A Concise and Modular Synthesis of Pyranicin
Nolan D. Griggs and Andrew J. Phillips, Org. Lett. ASAP

OTBS
1. n-BuLi, then
   PMBO, BF$_3$-OEt$_2$
2. TBDPSI, Imid, DMAP
3. PPTS, EtOH
4. Red-Al, then I$_2$

OHC-F$_3$O,Bn
1. C$_{12}$H$_{25}$MgBr
2. (-)-DIPT, Ti(i-PrO)$_4$, TBHP, CaH$_2$, SiO$_2$
(TBHP = t-butyl hydrogen peroxide)

1. TBSI, Imidazole
2. H$_2$, Pd/C
3. Dess Martin Periodinane

1. 9-BBN
2. B, 20%
   Pd(PCy$_3$)$_2$,
   K$_3$PO$_4$,
   H$_2$O, THF

Q: Why did they use the PCy$_3$ ligand for step 2?
   (Hint: What is possible in the mechanism that Greg Fu tries to avoid?)

Fact: Annonaceous Acetogenins are a group of polyketides with 1 or 2 tetrahydrofuran rings