

Chem 180/298

Individual Research

Research Mentor: Dr. Daryl K. Eggers
DH 604 (924-4960)
DH 603 (laboratory)
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Co/Prereq's: Interest in biochemistry
Chemistry and Engineering majors preferred
Chem 120S or Biol 6 (Safety Class)
undergrad GPA above 3.0

Time Commitment: Students should average a minimum of 6 hrs/week in the laboratory per unit of credit. Students must coordinate work hours with the mentor's schedule each semester.

Training: New students must complete a set of standard protocols that are designed to familiarize the individual with the general techniques employed in the lab. Standard protocols include determining the concentration of protein solutions by UV-vis spectroscopy, formation of sol-gel glasses, use of circular dichroism to study protein structure, calorimetry, and other techniques for measuring the physical properties of aqueous solutions. In addition, students may be asked to read and discuss research articles related to ongoing projects in the lab. Training is scheduled usually during summer break.

Continuing Students: Students who complete the first (probationary) semester of research may be invited to continue working in the lab for additional credit. At that time, students will begin original research on a project agreed upon by the student and mentor. Continuing students will have the opportunity to present their research as a poster at a research fair on campus and/or at the annual CSUPERB meeting held in January. At the end of each semester, students may be asked to turn in a 2-page summary of research accomplishments, or in lieu of a report, students may choose to give a formal research talk at journal club (see below). Continued research through the summer months is highly encouraged.

Journal Club: If class schedules allow, each research student should attend the weekly biochemistry journal club held jointly with the research groups of other biochemistry faculty. Continuing students (beyond first semester of research) are expected to lead one of the journal club presentations. A student may elect to discuss his/her own research project or a recently published science article of interest.