

Faculty Development Workshop Series

“Making the Most of Course-Based Research Experiences (CRE): a sequence of CREs”

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Research on CRE (course-based undergraduate research experience) suggests that it can be effective for engaging and training undergraduates in STEM, especially when made available to first-year students. However, establishing such courses, in particular, a sequence of them requires considerable planning. We established a Freshmen Research Immersion (FRI), a sequence of three CUREs that starts with fall freshmen. The first course focuses on identifying good research projects, reading the scientific literature, learning how to work in teams, and other generic issues. The second course introduces students to equipment, protocols, and experimental design in their chosen research track, such that they complete a research proposal by the end of the term. In the third course, students complete the research project that they proposed the previous spring. We have nine research tracks that span the STEM disciplines (life sciences, physical sciences, social sciences, and engineering). Each track has 30 freshmen, which results in 270 freshmen and 220 sophomores in FRI each year. Begun in 2014, already the FRI program has resulted in 25 student team research posters at regional/national conferences, with 105 student coauthors. Assessment of our CREs includes standardized rubrics applied to students' research proposal, report and poster; surveys of students' perspective on their gains; and students' reflection essays on their professional and personal growth. We will share results of student outcomes and lessons we have learned in implementing this program.

Friday, March 23, 2018

McElhinney Hall Room 116

11:30 – 12:30 pm

Lunch will be provided. Please RSVP using the link below: