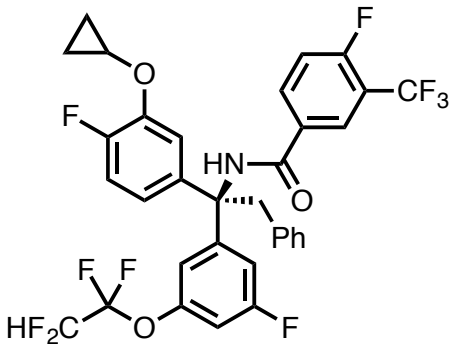
Engle Lab Group Meeting
November 19, 2015

Team Challenge #1
Presenter: Keary Engle

BMS recently published a series of triphenylethanamine compounds that are potent cholesteryl ester transfer protein (CEPT) inhibitors. Among them, compound **BMS-1** was found to be particularly active and was orally bioavailable at a dose of 1 mg/kg in human CETP/apoB-100 dual transgenic mice. **BMS-1** was advanced into preclinical safety studies, requiring that a large amount (~100 g) of the material be prepared.

Working in teams, propose a retrosynthesis and forward synthesis of **BMS-1** that is *concise, scalable, and stereoselective*. All starting materials in your synthesis must be available from Sigma-Aldrich in ≥5 g scale. You are only permitted to use a computer to search Sigma-Aldrich for commercial availability.



BMS-1

Xiao, J. X., *et al*., *J. Med. Chem.* **2015**, 58, 9010–9026.