## Department of Pathology

#### COLLEGE OF MEDICINE

# SUMMER RESEARCH OPPORTUNITIES FOR UNDERGRADUATE WOMEN

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The Departments of Pathology and Biomedical Engineering are pleased to offer the following research project for the summer of 2007. 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.

# **COLLAGEN CONTENT OF AGING TENDON INJURIES**

### **Professor Gregory P. Boivin**

Departments of Pathology MSB1257A Cincinnati, OH 45221-0529

Tel: (513) 558-9156 Fax: (513) 558-2487

Email: boivingp@ucmail.uc.edu

#### **Professor Jason Shearn**

ENGRG-Biomedical Engineering ERC 852 P. O. Box 210048 Cincinnati OH 45221

Tel: (513)556-4175 Fax: (513)556-4162

E-mail: jason.shearn@uc.edu

## **Project Description**

My laboratory is investigating the influence of aging on tendon repair. With increasing age there is decreasing success of repairing tendon injuries. We have previously examined the effects of aging on biomechanical strength and ultrastructural properties of the repairing patellar tendon. We currently are examining the effects of aging on the collagen components of healing tendons in young adult and aging rabbits. The samples have already been collected from the animals, so the project can be easily completed by a summer student. The summer student would be responsible for performing SDS Gel analysis of proteins from repairing tendon samples from 1- and 4-year old animals. The hypothesis is that there will be increased type V collagen in the repairing tissue of older rabbit patellar tendons.