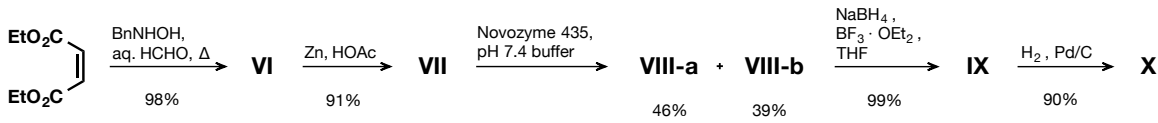
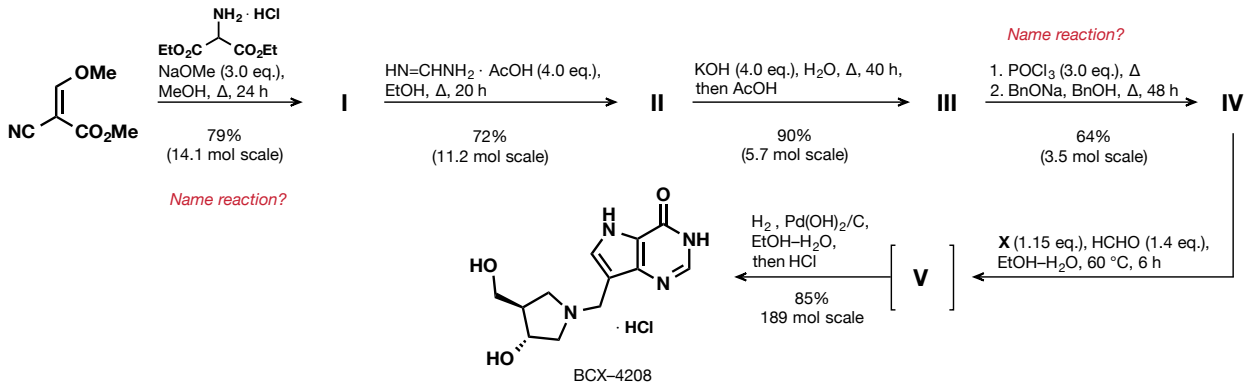


Problem Set Seminar – April 2014

1. Synthesis of Inhibitor BCX-4208 (*BioCryst Pharmaceuticals*)

Group A

Org. Process Res. Dev. 2009, 13, 928–932.

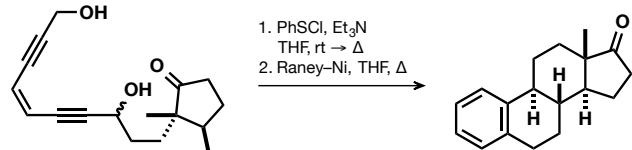
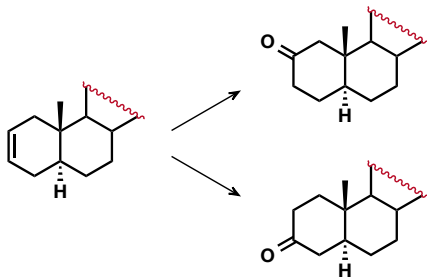


2. Propose conditions for the following transformations.

Group A

3. Propose a mechanism for the following transformation.

Group B

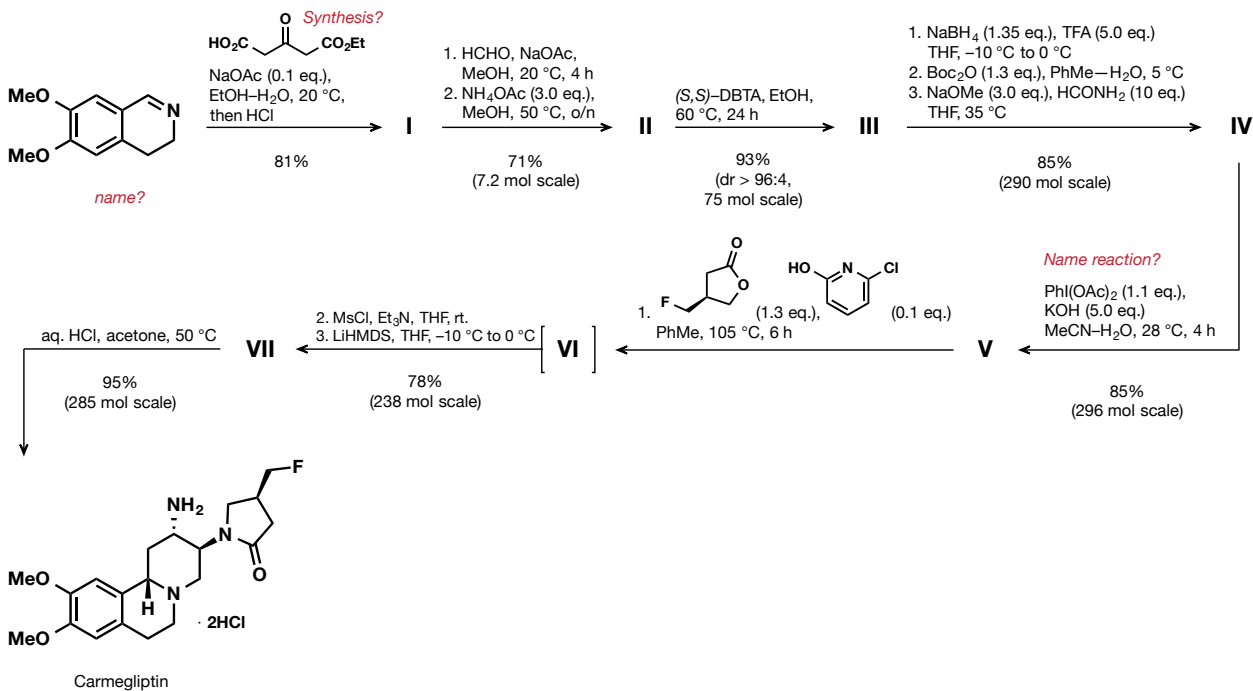


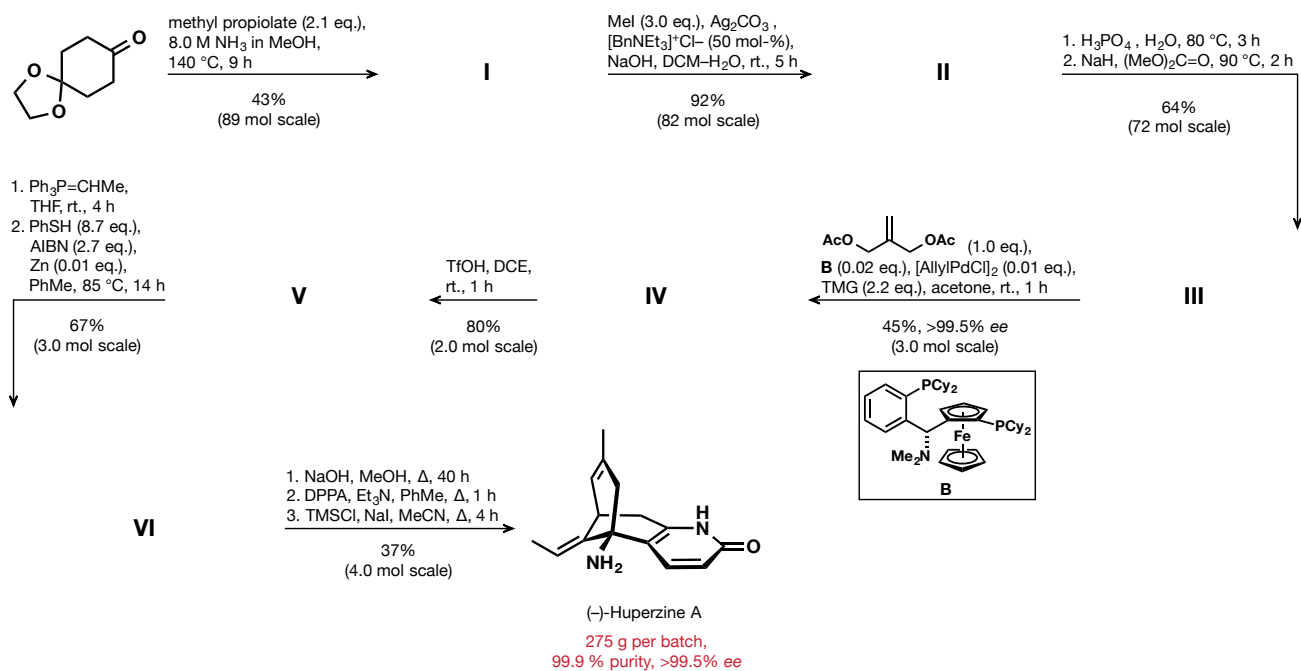
4. Synthesis of Carmegliptin (*F. Hoffmann-La Roche LTD.*)

In addition, propose a simple synthesis of 5-ethoxy-3,5-dioxopentanoic acid.

Group B

Org. Process Res. Dev. 2011, 15, 503-514.

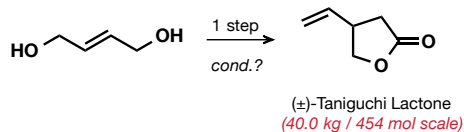
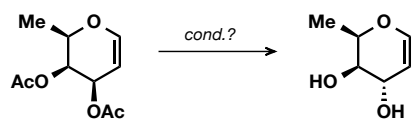




6. Propose plausible conditions for the following transformation.
D. Gin, *Angew. Chem. Int. Ed.* 2001, 40, 1128.

Group C

7. Synthesis of (±)-Taniguchi Lactone
Org. Process Res. Dev. 2014, asap.



8. Synthesis of MK-7655 (Merck) — If there is still some time..., first two steps may be interesting.

Org. Lett. 2011, 13, 5480–5483.

