Wesley Beougher: Chemistry & Biochemistry
Mentor: Cate Burgess -- Chemistry & Biochemistry
Determining the Structure and Function of AcxR Dependent Sigma54 Regulation of Acetone Carboxylase Expression

The overall emphasis of my project is to provide mechanistic insight into carboxylation reactions that represent the terminal steps in the convergent pathways of alkene and ketone metabolism. The specific goal includes determining the molecular basis for AcxR dependent sigma-54 regulation of acetone carboxylase expression within *Azotobacter vinelandii*.