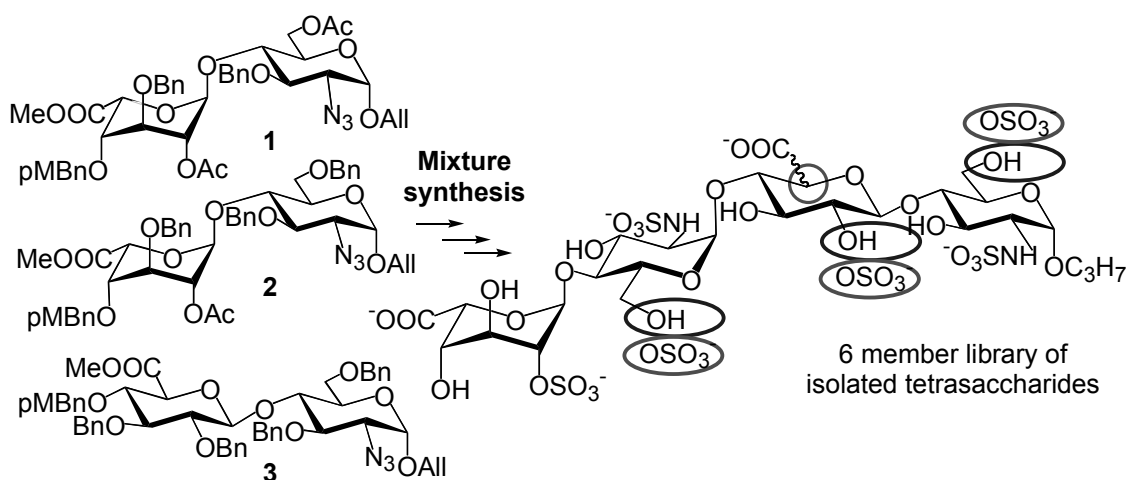


## COMBINATORIAL SYNTHESIS OF HEPARIN/HEPARAN SULFATE FRAGMENTS: SYNTHESIS OF TETRASACCHARIDE LIBRARIES

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A 6 member library of isolated tetrasaccharides was prepared from the disaccharide building blocks **1-3** [1,2] using a combinatorial synthesis approach. Compounds **1-3** were first derived into trichloroacetimidate donors and 4'-OH acceptors. Single donors were then condensed with a mixture of three acceptors giving mixtures of tetrasaccharides in good yields and stereoselectivity.[3,4] The deprotections and sulfations were then performed on the mixture, saving 20 steps compared to multiparallel synthesis. Prior to the hydrogenolysis of the benzyl groups, the tetrasaccharides were separated using reverse phase chromatography. Final parallel deprotection gave a library of 6 isolated tetrasaccharides in pure form.



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