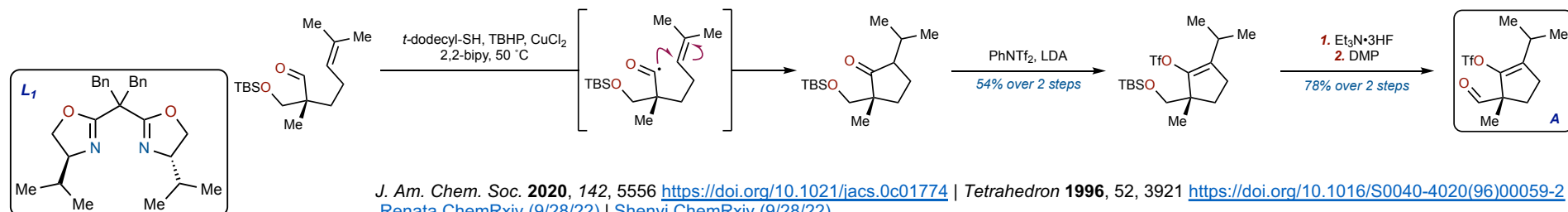
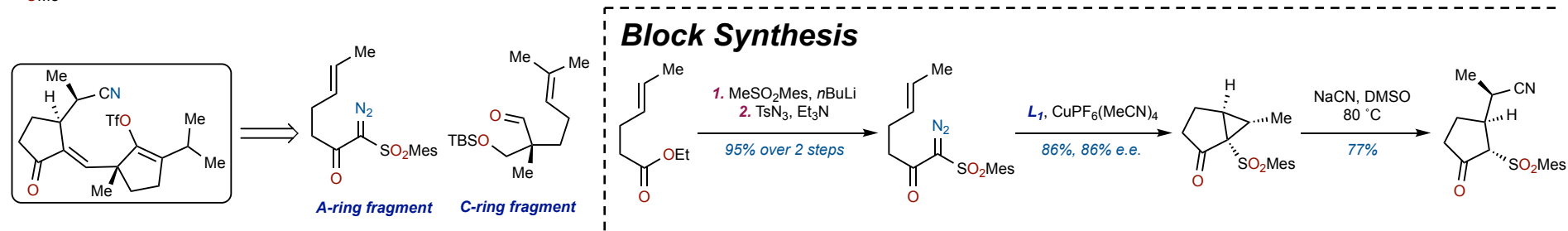
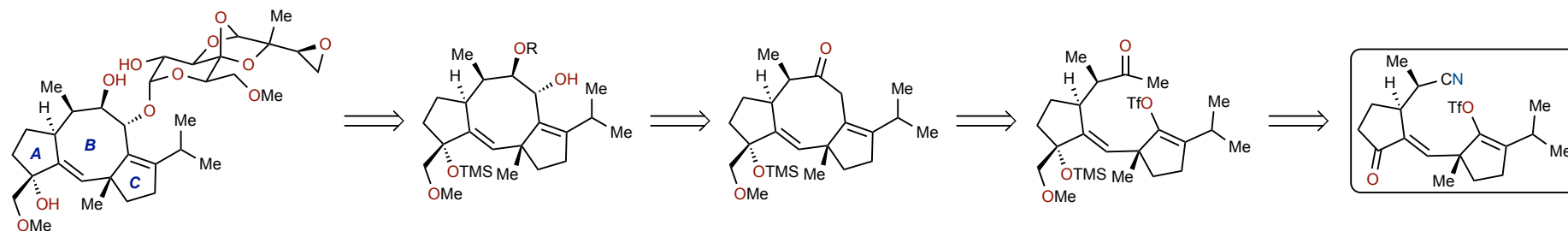


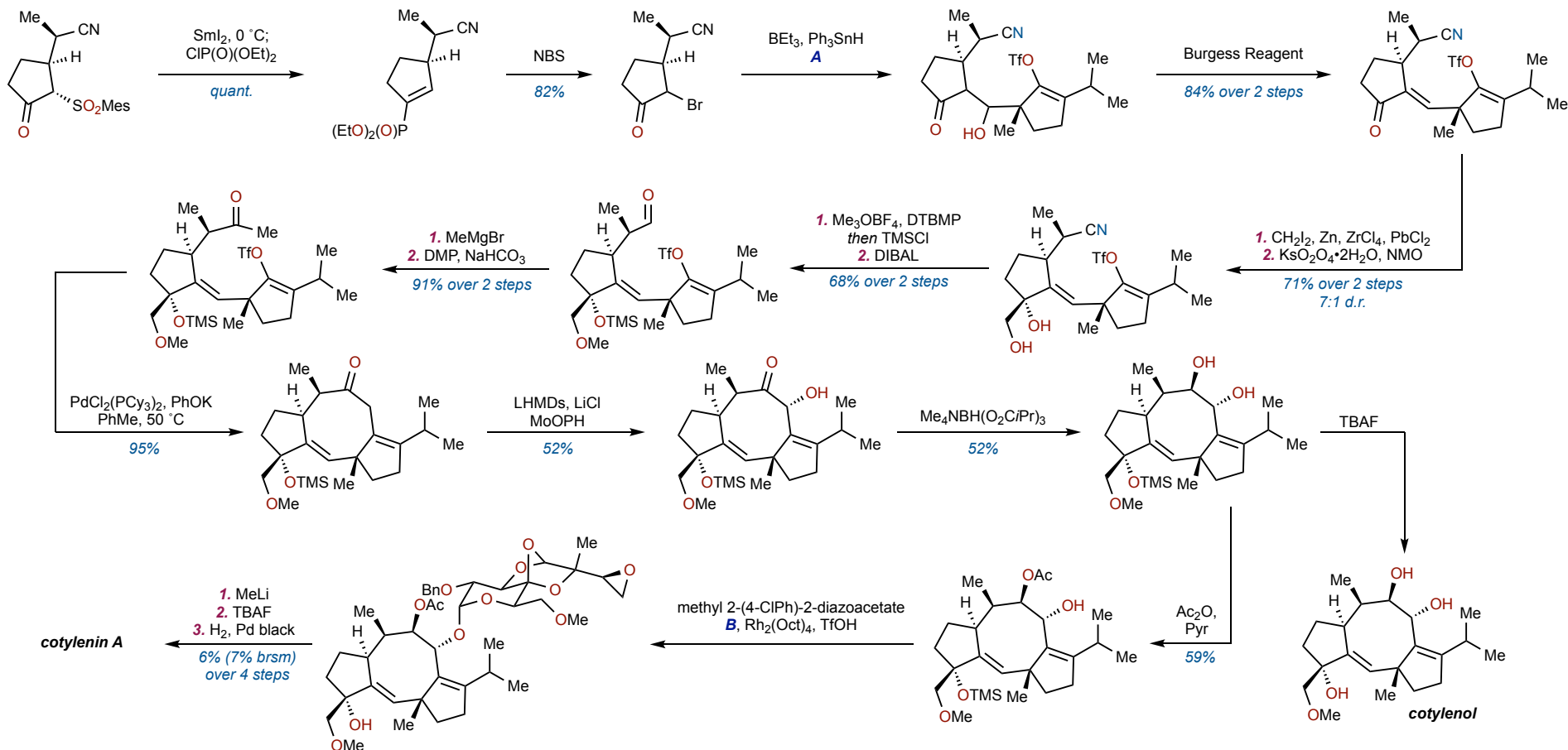
- Isolated in 1970 and identified as a plant growth stimulator
 - Later shown to cause selective apoptosis in many human cancer cell lines
- During preservation, the fungus lost the ability to proliferate!
- Cotylenin A contains a 5,8,5 tricyclic core and closure of the medium-sized ring is the major synthetic hurdle
- Unique sugar moiety requires late-stage introduction
- Cotylenol was first synthesized by Takeshita (1996), and recently Shenvi and Renata (2022)



Retrosynthesis



J. Am. Chem. Soc. **2020**, *142*, 5556 <https://doi.org/10.1021/jacs.0c01774> | *Tetrahedron* **1996**, *52*, 3921 [https://doi.org/10.1016/S0040-4020\(96\)00059-2](https://doi.org/10.1016/S0040-4020(96)00059-2) | [Renata ChemRxiv \(9/28/22\)](#) | [Shenvi ChemRxiv \(9/28/22\)](#)



Glycosyl Donor Synthesis

