

# ORGANIC CHEMISTRY SEMINAR



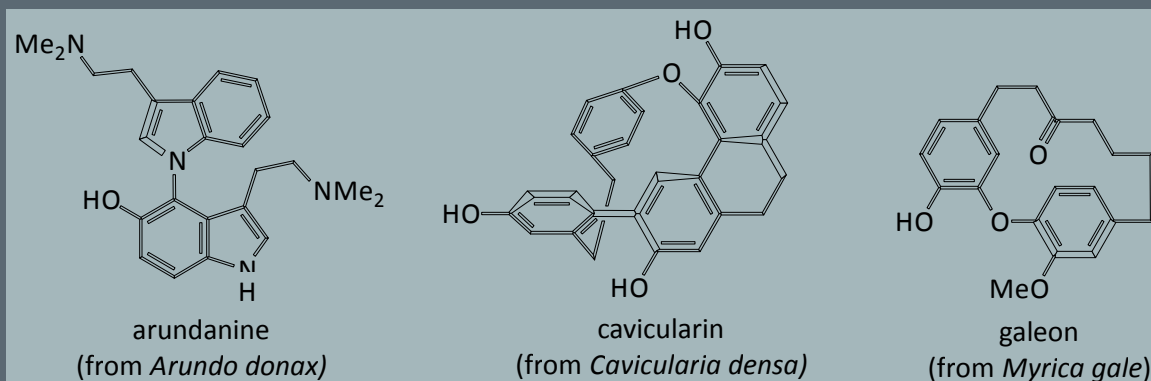
## Professor Chris Beaudry

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## SYNTHESIS OF NATURAL PRODUCTS WITH CONFORMATIONAL CHIRALITY

Identification of molecular chirality is trivial in molecules that contain  $sp^3$ -hybridized stereogenic carbon atoms (i.e. stereocenters). An enormous amount of effort has been directed at the stereocontrolled synthesis of such molecules. However, in molecules lacking stereocenters, the identification of molecular chirality (i.e. conformational chirality) is not straightforward. It is our hypothesis that chirality exists in many classes of natural products lacking  $sp^3$ -hybridized carbons, but their chiral properties go unnoticed by the community. Furthermore, stereocontrolled chemical syntheses of conformationally chiral molecules are rare. Our group has identified several classes of conformationally chiral natural products (examples shown below). I will describe our synthetic approaches to these molecules and describe how we determine if such molecules have persistent conformational chirality.



Thursday, March 27, 2014 at 11:00 am in  
Room 1315 Chemistry