

**COLLEGE OF NURSING
University of Cincinnati Medical Center**

**SUMMER RESEARCH OPPORTUNITIES
FOR UNDERGRADUATE WOMEN**

APPLICATION DEADLINE: MARCH 1, 2004

The College of Nursing is pleased to offer the following research project(s) for the summer of 2004. Interested students are urged to contact the faculty member(s) directing the project that most interests them. By contacting the faculty member, you can discover more about the project, learn what your responsibilities will be, and if possible, develop a timetable for the twelve-week research period.

**RESEARCH IN PHYSICAL INJURY RELATED TO SEXUAL
ASSAULT IN WOMEN**

Professor Marilyn Sommers

249 Procter Hall (513) 558-5268 FAX: (513) 558-5302

E-Mail: Lynn.Sommers@UC.edu

Sexual assault is epidemic in the U.S. One way to control the epidemic is to establish scientifically based interventions to locate and describe the injuries that occur with sexual assault. Our first step was to establish a Sexual Assault Forensic Examiner program at University Hospital in Cincinnati, where sexual assault survivors now receive evidence-based care. We then began a prospective study investigating injury in women after consensual and non-consensual sex. Because of the success in identifying microscopic genital injury in sexually assaulted children, more practitioners are using a colposcope during the exam of adult females. In our clinical laboratory, we are examining volunteer women with colposcopy technique to determine the type and locations of injury they experience after consensual sex and comparing their injuries to those that occur with rape. The study is funded by the National Institute of Health and will allow us to answer the following questions: 1) Can experts differentiate between colposcopic photos of two groups of women: those who have experienced consensual vs. non-consensual sex? 2) When viewed as colposcopic photos, what is the difference in number, type and location of injury after consensual versus non-consensual sex? 3) What are the differences in the sensitivity and specificity of colposcopic photos in detecting injury in African-American and White women? The photographs derived from the exam will be compared to a retrospective review of photographs from unidentified sexual assault survivors. Chart records and colposcopic photos of sexual assault survivors will be reviewed retrospectively and matched to control subjects by ethnicity, age, and time from assault to exam. A panel of five gynecologic and forensic experts will attempt to differentiate between the photographs of women with consensual and non-consensual sex. They will also determine the frequency, type and location of injury. Our long term goal is to provide an injury model that experts can use to predict the sensitivity and specificity of the colposcopy exam to predict non-consensual sex.

Students have several options for their role on this project. The primary student role will be to learn techniques to identify physical injury by using digital images. These techniques, and the data generated by working with digital images to determine the location and extent of injury, will serve as the basis for the research presentation. In addition, students will increase their knowledge of data management as they relate to large-scale clinical trials and research projects.