(+)-Lophotoxin (1) was first isolated in 1981 from pacific sea whips (*Lophogorgia*) by Fenical and co-workers [1]. It is highly toxic and acts as irreversible antagonist of nicotinic acetylcholine receptors [1,2]. Syntheses of other furanocembranoids and fragments (+)-Lophotoxin (1) have been reported. However, a method to install epoxide C-7/8 in the correct configuration within the 14-membered macrocycle, and therefore a synthesis of (+)-Lophotoxin (1), remains elusive.

Our approach is based on dihydroxylation followed by two epoxidation reactions of intermediate 2. Ring-closing metathesis (RCM), macrolactonisation and cross-coupling are the main disconnections leading back to coupling partners 3 and 4. Applying an RCM based furan methodology developed by our group [5], we synthesized fragments 3 and 4 on gram-scale. The stereocenter C-13 is successfully installed by means of an asymmetric Baylis-Hillman reaction.

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