

Concise Total Synthesis of Herquelines B and C

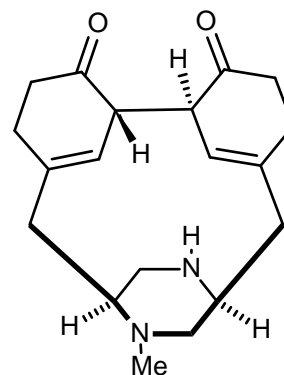
He, C.; Stratton, T. P.; Baran, P. S.*

J. Am. Chem. Soc. **2019**, *141*, 29 – 32

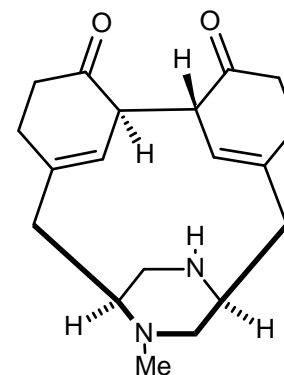
• Originally isolated and characterized in 1979, the tyrosine-derived herquiline family of natural products has been identified to exhibit antibiotic properties, as well as inhibit platelet aggregation.

• To date, three total syntheses of the herquiline B and C scaffolds have been reported:

- 1) Wood – *J. Am. Chem. Soc.* **2019**, *141*, 25–28
- 2) Baran – *J. Am. Chem. Soc.* **2019**, *141*, 29–32
- 3) Schindler – *J. Am. Chem. Soc.* **2019**, *141*, 3409–3413



(+)-herquiline B (**3**)



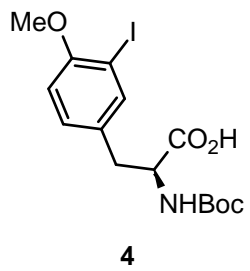
herquiline C (**14**)

• In this report, herquiline B was synthesized in 9 linear steps, overall 7.8% yield

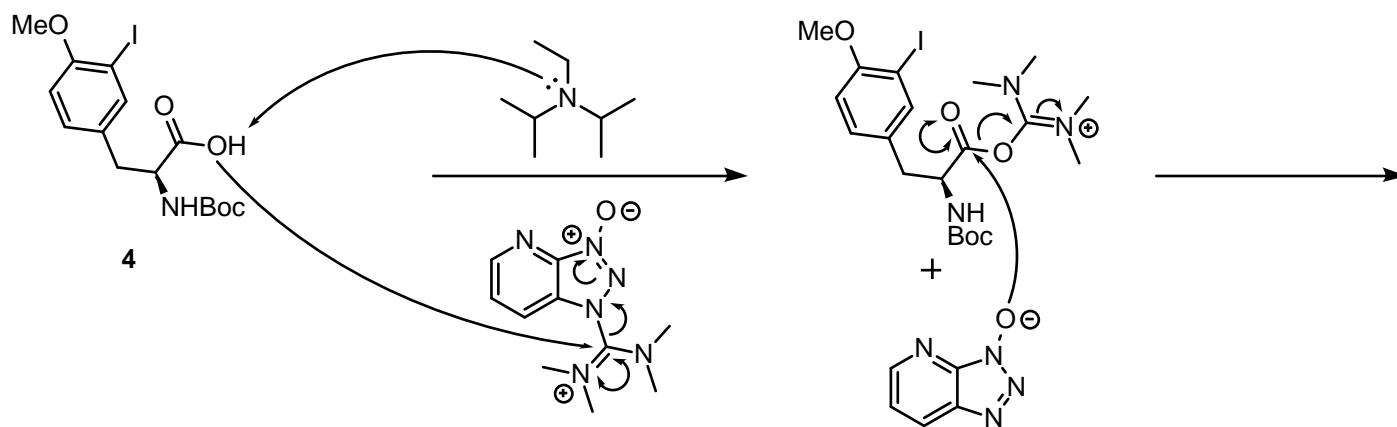
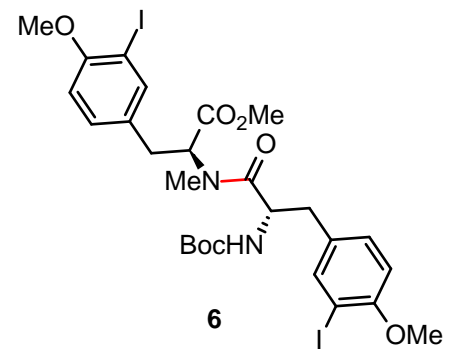
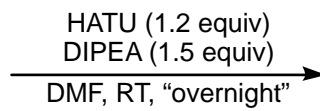
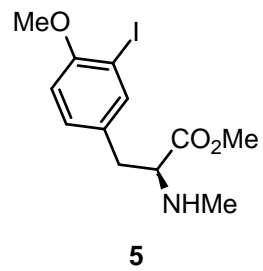
Jonathan Deegan
Liu Research Group
7 March 2019

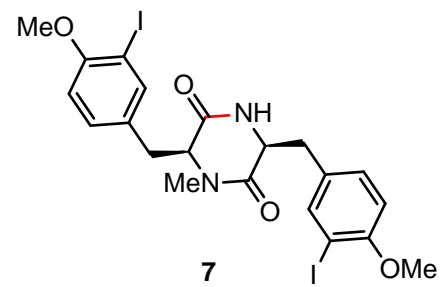
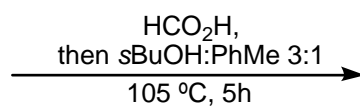
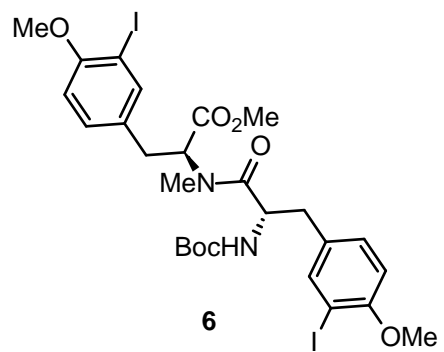
Retrosynthetic analysis

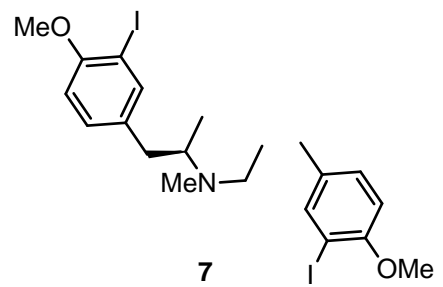


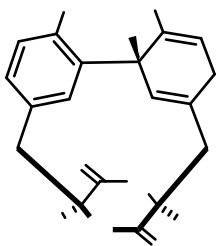


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