

Step Curriculum Retreat 2007 -- Report of the Chemistry Table
Submitted by Anne Moody

Breakout Session #1: Mini-Research Experiences in Existing Courses and Labs

- Gen. Chem. Labs: Kramer and Nagan suggest improving the Vitamin C and water analysis labs to make them more investigative.
- Organic Lab: Patterson and Moody suggest making an ester synthesis lab that would include identifying (via spectroscopy) an acid (or ester?) and then finding a synthetic path to a new ester (using a small list of additional reagents) as a mini-research project. Literature procedures would have to be found and used; spectroscopy would be used to characterize the products. Computational aspects could include calculating K_{eq} values, especially if literature values exist.

Breakout Session #3: Curricular Models that Promote Research Experiences

- Following the above freshman and sophomore experiences for chem. majors, put back the research-type projects in P-chem., instrumental, and biochem. labs, to push students to develop their research skills in the more advanced labs.
- Most conversation explored the idea of implementing the newest ACS CPT curriculum guidelines, in conjunction with potentially expanding the research expectations for chemistry majors at Truman.