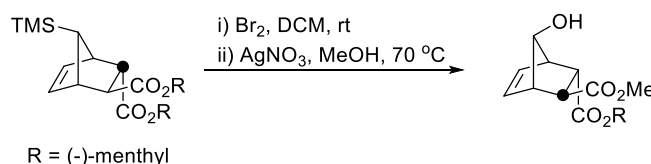


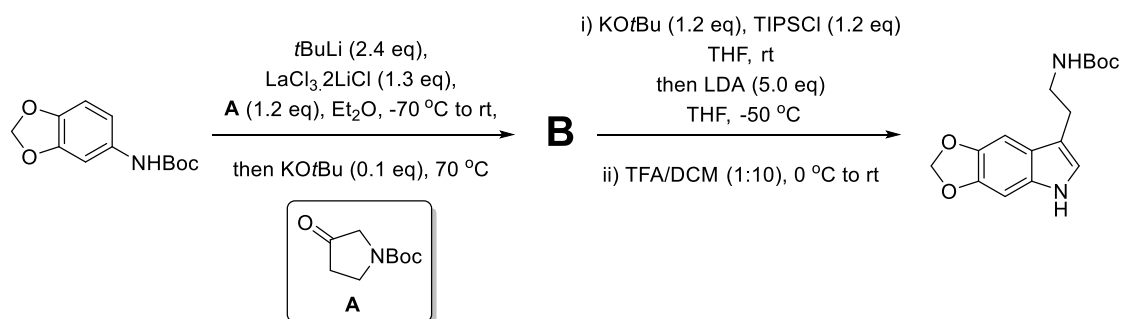
Group Meeting Problems – 8<sup>th</sup> January 2013

Please attempt the following problems, giving reagents, mechanisms and structures for intermediates **B-D**.

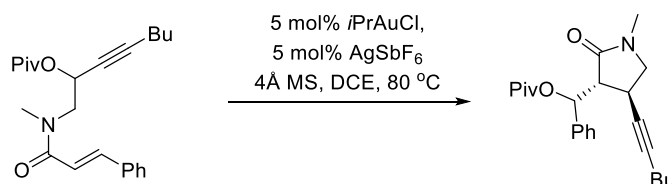
- 1) Suggest a synthesis of the starting material, along with providing a mechanism for this transformation. *Note*: Dot indicates position of that carbon in starting material and product, and is just there as a hint. (*Angew. Chem. Int. Ed.*, **2008**, 47, p8514)



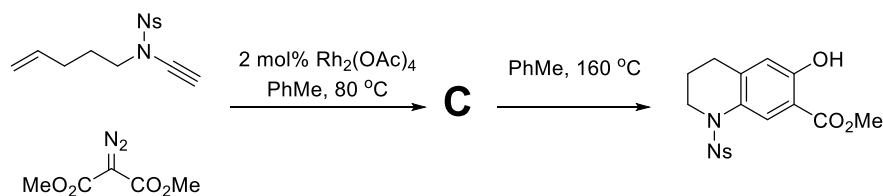
- 2) (*J. Am. Chem. Soc.*, **2009**, 131, p3690)



- 3) (*Angew. Chem. Int. Ed.*, **2013**, 52, p1329)



- 4) (*Org. Lett.*, **2006**, 11, p4462)



- 5) (*Tet. Lett.*, **2009**, 50, p1684)

