Questions:

- 1. In the paper I am presenting, Weinreb amides are effectively reduced to aldehydes with Schwartz's reagent. Provide a method and associated mechanism to generate a Weinreb amide.
- 2. Again, in the paper I am presenting, the following occurred:

Focusing only on the alkene produced, what happened and why? Provide the mechanism of the competing reaction.

 When alcohol A was subjected to the following reactions, B was formed (B. Schmidt, Org. Lett. 2000, 2, 791). Provide a structure for B, including stereochemistry.

Ph A 1. NaH, then Me
$$CO_2Et$$

2. i -Bu $_2$ AlH, -78 °C $C_{12}H_{14}O$

3. Ph_3PCH_3I , $KN(SiMe_3)_2$

4. $Cl_2(PCy_3)_2Ru$ =CHPh