Pd-Catalyzed Enantioselective Synthesis of α-(Trifluoromethyl)arylmethylamines

Significance: Trifluoromethylacetalaldimines, generated in situ from the corresponding N,O-acetals, undergo 1,2-addition of arylboroxines under palladium catalysis to generate a variety of R-(trifluoromethyl)arylmethylamines with good to high enantioselectivity and yield.

Comment: The reported protocol is very versatile since it proceeds without the exclusion of ambient air and moisture. Moreover, several functional groups are tolerated, and readily available N,O-acetals synthesized from trifluoroaldehyde are used as starting materials.