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**Project #6: Role of extracellular matrix (ECM) in mechanical properties of skeletal muscle**

Contractions of skeletal muscle are essential for force generation and body movement. Like many other cells, myofibers are embedded in the Extracellular Matrix (ECM). The ECM plays important roles in maintaining muscle integrity, contributing to the mechanical properties, promoting myogenesis and organizing muscle regeneration. Despite this importance, it is surprising how little is known about the ECM of skeletal muscle compared to other musculoskeletal tissues. The purpose of this project is to determine the role of ECM in passive and active mechanical properties of skeletal muscle. The students should have strong background in mechanical testing. This project is well suited for a team of 2-3 students.