

Research in the Clift group focuses heavily on the development of new methods for asymmetric organocatalysis. We seek to discover novel synthetic strategies that will enable a diverse range of enantioselective transformations by drawing inspiration from enzymatic systems. The successful pursuit of these goals is expected to deliver synthetic methods that will facilitate previously challenging or even impossible chemical transformations.

REU students in the Clift group will work to discover and develop these valuable synthetic tools. These efforts will provide training in the application of fundamental synthetic techniques and instrumentation such as flash column and thin layer chromatography, gas chromatography (GC), high performance liquid chromatography (HPLC), nuclear magnetic resonance (NMR) spectroscopy, and infrared (IR) spectroscopy. Students will learn to apply these state of the art techniques and instruments to the design and execution of their own experiments to move towards the successful delivery of new methods in asymmetric catalysis.