ABSTRACT

TITLE:	Synthesis of Conformationally Constrained Diarylether Paracyclophanes
AUTHOR(S):	Tregillus, Zoe; Ozvat, Tyler; Cooper-Sansonne, Andrew; Caldera, Hector
PRESENTED AT:	2016 Undergraduate Research and Creative Activities Symposium, Fort Lewis College

ABSTRACT: The syntheses of a series of macrocyclic diarylether paracyclophanes with varying length in the bridging chain are reported. Several naturally occurring biologically active cyclophanes have been described in the literature, and many of these are chiral by virtue of restricted bond rotation opposed to the presence of stereocenters. We report the first systematic study of the relationship between the bridging chain length and the barrier to racemization of these important compounds. Progress toward the synthesis of a library of diarylether paracyclophanes with varying tether lengths is described, as well as stereochemical implications.