MSc Seminar

Monday March 6, 2023 at 1:30pm via Zoom [Remote]

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Simulating Motor Neuron Diseases in Synthetic Muscles

Advisor: Dr. Andrew Hamilton-Wright
Advisory: Dr. Denis Nikitenko

Abstract:

Muscle modelling allows us to create a synthetic muscle where we could simulate various conditions in order to better understand the way a muscle works and reacts to various inputs that would simply not be possible in a real person. Muscle modelling also allows us simulate diseases and monitor their progression and behaviour with hopes of better understanding the disease, and gaining insight into better diagnosing it, or creating tools that would improve the quality of life for many patients.

Motor Neuron Diseases are a class of diseases where early intervention is crucial to any positive outcomes, by modelling this class of disease we can pave the way for better understanding, and early diagnosis.