PSL 460, Topics in Cell Physiology Section 6: Metabolic Regulation in Muscle. Tuesdays, 3:00 – 4:50 PM, BPS 2235 Zoom classes:

https://msu.zoom.us/j/96421587798

Meeting ID: 964 2158 7798 Passcode:

Introduction:

This informal lecture/discussion course for senior physiology majors will examine selected topics in muscle cell adaptation and metabolism important for understanding muscle performance.

Instructors:

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Robert Wiseman, PhD. 3198 BPS Bldg., 884-5132 Email: rwiseman@msu.edu Office hours: 3-5 PM Fridays

Grading: 50% class participation/attendance, 20% group presentations, and 30% final term paper.

Course Outline (tentative and flexible):

Week 1, Jan. 11: Introduction and Preliminaries (Zoom)

Week 2, Jan. 18: Muscle Function and Metabolism (Zoom)

Week 3, Jan. 25: Regulation of Mitochondrial Biogenesis (Zoom)

Week 4, Feb. 1: Signaling Pathways that Regulate Muscle Energy Metabolism

Week 5, Feb. 8: Response of Muscle Metabolism to Energy Demand

Week 6, Feb. 15: Fuel Selection in Muscle / Discussion of Group Presentation Format

Week 7, Feb 22: The Effect of Calcium on Muscle Metabolism / Group Discussion Topics Due

Week 8, March 1: Student Led Discussion on Selected Topics / Discuss Individual Review Assignment Format

Week 9, March 8: Spring Break

Week 10: March 15: Student Led Discussion on Selected Topics

Week 11: March 22: Student Led Discussion on Selected Topics

Week 12: March 29: Student Led Discussion on Selected Topics

Week 13: April 5: Group Presentations / Individual Review Papers Due

Week 14: April 12: Group Presentations

Week 15: April 19: Group Presentations

Week 16: April 26: Group Presentations and Discussion of Final Paper

Paper due by 5 PM May 5th, 2022

Course Materials: Distributed on www.d2l.msu.edu.