Synthesis of an Estrogen Receptor Beta Agonist

**Significance:** The target tetrahydrofluorene is an estrogen receptor β agonist that is of interest for the treatment of symptoms associated with reduced estrogen levels in post-menopausal women. The large-scale synthesis depicted features a chiral auxiliary mediated dialkylation to construct the quaternary center in G with excellent stereocontrol. Note the intramolecular enolate alkylation F → G in which phenoxide ion is the leaving group.


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![Chemical diagram](image_url)