Many complex natural glycosides possess remarkable biological properties, therefore have attracted great attentions in chemical synthesis in order to understand their structure-activity relationships and the mechanisms of action. Focusing on the construction of the glycosidic linkages between the aglycon and the saccharides, I shall discuss the general synthetic strategies[1] and the glycosylation methods.[2] Highlighted are the gold(I)-catalyzed glycosylation protocol with ortho-alkynylbenzoates as donors[3] and its application in the synthesis of the biologically significant steroid glycosides, namely gordonoside F[4] and periploside A.[5]

Reference