

Barry B. Snider is a graduate of the University of Michigan (B.S.) and Harvard University (Ph.D.). After postdoctoral training at Columbia University, he joined the faculty of Princeton University. Since 1981 he has been at Brandeis University, where he is now Professor of Chemistry. He has been an Alfred P. Sloan fellow, a Dreyfus Teacher Scholar and an ACS Cope Scholar. His research interests are in the area of synthetic methods development and natural product synthesis. Current interests include oxidative free-radical cyclizations, Lewis acid-induced and -catalyzed reactions, ene reactions, and the synthesis of guanidine-containing natural products.



Barry B. Snider

Born:

-January 13th, 1950, Chicago, Illinois

Education:

-B.Sc. Chem. University of Michigan, Ann Arbor, MI, 1970

-Ph. D.: Harvard University, Cambridge, MA, 1973 (advisor: E.J. Corey)

-PostDoc: Columbia University, New York, NY 1973-1975 (advisor: Ronald Breslow)

Independent Career:

-Assistant Professor, Princeton University, 1975-1981

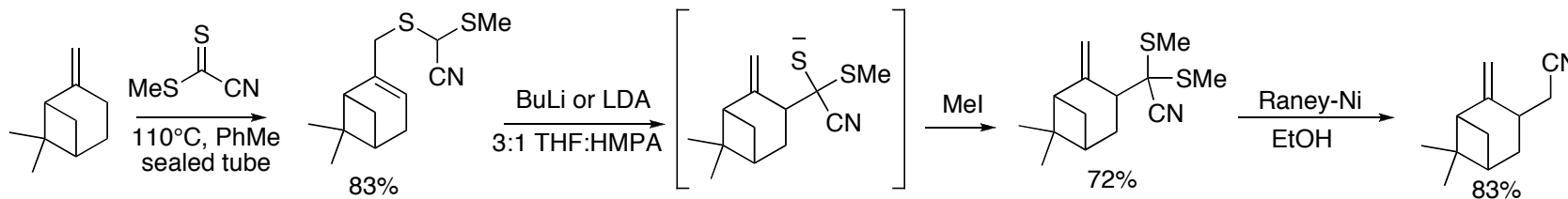
-Associate Professor, Brandeis University, 1981-1985

-Professor, Brandeis University, 1985-present

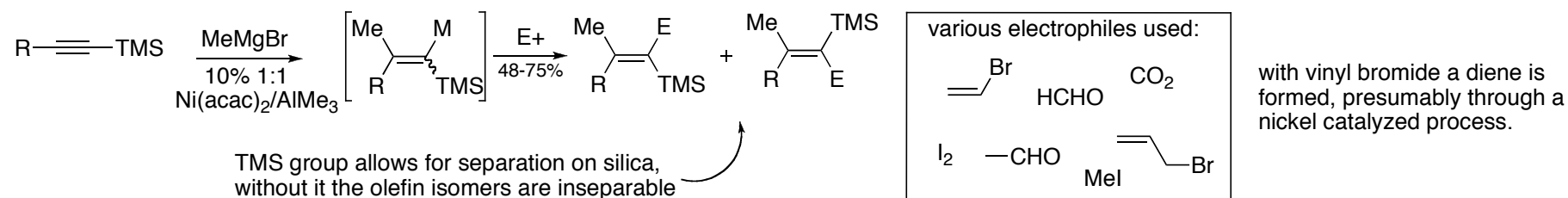
Research Interests:

-Total synthesis of biologically active natural products with structural novelty of the ring system or functionality
-Method development especially oxidative free-radical cyclizations, ene reactions, Lewis acid catalyzed reactions

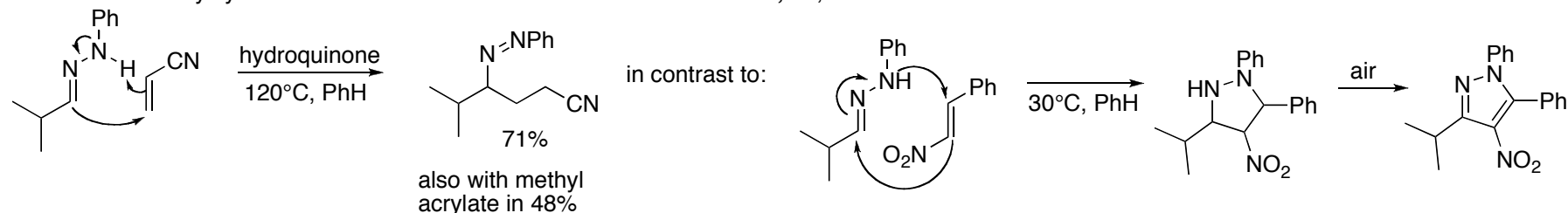
Allylic Cyanobis(methylthio)methylation. Insertion of a Functionalized Carbon in an Allylic Carbon-Hydrogen Bond. *JACS* **1976**, 98, 7116-7117.



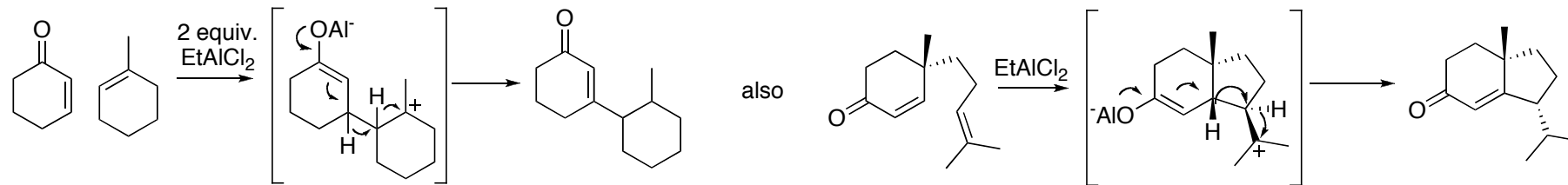
Nickel-Catalyzed Addition of Grignard Reagents to Silylacetylenes. Synthesis of Tetrasubstituted Alkenes. *JACS* **1978**, 100, 4624-4626.



Reactions of Phenylhydrazones with Electron-Deficient Alkenes. *JOC* **1979**, 44, 218-221.

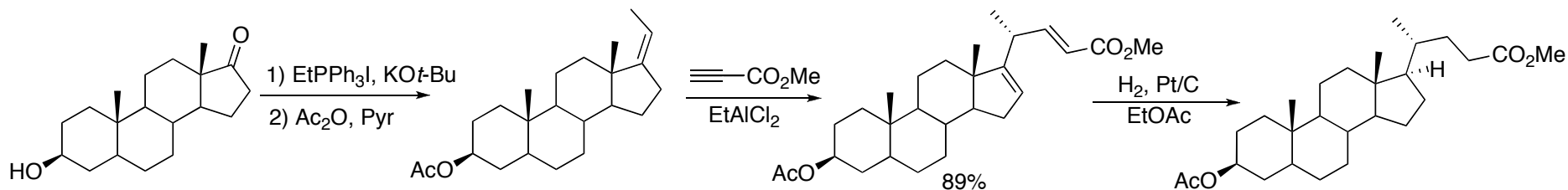


Lewis Acid Induced Conjugate Addition of Alkenes to α,β -Unsaturated Ketones and Aldehydes. *JACS* **1980**, 102, 5872-5880.

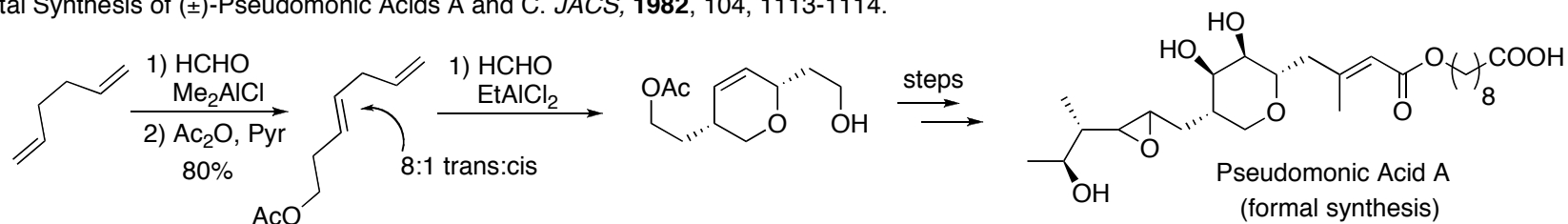


deuterium labeling studies show that there are two 1,2-hydride shifts

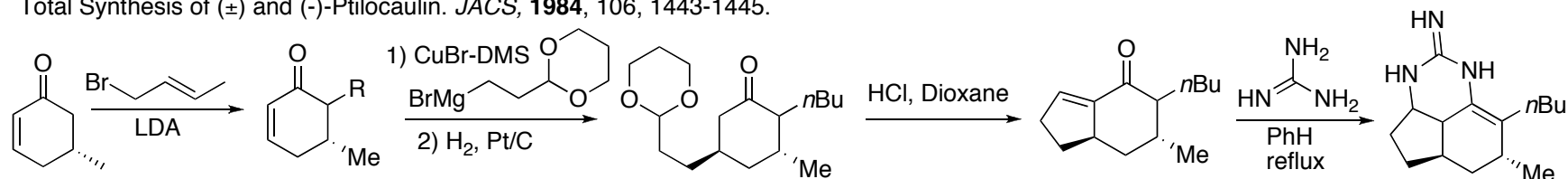
C-20 Stereospecific Introduction of a Steroid Side Chain. *JACS*, **1981**, 103, 1293-1295.



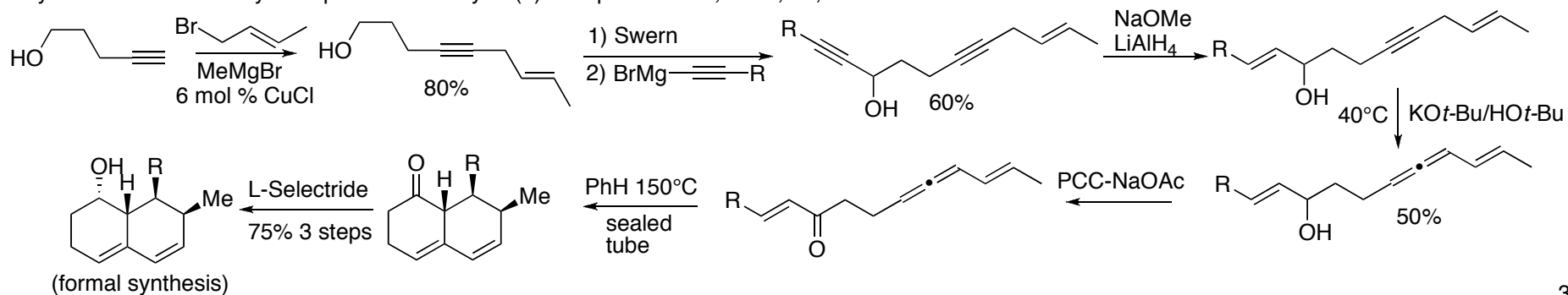
Total Synthesis of (\pm)-Pseudomonic Acids A and C. *JACS*, **1982**, 104, 1113-1114.



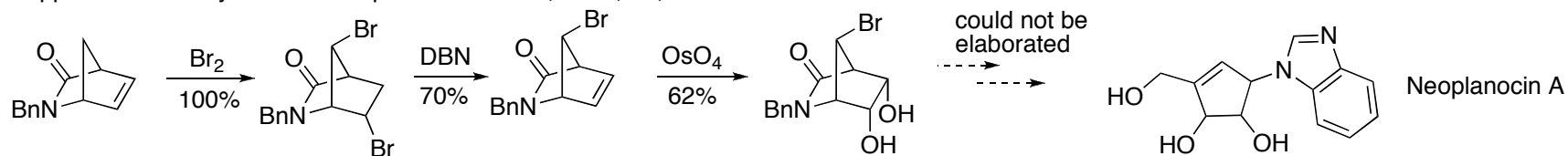
Total Synthesis of (\pm) and (-)-Ptilocaulin. *JACS*, **1984**, 106, 1443-1445.



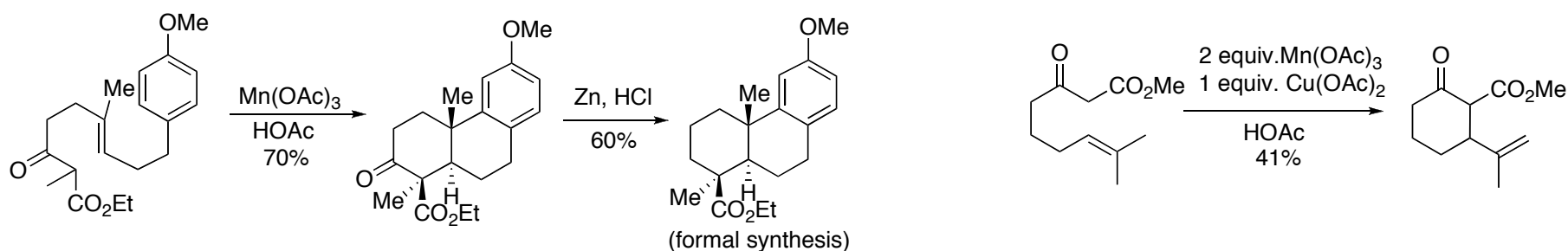
Synthesis of the Hexahydronaphthalene Moiety of (\pm)-Compactin. *JOC*, **1982**, 47, 2682-2684.



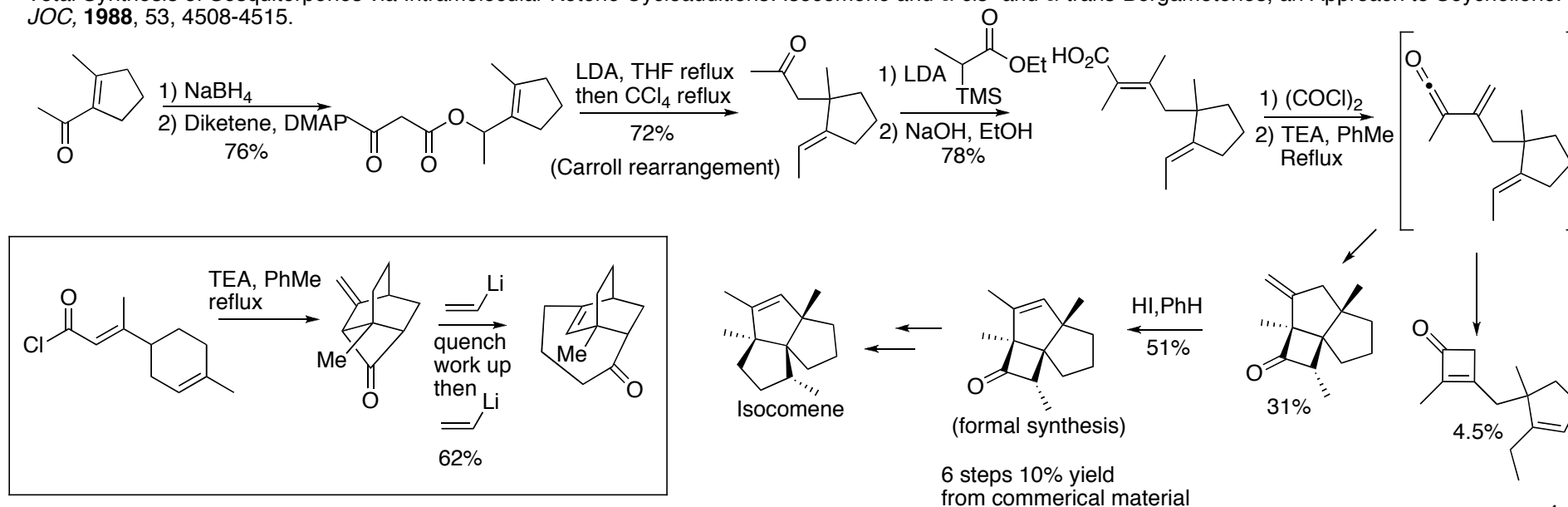
An Approach to the Synthesis of Neplanocin A. *JOC*, **1985**, 50, 1983-1985.



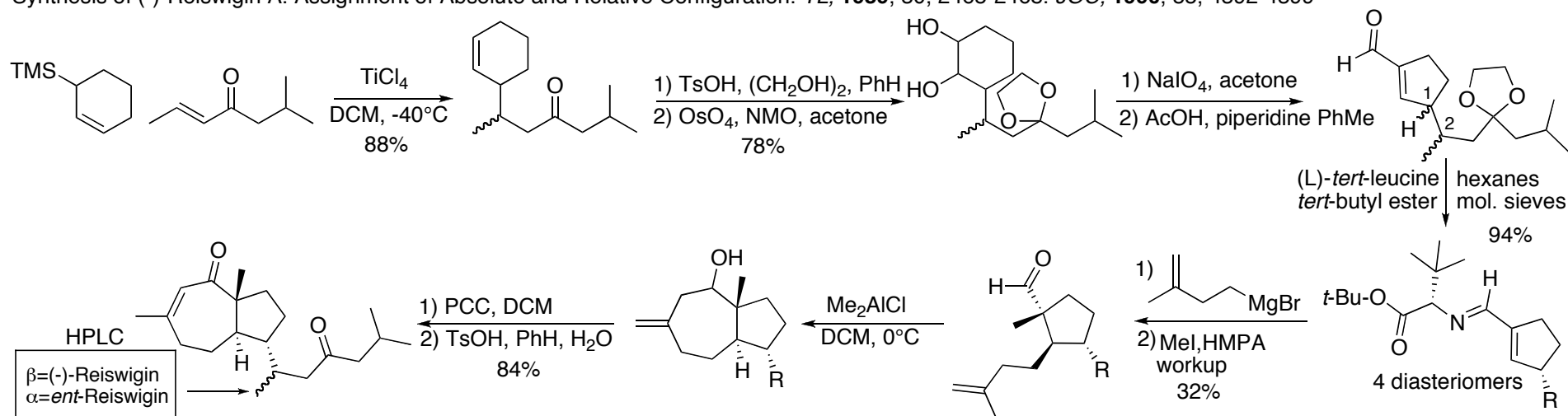
Manganese(III)-Based Oxidative Free-Radical Cyclization. Synthesis of (±)-Podocarpic Acid. *JOC*, **1985**, 3659-3661.



Total Synthesis of Sesquiterpenes via Intramolecular Ketene Cycloadditions: Isocomene and α -cis- and α -trans-Bergamotenes, an Approach to Seychellene. *JOC*, **1988**, 53, 4508-4515.

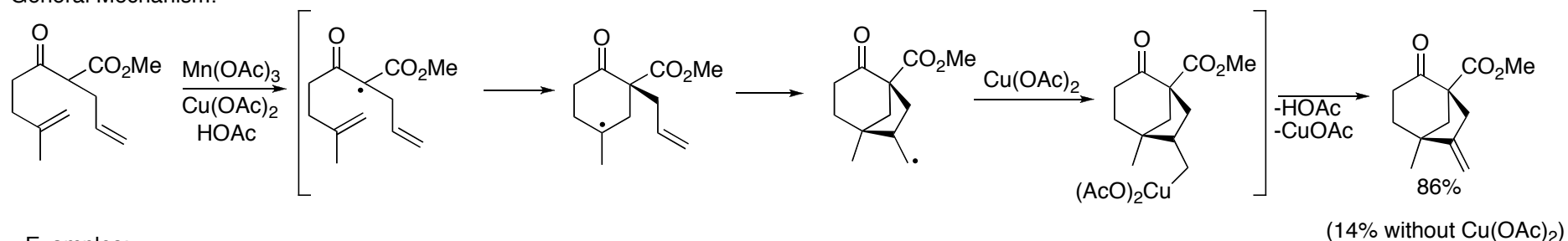


Synthesis of (-)-Reiswigin A. Assignment of Absolute and Relative Configuration. *TL*, **1989**, 30, 2465-2468. *JOC*, **1990**, 55, 4392-4399

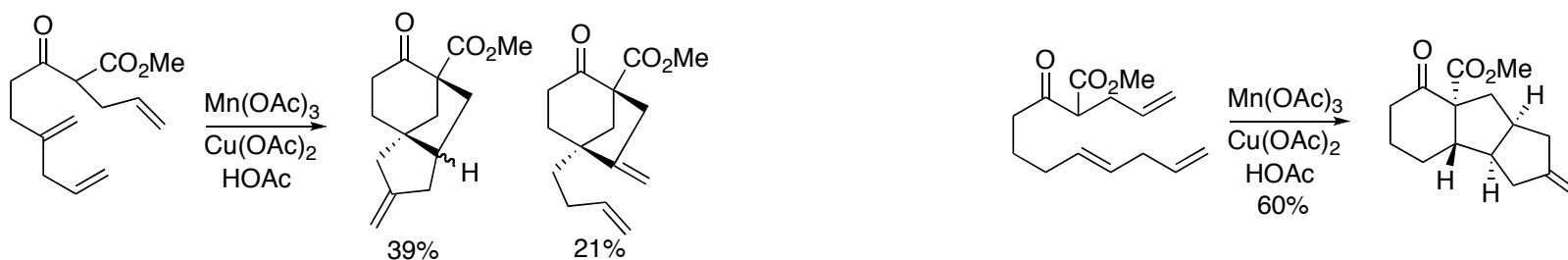


Manganese(III)-Based Oxidative Free-Radical Tandem and Triple Cyclizations. *JACS*, **1990**, 112, 2759-2767.

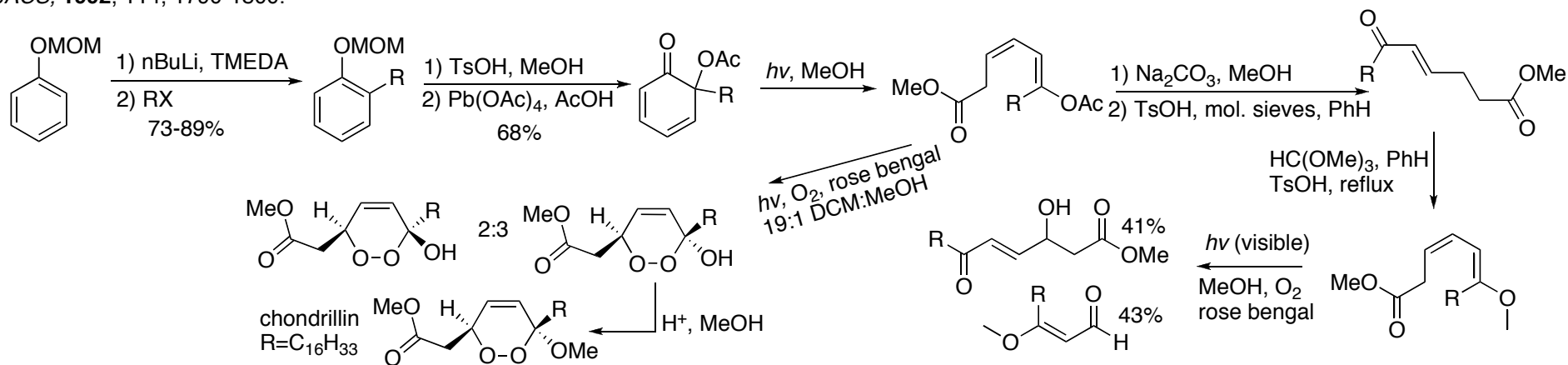
General Mechanism:



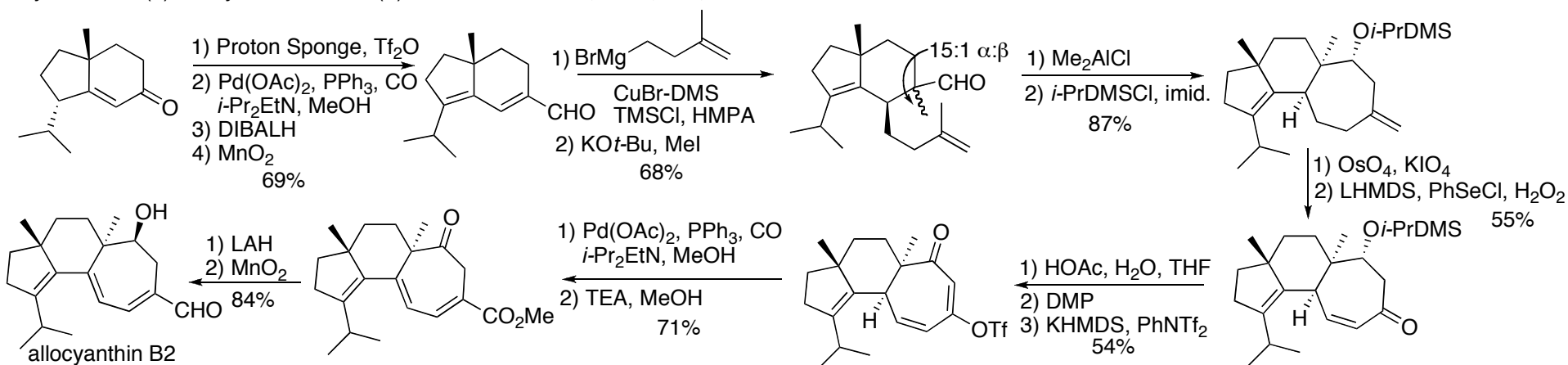
Examples:



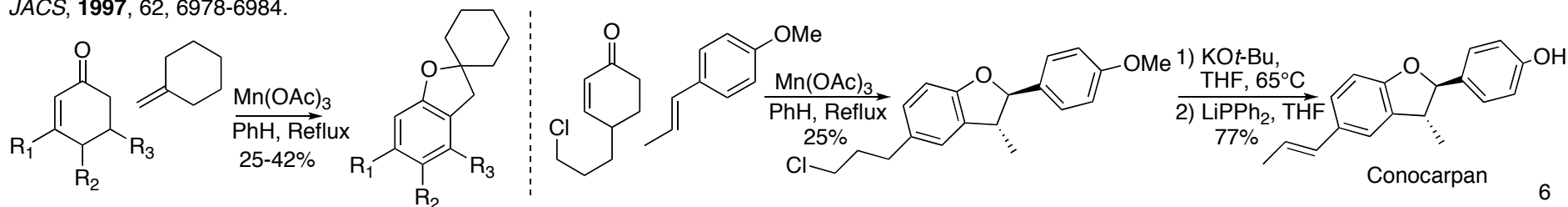
Total Synthesis of (±)-Chondrillin, (±)-Plakorin, and Related Peroxy Ketals. Development of a General Route to 3,6-Dihydro-1,2-dioxin-3-ols.
JACS, **1992**, 114, 1790-1800.

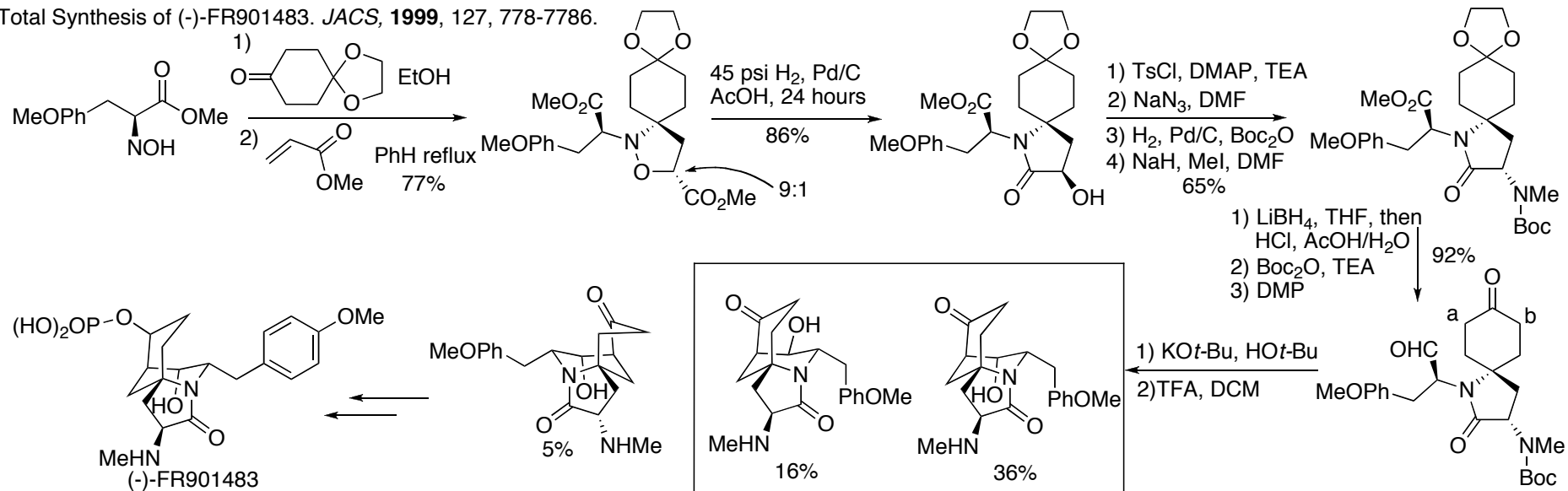
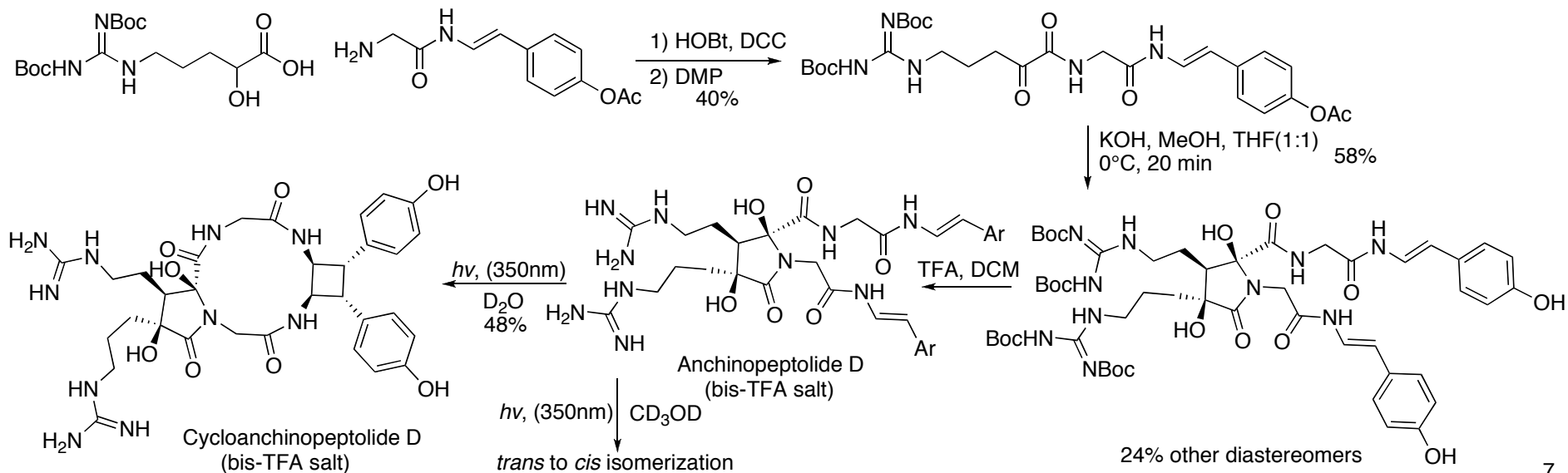


Synthesis of (±)-Allocyanthin B2 and (+)-Erinacine A. *JACS*, **1996**, 118, 7644-7645.

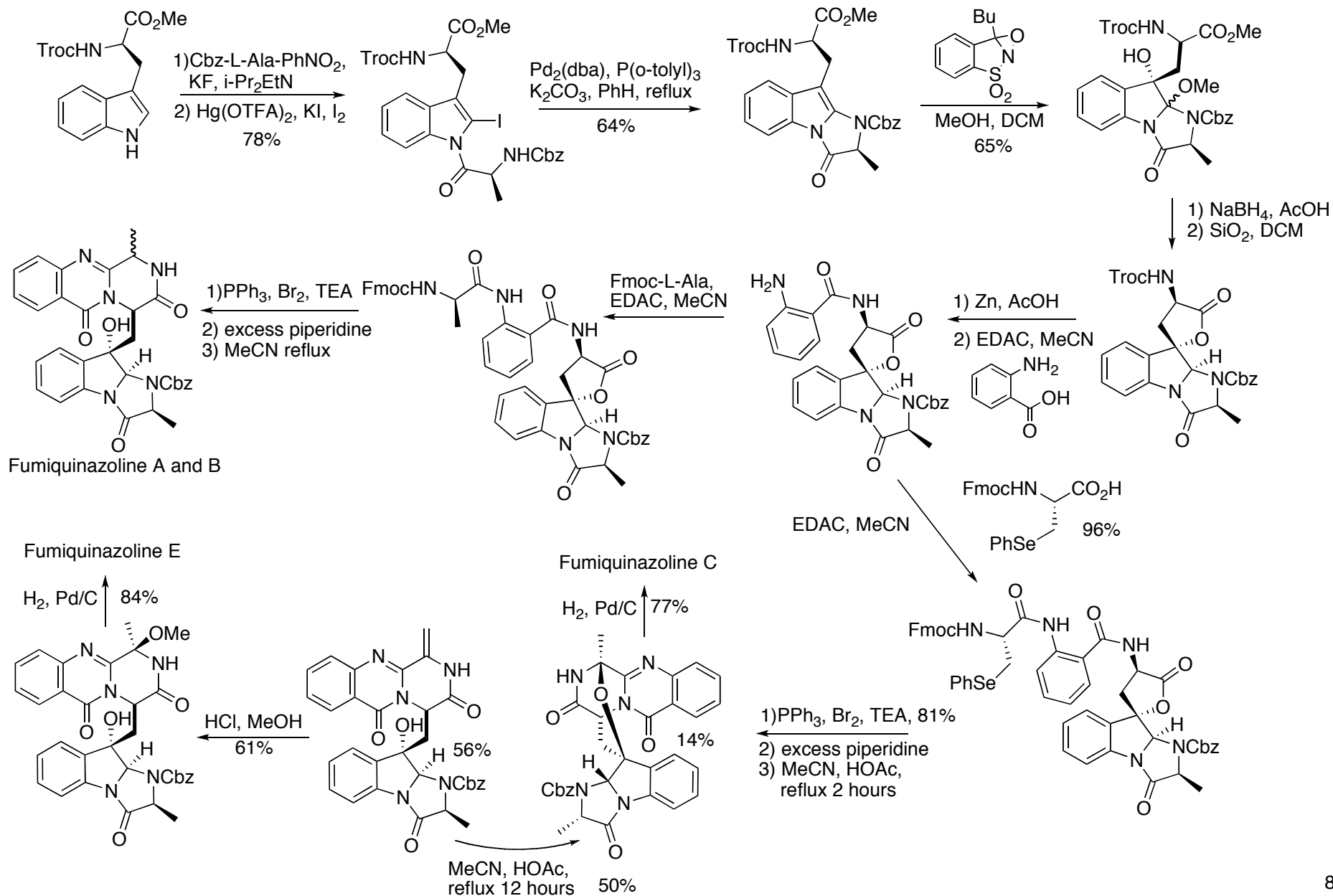


Synthesis of 2,3-Dihydrofurans by Mn(OAc)₃-Based Oxidative Cycloaddition of 2-Cyclohexenones with Alkenes. Synthesis of (±)-Conocarpan.
JACS, **1997**, 62, 6978-6984.

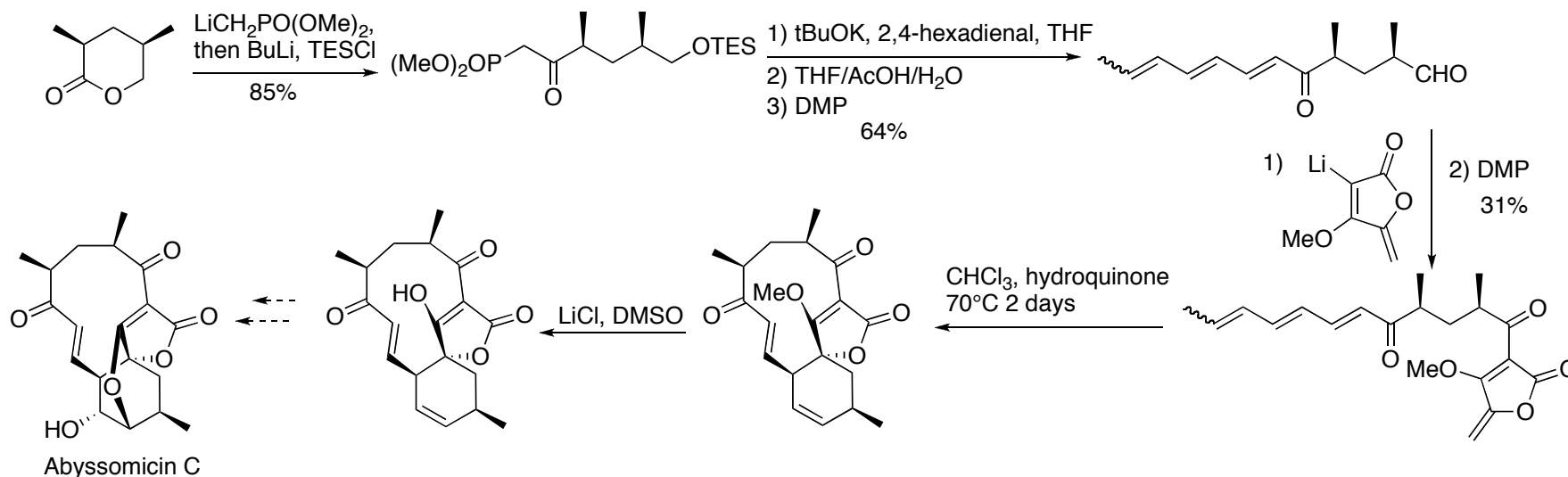


Total Synthesis of (-)-FR901483. *JACS*, **1999**, 127, 778-7786.Total Synthesis of (±)-Anchinopeptolide D and (±)-Cycloanchinopeptolide D. *JOC*, **2000**, 65, 793-800.

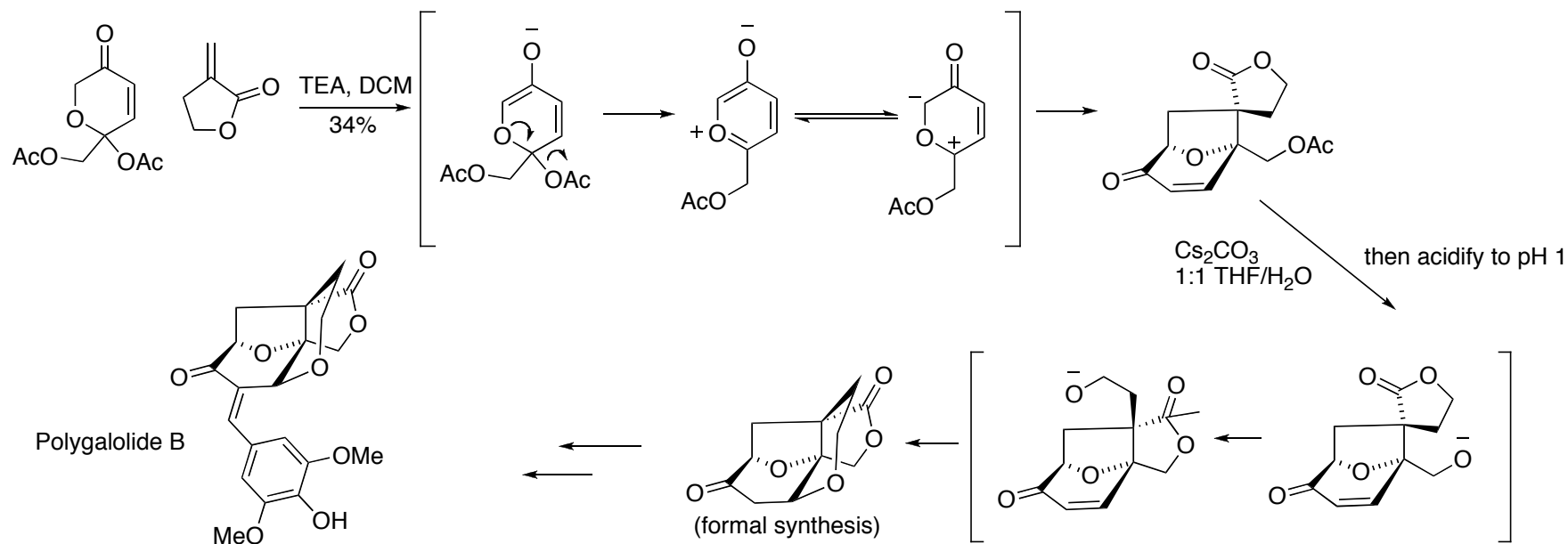
Total Synthesis of (-)-Fumiquinazolines A, B, C, E, H and I. Approaches to the Synthesis of Fiscalin A. *JOC*, **2003**, 68, 545-563.

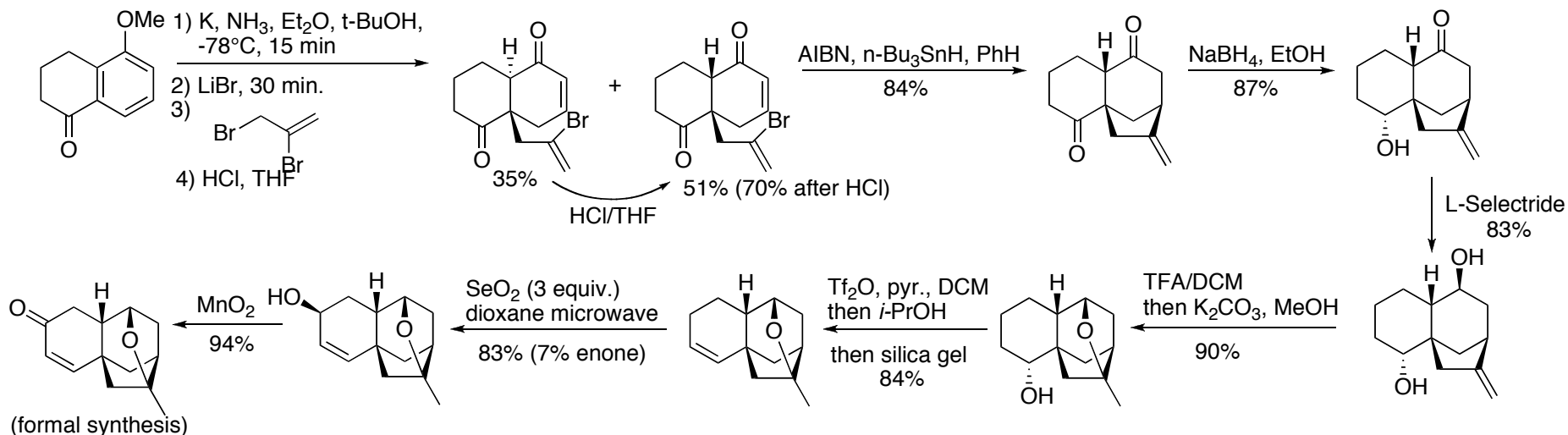
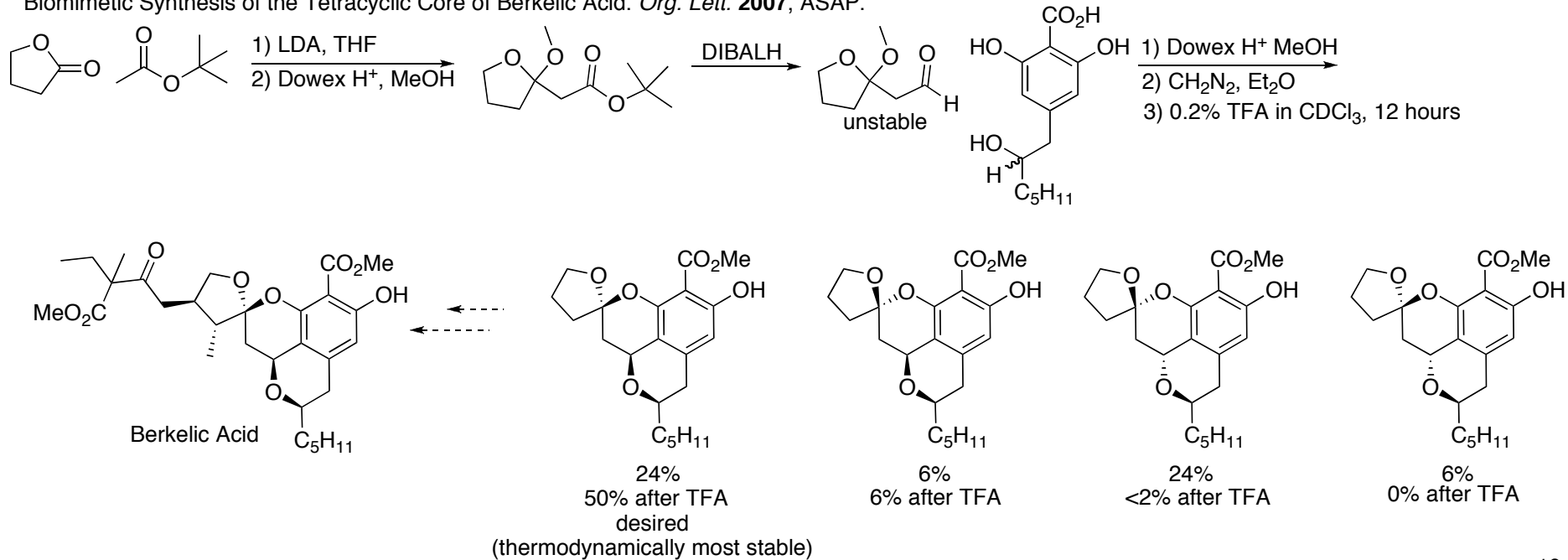


Synthesis of the Carbocyclic Skeleton of Abyssomicins C and D. *Org. Lett.* **2005**, 7, 4939-4941.

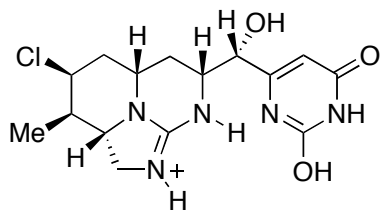


A Short, Formal, Biomimetic Synthesis of (±)-Polgalolides A and B. *Org. Lett.* **2007**, 9, 873-874.

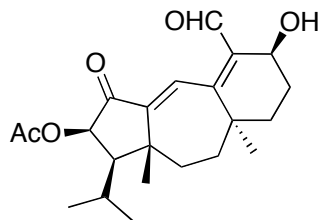


Formal Synthesis of (±)-Platensimycin. *Org. Lett.* 2007, 9, 1825-1828.Biomimetic Synthesis of the Tetracyclic Core of Berkelic Acid. *Org. Lett.* 2007, ASAP.

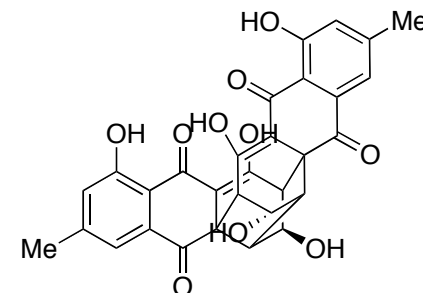
Suggested further reading:



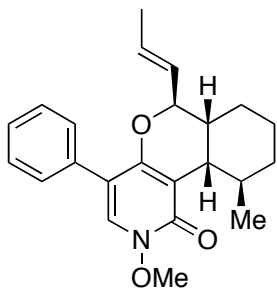
Total Synthesis of (±)-Cylindrospermopsin.
JACS, **2000**, 122, 5017-5024.



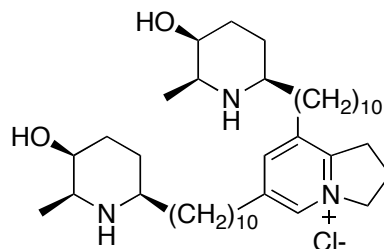
Formal Synthesis of (±)-Guanacastepene A.
JOC, **2003**, 68, 1030-1042.



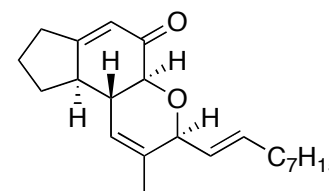
Efficient Syntheses of Rugulosin Analogues.
JOC, **2005**, 70, 6863-6869.



Total Synthesis of (±)-Leporin A.
JOC, **1996**, 61, 2839-2844.



Syntheses of Ficusseptine, Juliprosine, and Juliprosopine by Biomimetic Intramolecular Chichibabin Pyridine Syntheses
Org. Lett. **2005**, 7, 2715-2718.



Total Synthesis of (±)-Deoxyphenostatin A
JOC, **1999**, 64, 1088-1089.