

Nervous System Injury & Repair - Winter / Spring 2021 (NGG 618)

Class of 1962 auditorium Tue/Thurs 9:30-11am

Week 1 (Jan 21)	Overview (Epidemiology, Injury Mechanisms, Clinical Presentation & Diagnosis, Models) – Cohen/Cullen
Week 2 (Jan 26 & 28)	Brain Injury Excitatory-Inhibitory (E-I) Imbalance – Cohen
Week 3 (Feb 2 & 4)	TBI Biomechanics (Sports Concussion, Military/Blast TBI) – Cullen
Week 4 (Feb 9 & 11)	Diffuse Axonal Injury (DAI) & Chronic Neurodegenerative Sequelae (CTE) – Victoria Johnson
Week 5 (Feb 16 & 18)	Excitotoxicity – Mike Robinson
Week 6 (Feb 23 & 25)	Spinal Cord Injury – Ali Ozturk
Week 7 (Mar 2 & 4)	Inflammation & Blood Brain Barrier (BBB) Breakdown Kelly Jordan-Sciutto
Week 8 (Mar 9 & 11)	Peripheral Nerve injury – Steve Scherer
Week 9 (Mar 16 & 18)	Oxidative Stress/Free Radical Biology – Harry Ischiropolous
Week 10 (Mar 23 & 25)	Neurogenesis & Cell Death – Amelia Eisch
Note no class this week (March 30) as requested by UPENN	
Week 11 (Apr 6 & 8)	Secondary Injuries & Prevention – M. Sean Grady
Week 12 (Apr 13 & 15)	TBI-Induced Sleep Disturbances – Danielle Sandsmark
Week 13 (Apr 20 & 22)	Treatment (Brain Cooling, Fish Oil, Exercise, BCAAs) – Cohen
Week 14 (Apr 27 & 29)	Deep Brain Stimulation/Electroconvulsive Therapy (DBS/ECT) – Isaac Chen
Week 15 (May 4 & 6)	Gene Therapy & Stem Cells – John Wolfe
Week 16 (May 11 & 13)	Neural Tissue Engineering & Regenerative Medicine – Cullen