Total synthesis of manzamine A  
(Jimmy Seiberg, April 2012)

Manzamine A has been isolated from marine sponges of the genera Haliclona and Pellina. It exhibits broad biological activity, including cytotoxic, antibacterial, antimalarial, insecticidal, anti-inflammatory, and anti-HIV.

One of the three reported total syntheses is given below.  
Give structures and reagents where missing, and discuss reaction mechanisms and stereochemy.
1) TBAF
2) H₂, Lindlar's cat.
3) DMP

манзамин A