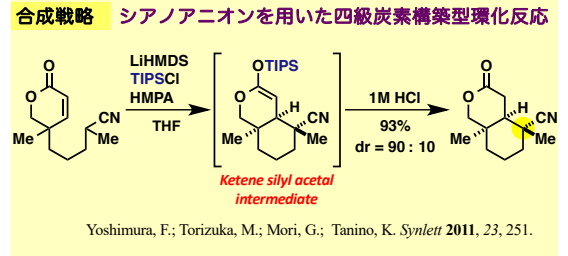
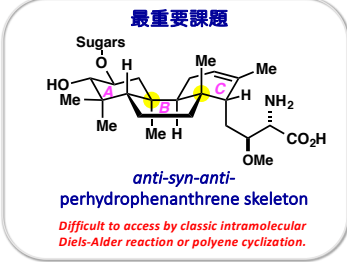
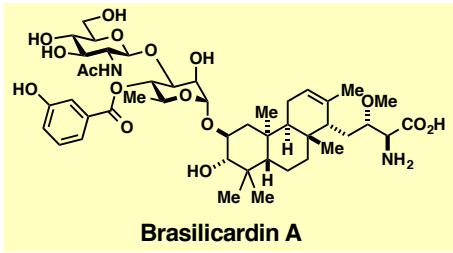


中分子ハイブリッド天然物の不斉全合成

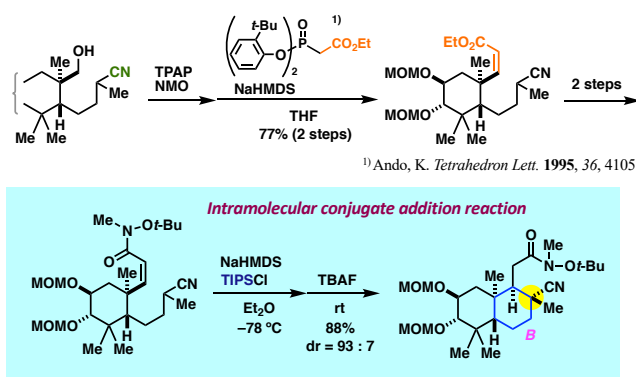
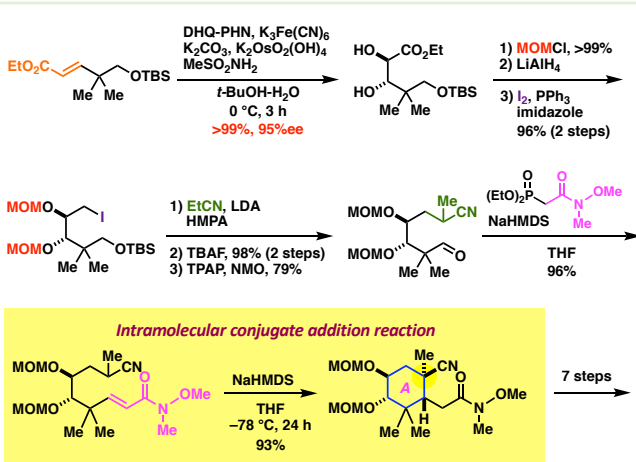
(北大院理) 谷野圭持・森元気 (北大院総化) 伊東龍生・鳥塚誠
(静岡県大薬) 吉村文彦



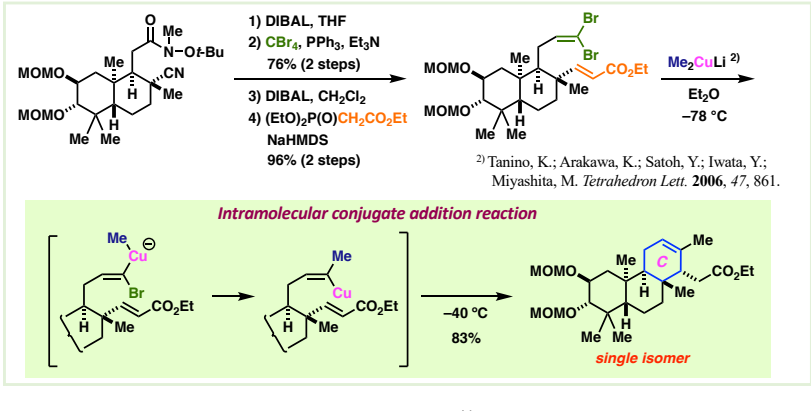
Isolation : cultured broth of the actinomycete *Nocardia brasiliensis* IFM-0406; Kobayashi, J. *et al. J. Org. Chem.* 1998, 63, 6900.

Biological activity : a potent immunosuppressive activity; Usui, T.; Nagumo, Y.; Watanabe, A.; Kubota, T.; Komatsu, K.; Kobayashi, J.; Osada, H. *Chem. Biol.* 2006, 13, 1153.

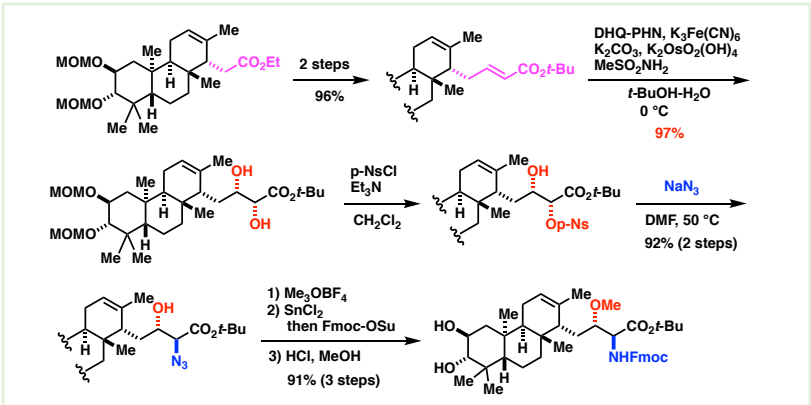
AB環の立体選択的構築



C環の立体選択的構築



β-ヒドロキシアミノ酸側鎖の導入



糖鎖の導入と保護基の除去

