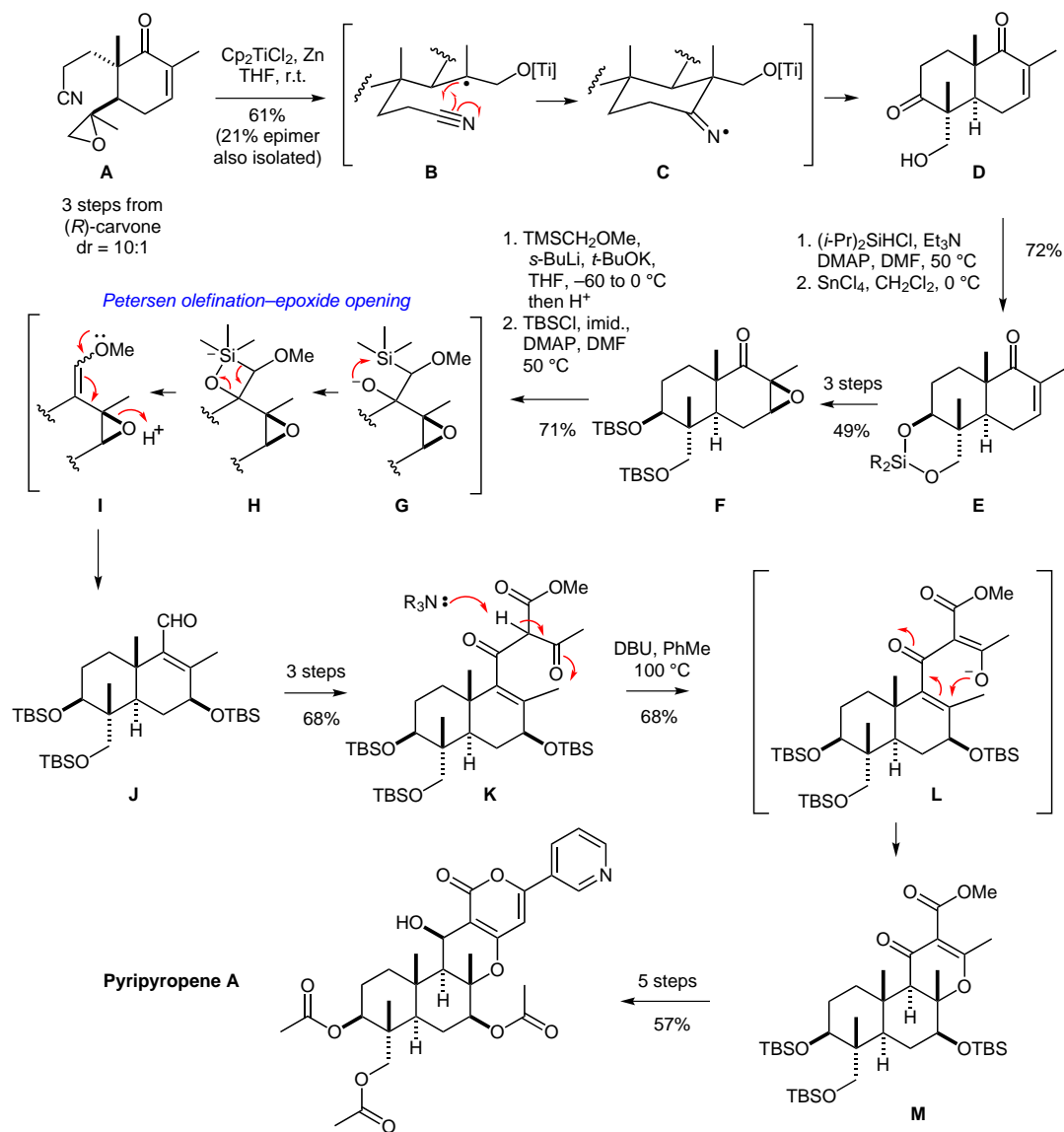


Synthesis of Pyripyropene A



Significance: Pyripyropene A is a fungal metabolite isolated from *Aspergillus fumigatus* FO-1289–2501. It is a potent inhibitor of Acyl-CoA:cholesterol-acyltransferase. Several semi-synthetic derivatives show even greater inhibition.

Comment: Key steps in this synthesis include the titanium-mediated epoxide opening–radical cyclization (**A** \rightarrow **D**) and a Petersen-olefination/epoxide-opening sequence (**F** \rightarrow **J**). A more scalable sequence from **D** to **F** involving Me₄NHB(OAc)₃ as an alternative reducing agent was also reported.