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Synthetic Explorations Towards 3-Deoxy-3-fluoro Derivatives of D-Perosamine. — The approach towards substances related to 3-deoxy-3-fluoro-D-perosamine involves fluorination with inversion at C-3 [(III)→(IV)] as well as inversion of configuration at C-2 [(VII)→(VIII)] via a nucleophilic S_N2 displacement reaction. Additionally, the 2-O-methyl analogue of (VIII), mannopyranoside (XIII), is prepared. The latter compounds are converted into the 3-fluoro analogues [(XI) and (XVI)] of the terminal determinants of the O-PS of Vibrio cholerae 0:1, serotype Inaba and Ogawa, respectively. — (POIROT, EMMANUEL; CHANG, ALEX H. C.; HORTON, DEREK; KOVAC, PAVOL; Carbohydr. Res. 334 (2001) 3, 195-205; Natl. Inst. Diab. Dig. Kidney Dis., NIH, Bethesda, MD 20892, USA; EN)