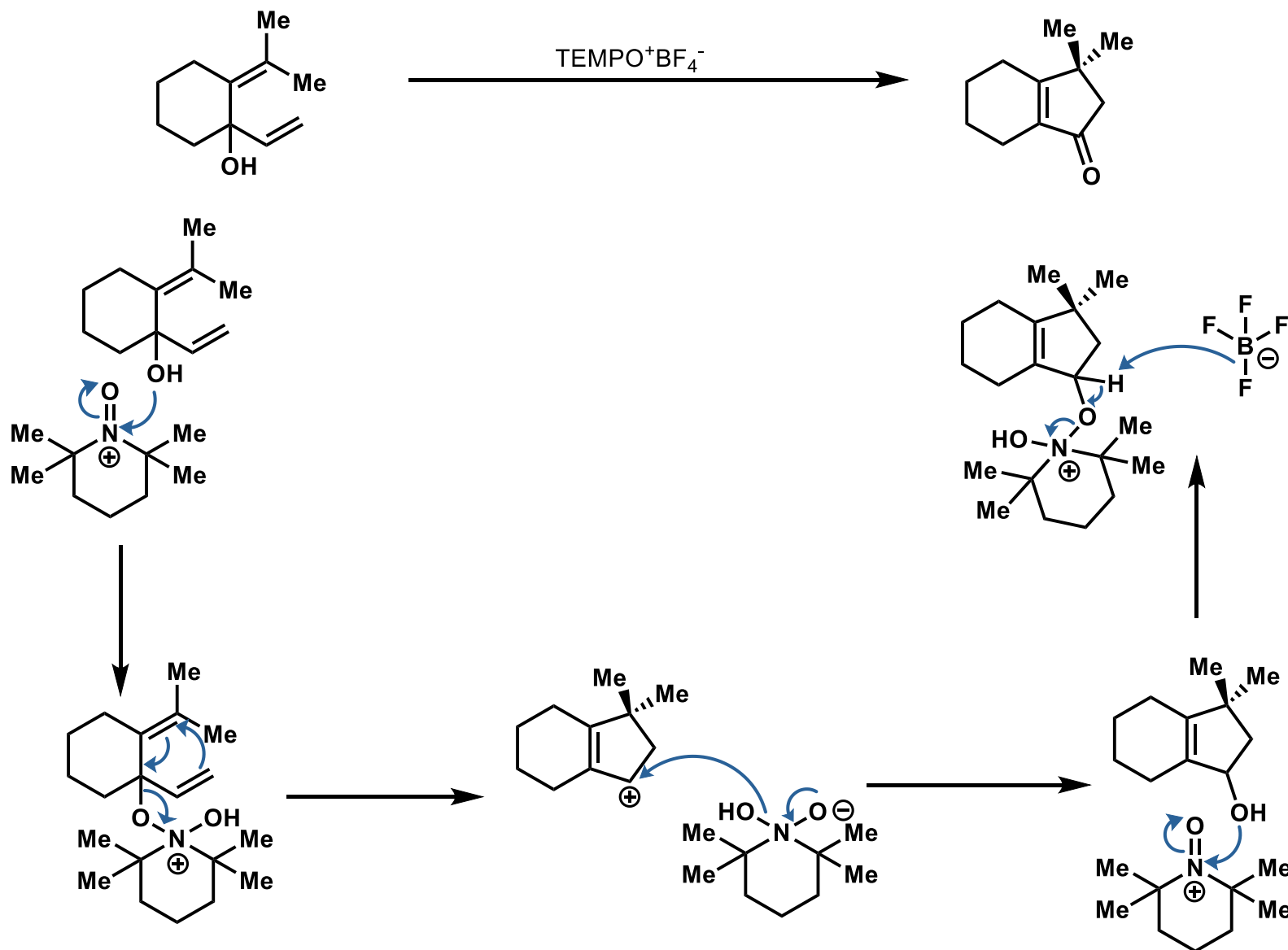


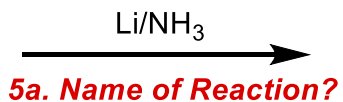
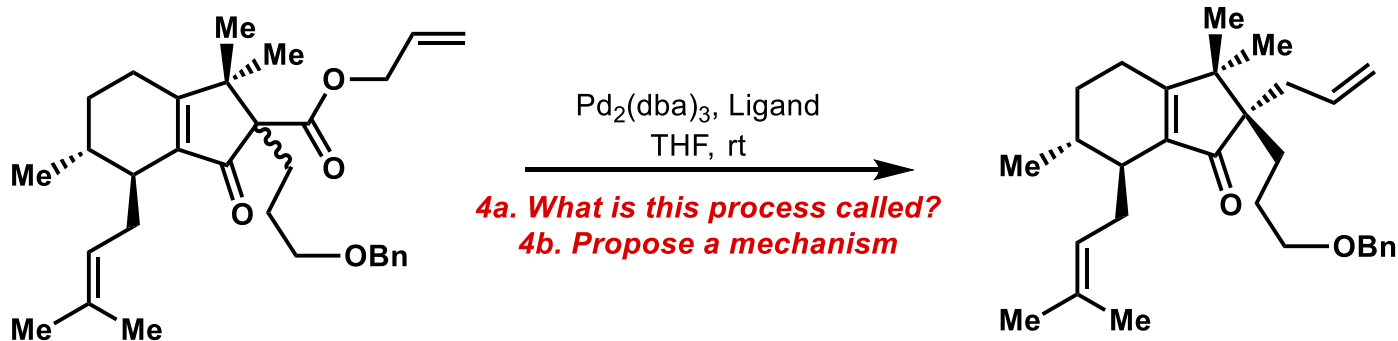
3. Propose a Mechanism



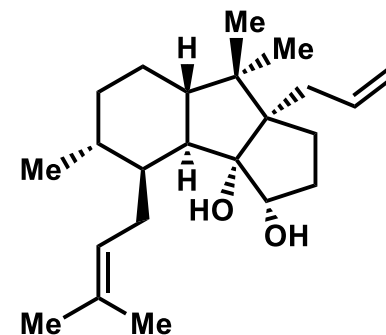
Bonus: Where is Li?

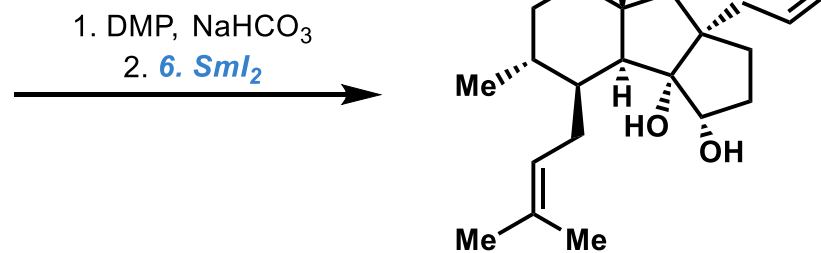
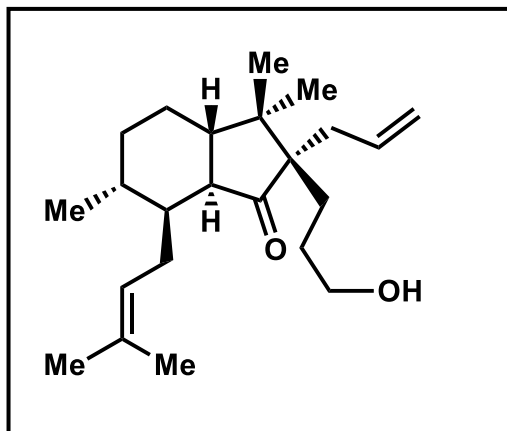
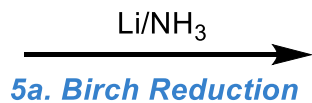
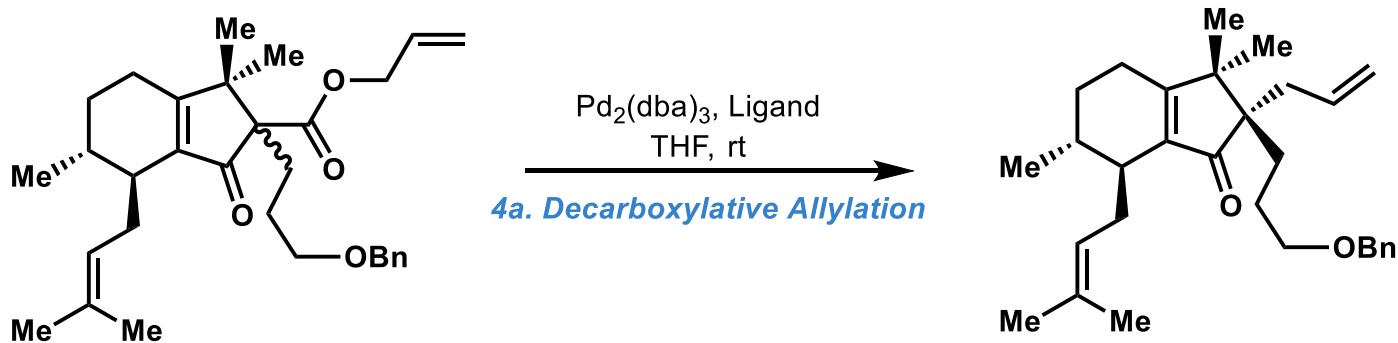




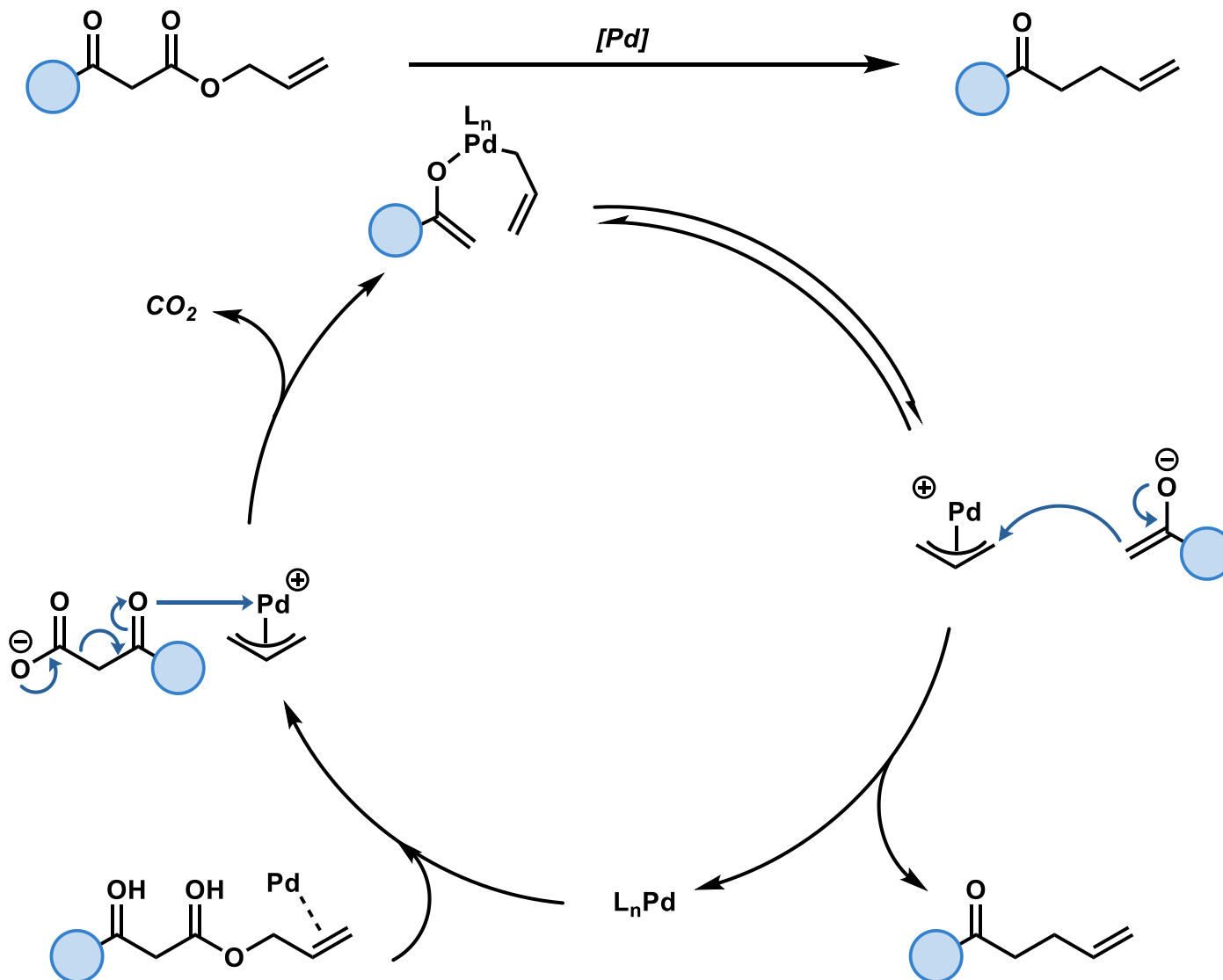


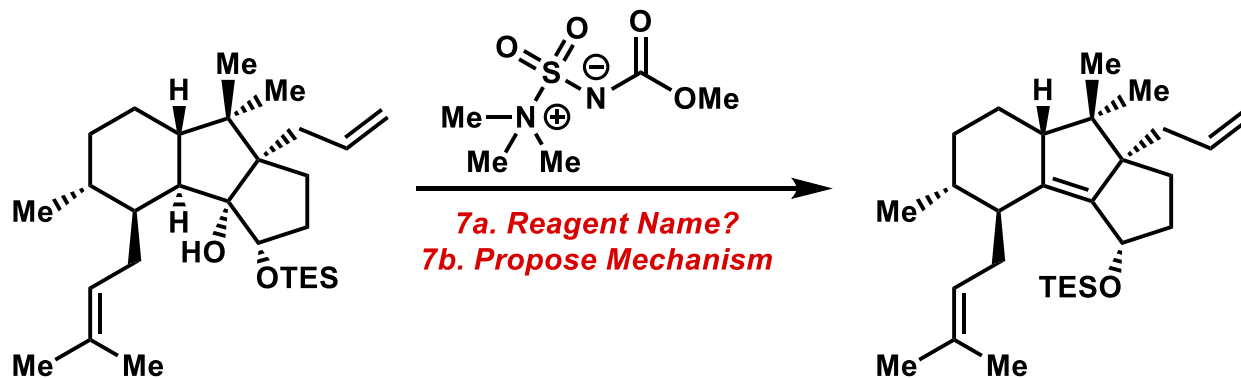
5b. Predict the product





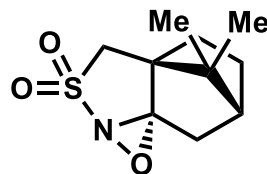
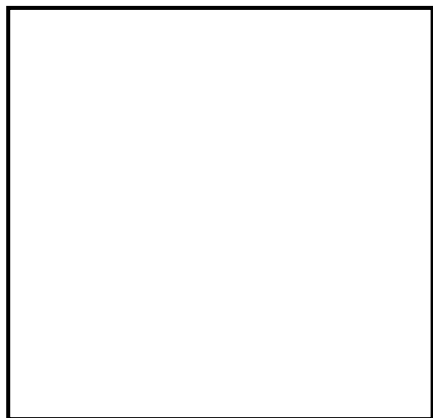
Stoltz Decarboxylative Allylation





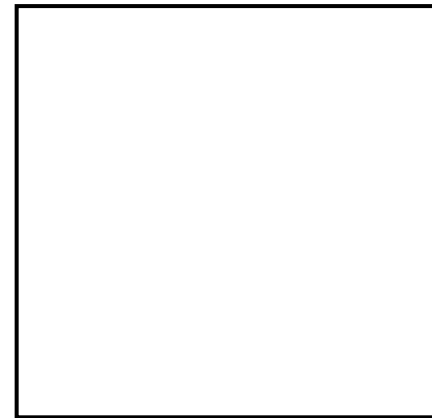
1. IBX, DMSO/THF
2. Li/NH₃

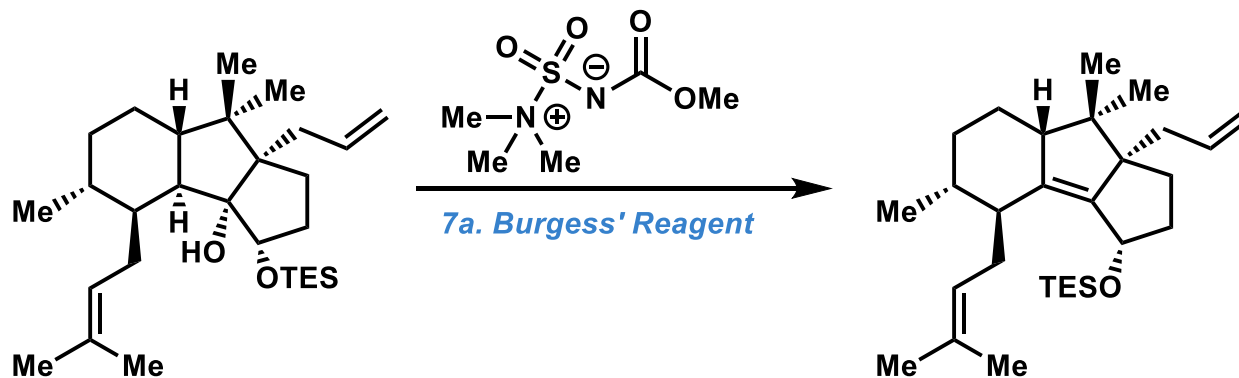
8. Predict Product



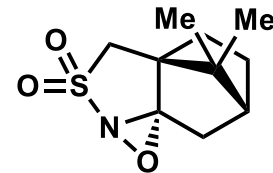
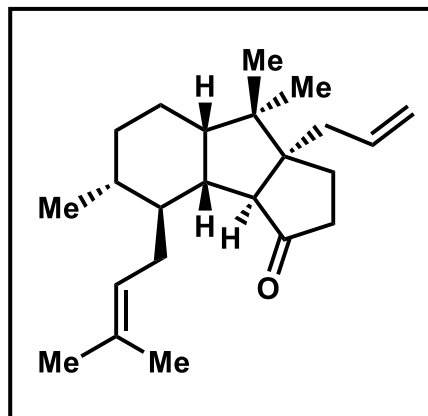
1. and base

9a. Reaction Name?
9b. Predict Product



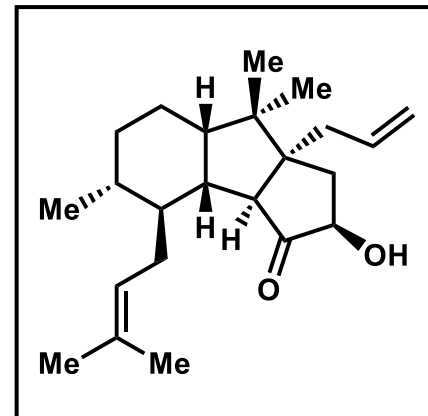


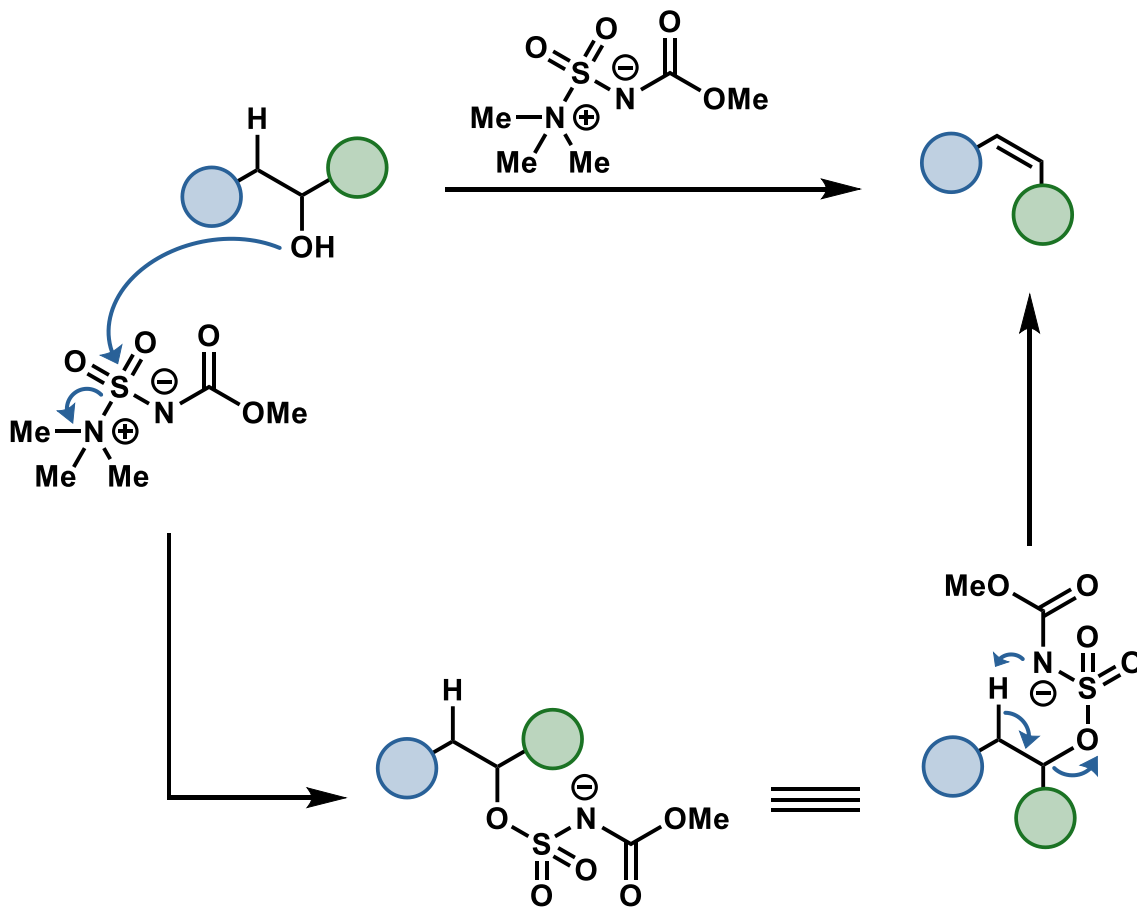
1. IBX, DMSO/THF
2. Li/NH₃



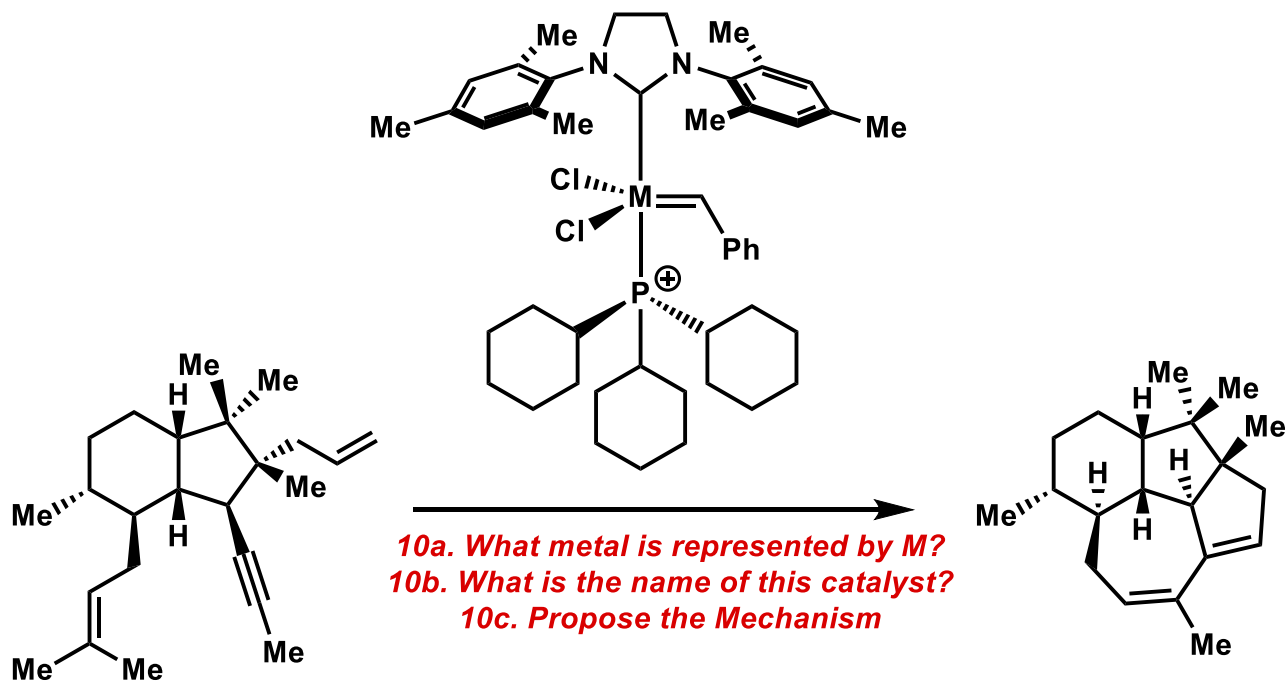
1. and base

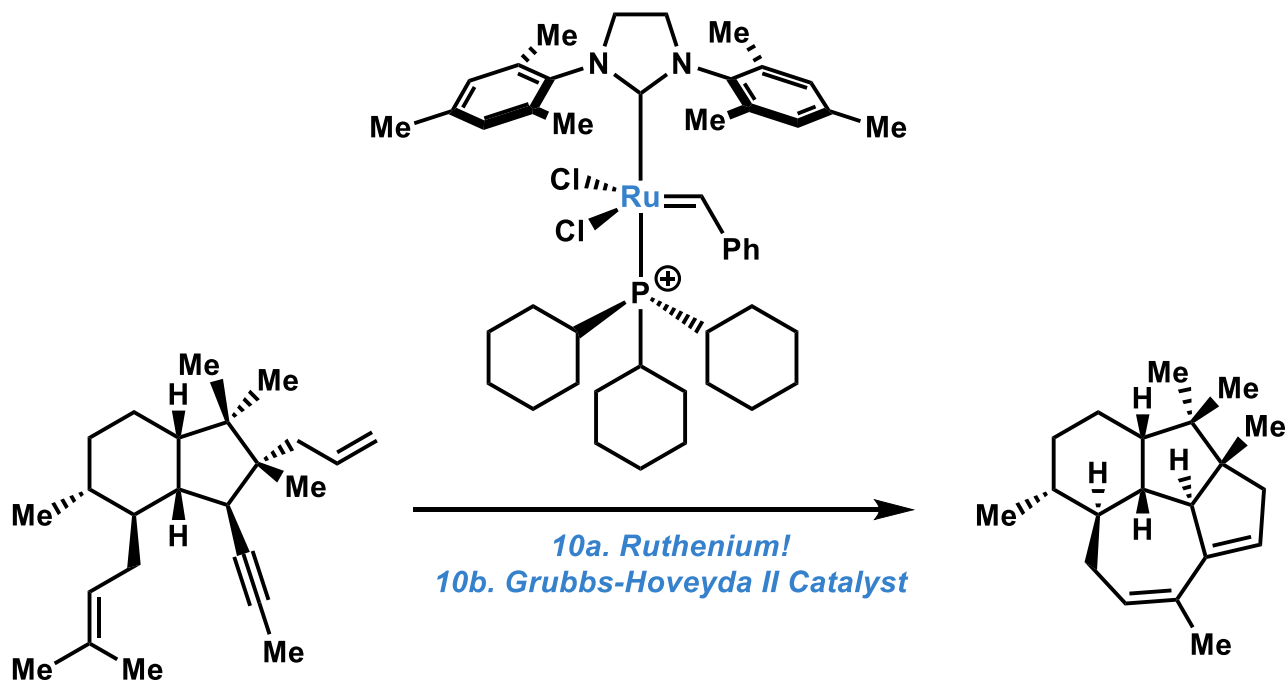
9a. Davis Oxidation

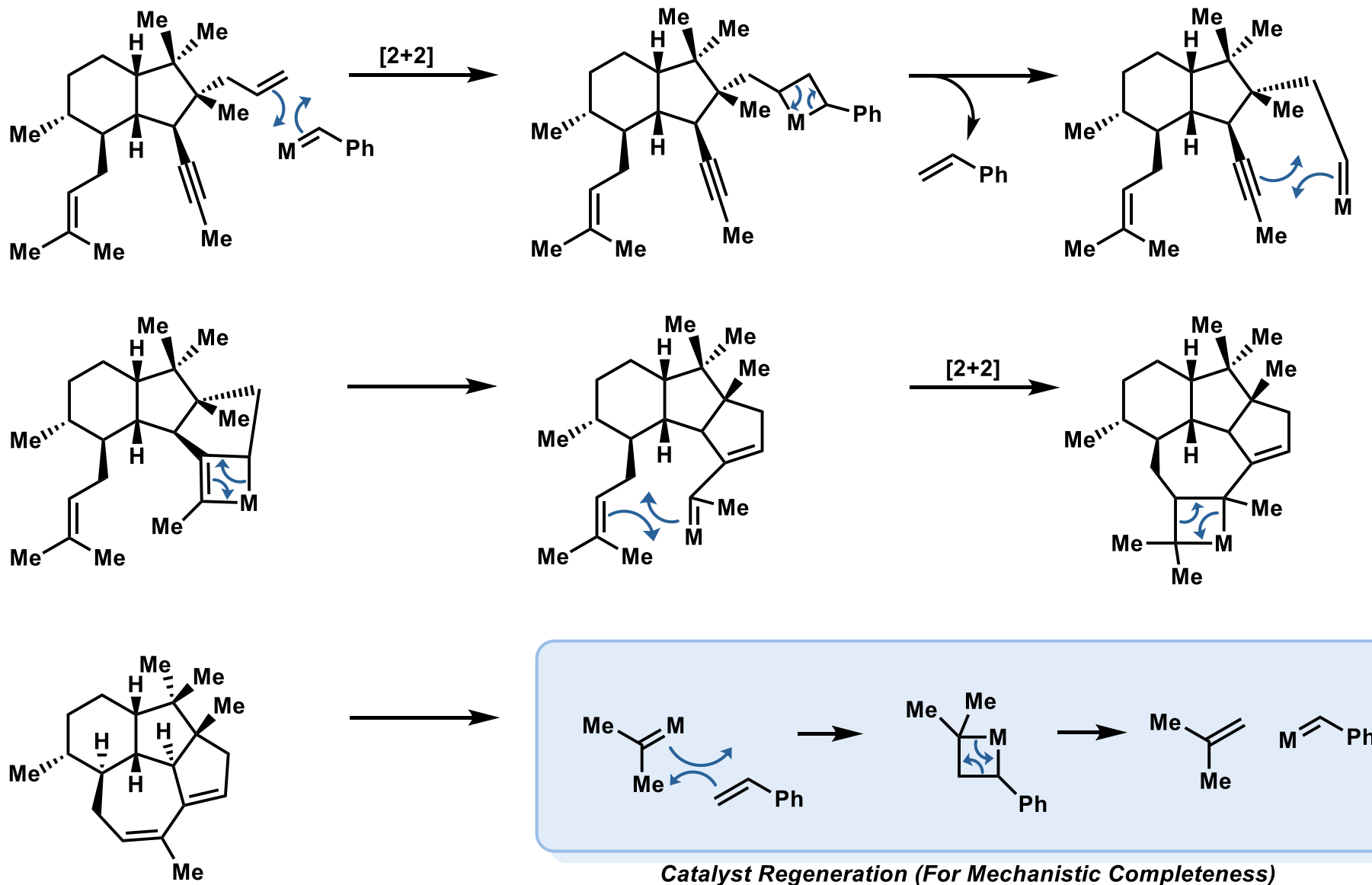




an example of syn-periplanar elimination!









Great Job Everyone!

