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Rehabilitation Concepts in Muscle, Joint, Brain and Nerve Physiology Mini-Elective Spring 2019

<u>Course Dates:</u>	January 31, February 14, 21, 28 Thursdays, 1:00-5:00 PM
<u>Maximum Students:</u>	8
<u>Class Year:</u>	MS1 and MS2
<u>Course Director:</u>	Brad E. Dicianno, MD
<u>Contact Information:</u>	Brad E. Dicianno, MD 412-648-6666 dicibe@upmc.edu
<u>Registration:</u>	Betsy Nero, Office of Medical Education betsy@medschool.pitt.edu

Description:

This four-session mini-elective introduces students to rehabilitation concepts in the physiology of muscle, joints, brain and nerves. Sessions are held at various locations for hands-on experience and observation. The goal of this program is to explore the relationship among anatomy, physiology, and human motion. This course highlights ways rehabilitative efforts and technology can be used to diagnose and treat disorders of the neuromuscular system. Through both didactic and hands-on exposure at these sites, this series covers topics including:

- The use of musculoskeletal ultrasound to identify normal and pathological structures of joints
- The pathophysiology and treatment of traumatic brain injury and concussion.
- Anatomy of joints and techniques used to guide injections
- The use of Nerve Conduction Studies and Electromyography as a way to diagnose neuromuscular diseases.

Objectives:

- To understand the physiology of traumatic brain injury
- To understand the anatomy of the major joints
- To become familiar with Nerve Conduction Studies and Electromyography and understand their role as an extension of the physical examination.
- To review nerve and muscle physiology, including muscle recruitment as demonstrated by EMG.

Requirements:

- Active participation in all 4 course sessions.

Course Outline
Rehabilitation Concepts in Muscle, Joint, Brain and Nerve Physiology

Course Director:

Brad E. Dicianno, MD
Associate Professor
University of Pittsburgh Medical Center
Dept. of Physical Medicine and Rehabilitation Kaufmann Medical Bldg, Suite 202

Faculty:

Dr. Gary Galang
Dr. Amanda Harrington
Dr. Kentaro Onishi
Dr. Suehun Ho
Dr. Jennifer Shen

Location:

Various locations outlined below.

Special Instructions:

Professional dress is requested for the spasticity and TBI groups. Please wear scrubs for the other two sessions.

Week One: January 31, 2019

Musculoskeletal Exam and Ultrasound

Location: Kaufman Building Conference Room 201

Instructors: Drs. Kentaro Onishi and Suehun Ho

Week Two: February 14, 2019

Spinal Cord Injury, Spasticity, Baclofen Pumps, and Botox Injections

Location: Meet in Mercy Inpatient Spinal Cord Injury Unit Resource Room 7015

Instructor: Dr. Amanda Harrington

Week Three: February 21, 2019

Traumatic Brain Injury

Location: Meet at inpatient Stroke Rehab Unit, Mercy Hospital, 6th Floor, Resource Room 6228

Instructor: Dr. Gary Galang

Week Four: February 28, 2019

Electromyography and Nerve Conduction

Location: Meet at inpatient Stroke Rehab Unit, Mercy Hospital, 6th Floor, Resource Room 6228

Instructor: Dr. Jennifer Shen