

HT020 — Musculoskeletal Pathophysiology — 2019

Course Information and Objectives

Course Directors:

Laura Tarter, MD	Dept of Medicine, BWH	ltarter@bwh.harvard.edu
Mary Bouxsein, PhD	Dept of Orthopedic Surgery, BIDMC	mbouxsei@bidmc.harvard.edu
Benjamin Shore, MD	Dept of Orthopedic Surgery, CHB	Benjamin.Shore@Childrens.harvard.edu

TA: Davi daSilva

ddasilva@mit.edu

Logistics:

Lectures / lab: Jan 7th to Feb 1st, M-Tu-Fr 1:30 pm – 4:30 pm
(no class on Jan 21, Martin Luther King, Jr. day)

Location: TMEC 209

Final exam: Feb 1, 1:30 – 3:30 pm

Course Overview: This course will serve as an introduction to the cellular composition, structural anatomy and pathophysiology of the bones, joints and muscles that allow proper function of the musculoskeletal system. The consequences of genetic mutations, abnormal physiology, structural failure and of inflammatory processes affecting the integrity of the musculoskeletal system (including bone, joint, muscle, and cartilage) and leading to pathology will be outlined through lectures, patient visits, and labs (plates and screws, musculoskeletal ultrasound).

Class Attendance: Attendance is expected at each class. You are expected to read the assigned material prior to class to enhance your understanding of the lecture. Please contact one of the course instructors if you need to miss class.

Patient Visits: Attendance is expected at each patient visit, with appropriate business dress (ie, no sweats!) when patients are present. Close your computers and make eye contact with our visitor. You are as responsible for your comportment as evolving physicians as you are for your understanding of mechanism of disease. These patients are taking time out of their day to help you learn, please show them the respect they deserve.

Homework: After each patient visit, you are required to submit a 1 page reflection relating your thoughts and impressions that were spurred by the patient's visit. This could include your emotional response, thoughts about being a physician, thoughts about the psychosocial aspects of disease, concerns about the use of healthcare resources, and/or thoughts about ethical dilemmas faced by the patient and/or his or her physician.

Grading: Class participation and homework (15%), mid-course evaluation (10%) and final exam (75%)

Textbook: none required

Reference / reading materials: Relevant reading materials will be provided in class or on course website.

HST 020 – Musculoskeletal Pathophysiology
Syllabus, Jan 2019, TMEC 209 (260 Longwood Avenue)

Day	Date	Time	Lecture	Faculty
Mon	7-Jan	01:30	Overview, intro to course	Bouxsein & Tarter
		02:00	Growth plate physiology, growth disorders	M. Demay
		03:15	Bone structure and remodeling	M. Bouxsein
Tu	8-Jan	01:30	Tendon, ligament, bone injuries, fracture healing	B. Shore
		02:30	Pedi Ortho, Bone tumors	B. Shore
		03:30	Plate and screws Lab	B. Shore
Fr	11-Jan	01:30	Control of mineral metabolism, metabolic bone disease and mineralization defects	M. Wein
		02:30		
Mo	14-Jan		Patient visit (Ms. Neena Nizar)	M. Wein
		01:30		
		02:30	osteoporosis	M. Bouxsein
Tu	15-Jan	03:30	Patient visit (osteoporosis)	J. Tsai
		01:30	Back Pain	M. Glotzbecker
		02:30	ACL injury and repair	M. Murray
Fr	18-Jan	03:30	Patient visit	J. Charles
		01:30	Intro to Rheumatology	L. Tarter
		02:30	OA	L. MacFarlane
Mon	21-Jan	03:30	Pediatric rheumatology	P. Nigrovic
			ML King Day - NO CLASS	
Tu	22-Jan	01:30	Rheumatoid arthritis	D. Rao and M. Brenner
		02:30	Rheumatoid arthritis -- Patient	S. Ritter
		03:30	Gout	D. Solomon
Fr	25-Jan	01:30	Scleroderma	F. Castellino
		02:30	Spondyloarthropathy	J. Ermann
		03:30	Psoriatic arthritis -- Patient	G. Kane-Wanger
Mon	28-Jan	01:30	SLE	P. Hoover
		02:30	Vasculitis	P. Monach
		03:30	Review	Bouxsein/ Tarter/ Shore
Tu	29-Jan	01:30	Muscle disorders	S. Rutkove
		02:30	Ultrasound lab	M. Kohler
		03:30	Ultrasound lab	M. Kohler
Fr	1-Feb	01:30	Final Exam	Bouxsein / Tarter / Shore