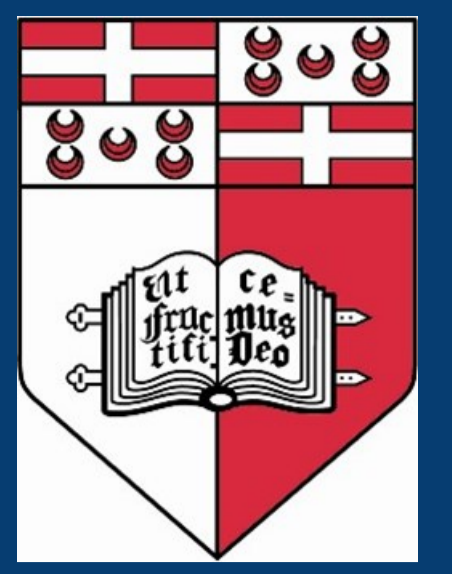


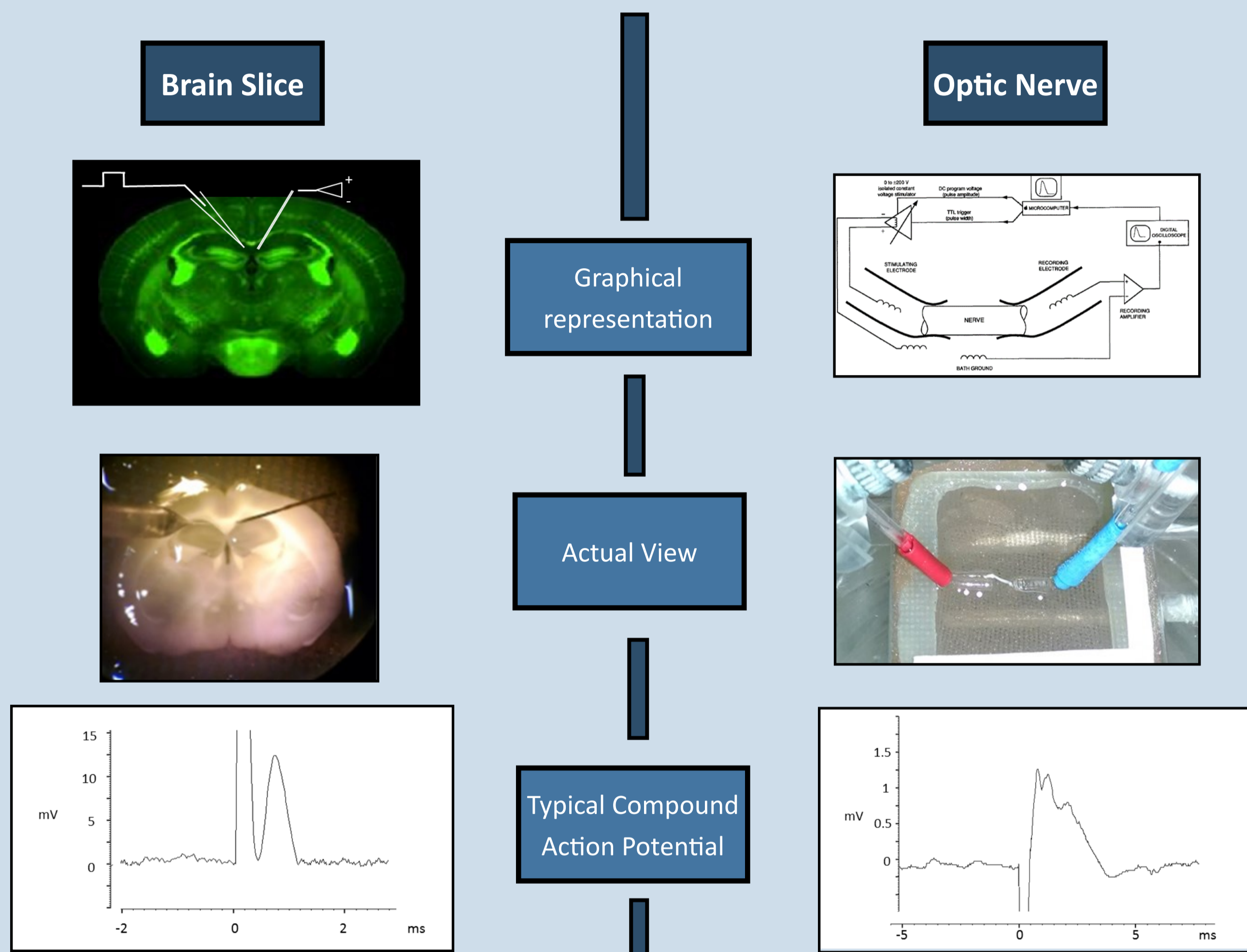
Functional electrophysiological assessment from optic nerve and callosal slice in mice to study white matter injury



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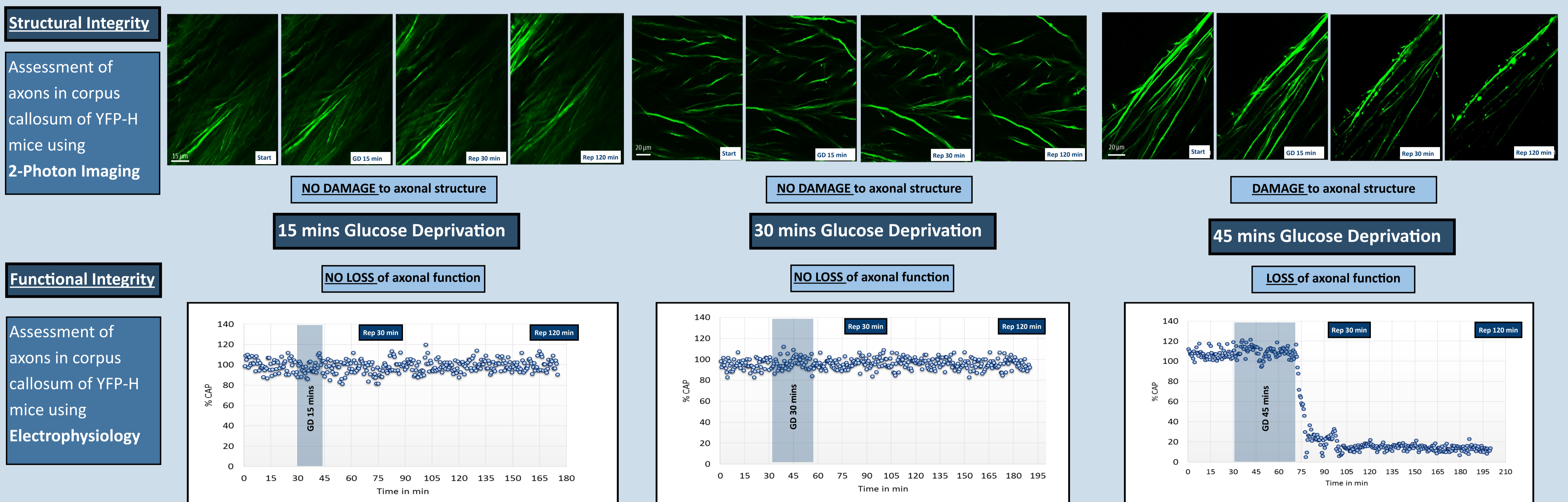
Comparing Compound Action Potential Recordings



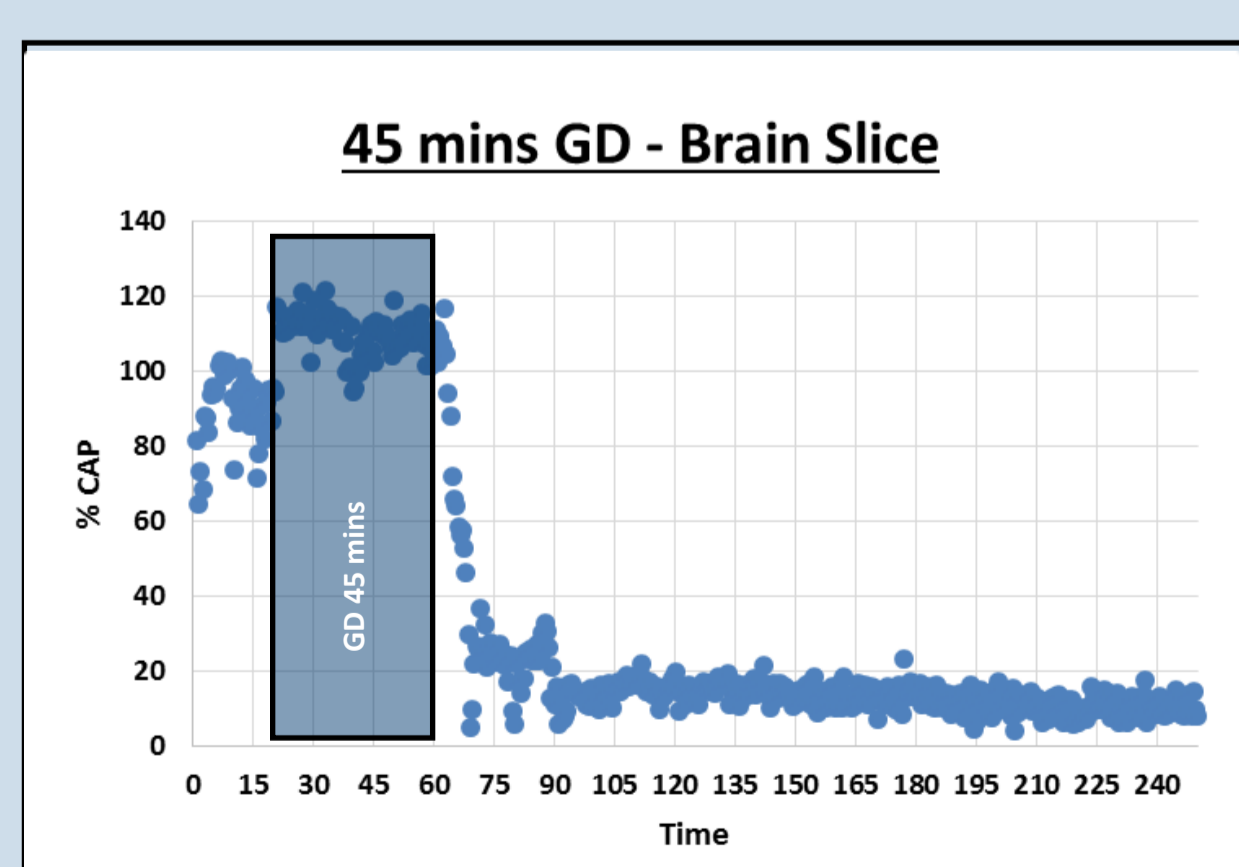
Comparing Parameters used for recording

	Brain Slice	Optic Nerve
Incubation	2 – 3 hours	20-30 mins
Stimulating Electrode	Bipolar tungsten Electrode (1 MΩ)	Suction Electrode (silver wire)
Recording electrode	Borosilicate electrode (2-5 MΩ) Tip separation 2-5μm	Suction Electrode (silver wire)
Stimulating Pulse Amplitude	1.5 – 2.5 mA	1.5 – 2.5 mA
Stimulating Pulse Width	50 – 100 μsec	50 μsec
Flow rate	5-6 ml/min	2-3ml/min
Filtering	100 – 50000Hz	100 – 10000Hz
Recorded Compound Action Potential	10-12 mV	0.75-1.25 mV

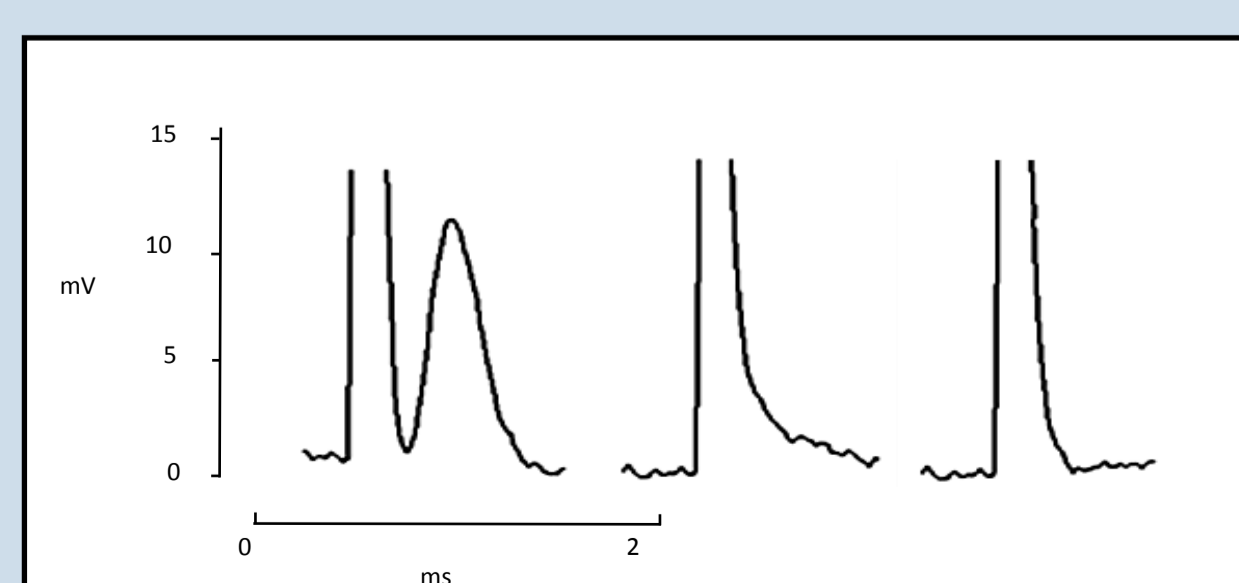
Comparing Structural vs Functional analysis of Axonal Integrity following 15, 30 and 45 mins of Glucose Deprivation



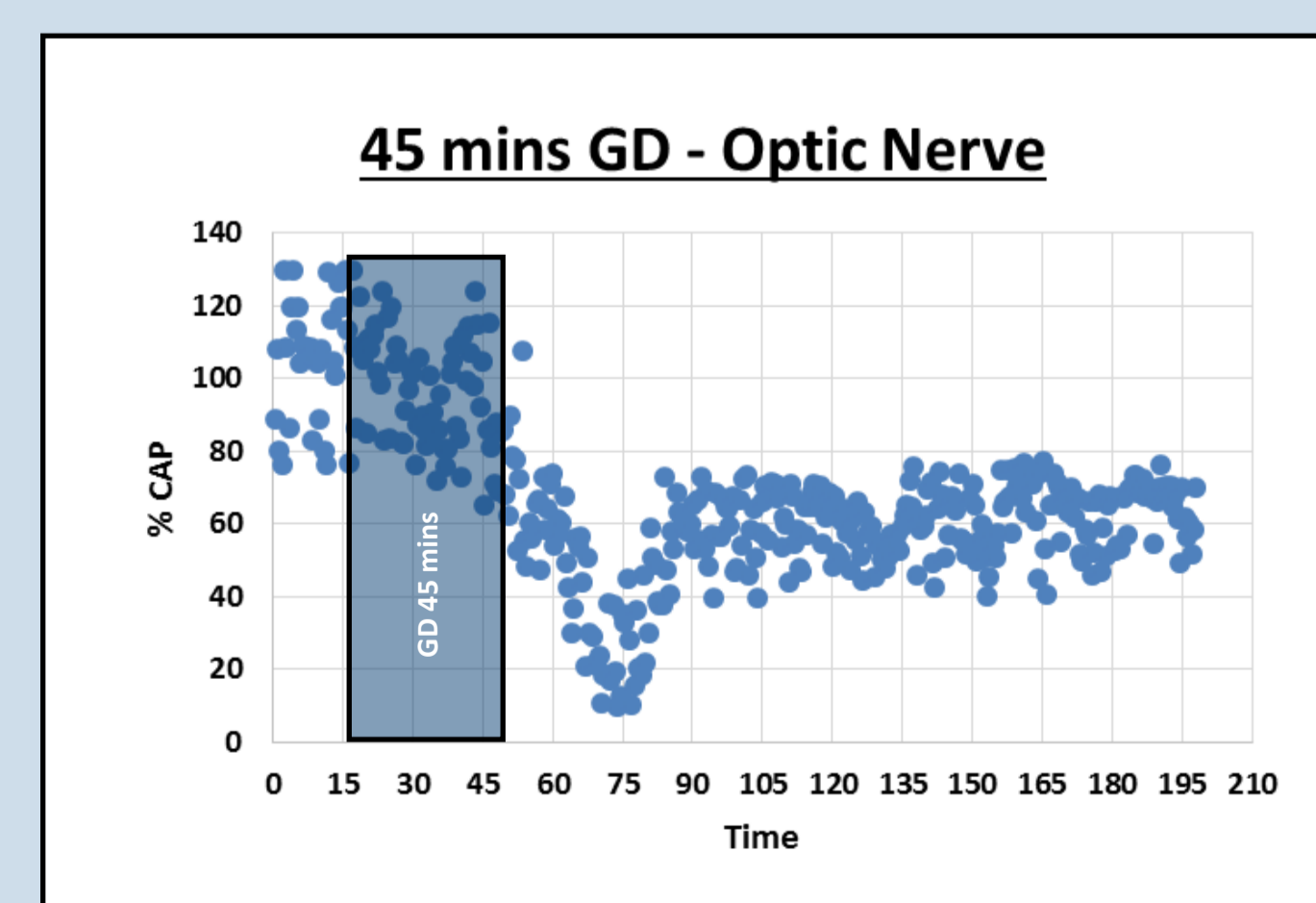
Comparing vulnerability of BRAIN SLICE vs OPTIC NERVE axons following 45 mins of Glucose Deprivation



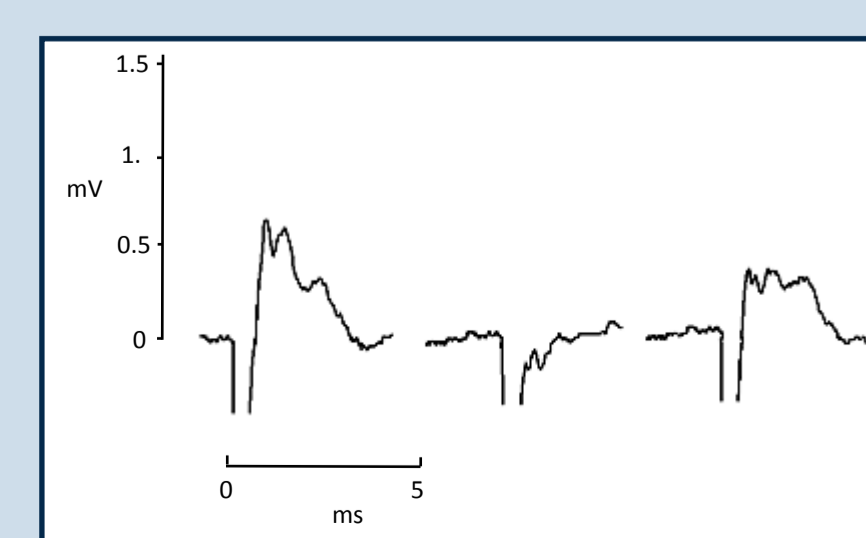
RAPID DECLINE
of Compound Action Potential after 45 mins GD



NO RECOVERY
of function during reperfusion



GRADUAL DECLINE
of Compound Action Potential after 45 mins GD



PARTIAL RECOVERY
of function during reperfusion