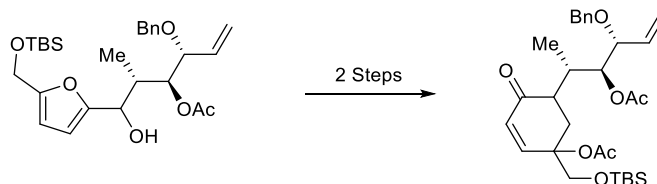


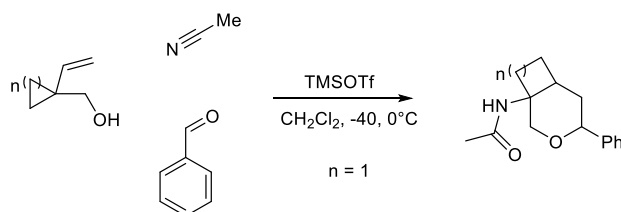
Exercise meeting

Submitted by Camilo Meléndez.

- Propose the conditions and the mechanism involved in the following transformation. This reaction represents the key step in the total synthesis of *Resinieratoxin* (*J. Am. Chem. Soc.*, **1997**, 119 (52), 12976–12977)

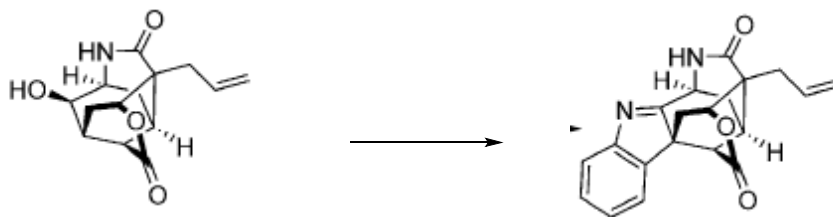


- Recently, *Sarma* and co-workers developed a methodology for the synthesis of oxabicycles in a one-pot reaction: (*Org. Biomol. Chem.*, **2015**, 13, 5532-5536)

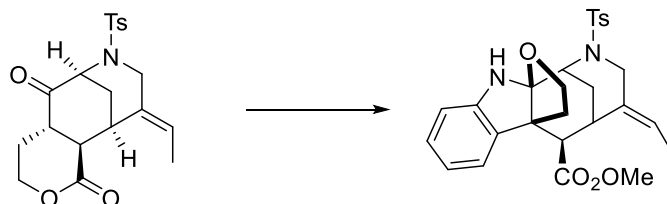


- Propose a plausible mechanism for this transformation.
- What would be the outcome of the reaction if $n = 2$?

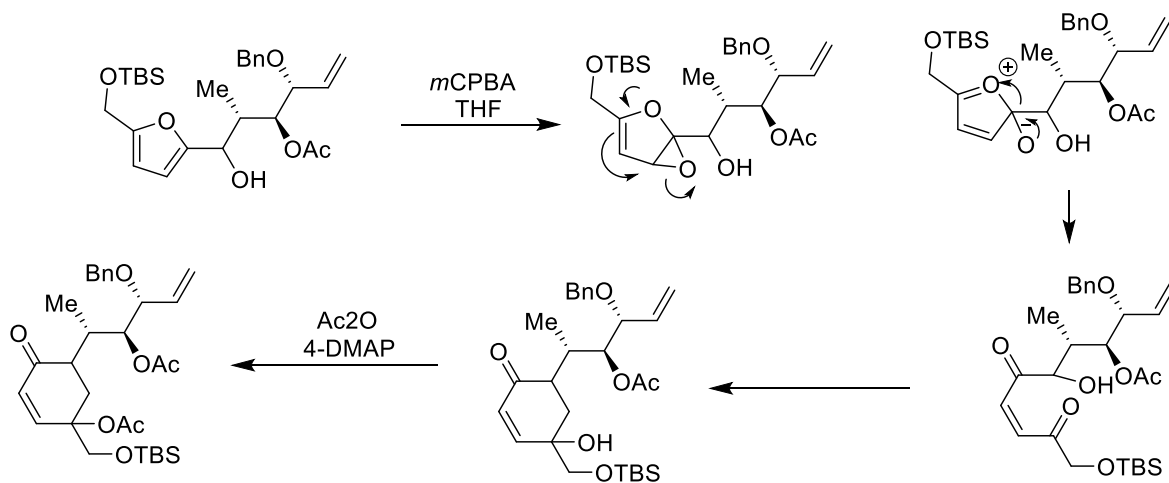
- Propose conditions and the corresponding mechanism for the following transformations:
- ✓ Total synthesis of (+)-*Scholarisine* (Two steps protocol, at least one through a radical pathway) (*J. Am. Chem. Soc.*, **2013**, 135, 12964-12967) (*Angew. Chem. Int. Ed.* **2015**, 54, 400-412)



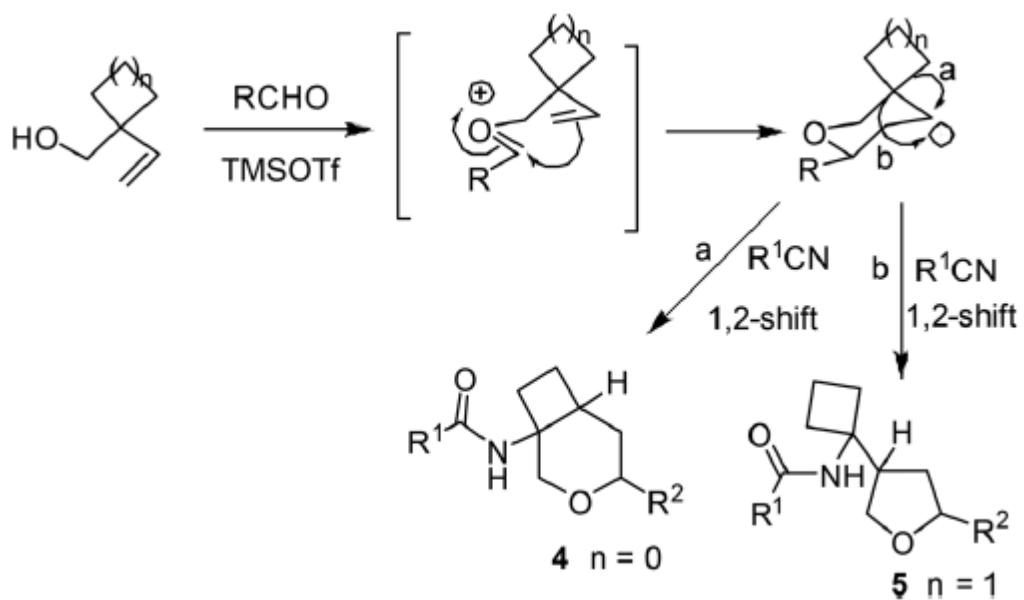
- ✓ Total synthesis of (±)-*Aspidophylline* (Two steps protocol) (*J. Am. Chem. Soc.*, **2011**, 133 (23), 8877–8879) (*Angew. Chem. Int. Ed.* **2015**, 54, 400-412)



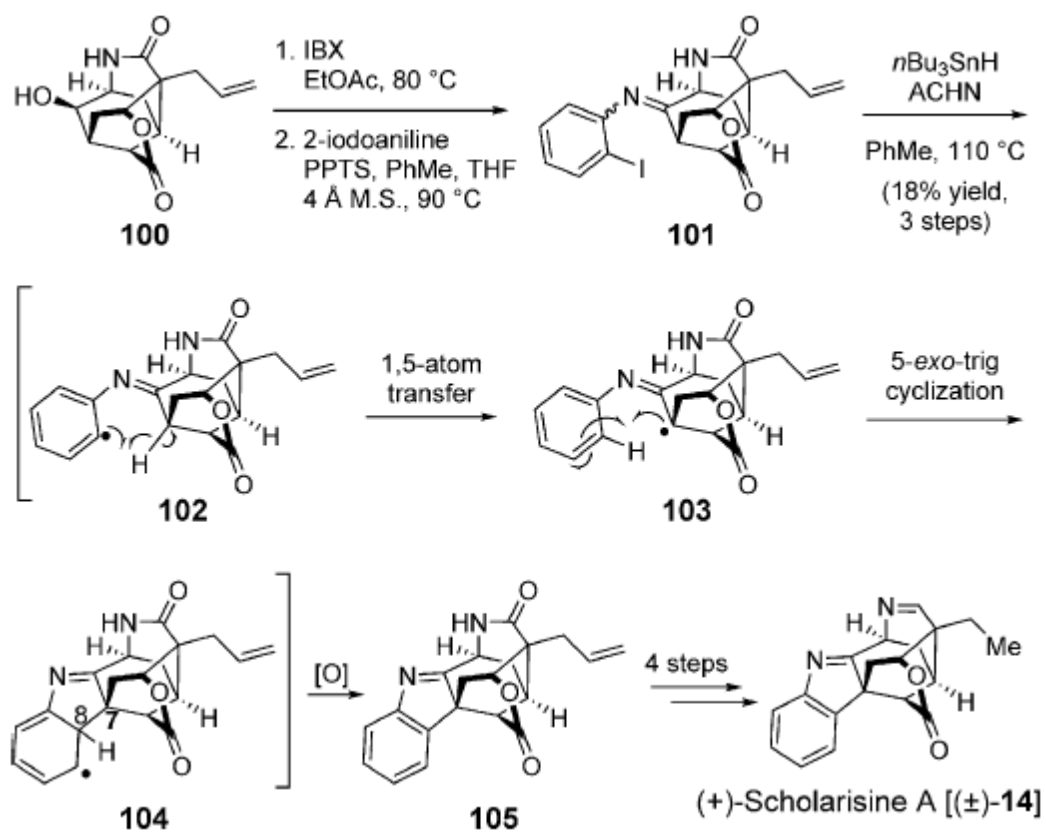
Total Synthesis of Resiniferatoxin



Synthesis of oxabicycles



Total synthesis of (+)-Scholarisine



Total synthesis of (±)-*Aspidophylline*

