Department: Kinesiology
Supervising Faculty Member: Susan Saliba
Specialization: Sports medicine

Research Focus: Professor Saliba’s research focuses on the efficacy of therapeutic interventions in physical therapy and athletic training. Her research agenda focuses on the application and physiological effect of physical agents (heat, cold, light, electrical stimulation, or ultrasound) on healing tissues. Specifically, her research explores the manner in which the application of the agents affects blood flow and neuromuscular factors in conjunction with patient-oriented outcomes of function and pain.

Job Description: 1) Interact and screen participants for human research (including by phone); 2) File IRB paperwork for research on human subjects; 3) become proficient in the instrumentation used for data collection: Biodex dynamometer, Biopac interface, EMG, Accusway, Biomechanical tools (Flock of Birds), and Ultrasound Imager, among others; 4) interact professionally with supervisors and other faculty members who run the lab; 5) Data acquisition from Acknowledge Software; 6) spreadsheet data entry.

Required Skills/Knowledge: ability to interact professionally with human subjects, doctoral students and faculty; science background, including physiology/anatomy and biology; familiarity with Matlab software will be helpful but is not required. Students should demonstrate a strong interest in clinical research.

Required Courses: none required

Training: The student selected for this position will need to complete CITI on-line training for ethical research and treatment of human subjects before beginning work

What You Will Learn: Through this research-work opportunity, you will: 1) explore relevant literature to develop an understanding of how the body responds to the application of biostimulation; 2) develop skills relevant for ethical research practice with human participants; 3) develop a research question that will contribute to the understanding of the physiological effects of the application of physical agents during soft tissue healing; and 4) develop methods to test the neuromuscular effects following the application of a therapeutic intervention.

Suggested Reading:
Specific readings will be assigned once the student is hired, but interested students can read any of the following prior to applying:


