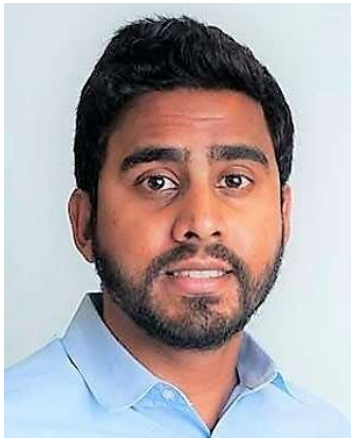


Department of Neurology

Awards and Promotions



Dr. Lan Luo was awarded the BIDMC 2023 Early Stage Career Investigator Award for her grant proposal: *Metabolic and Proteomic Profiling for Effective Deep Brain Stimulation in Parkinson's Disease*.



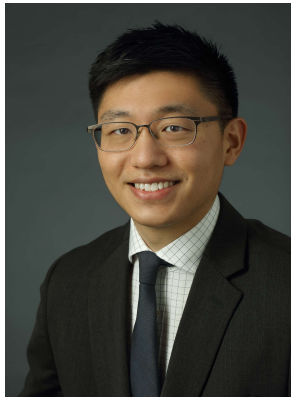
Dr. Alvin Das was awarded the 2023 BIDMC Inspire - Early Stage Career Investigator Award for his grant proposal: *Cerebral Small Vessel Disease Proteomics Pilot Study*



Dr. Christopher Gibbons was promoted to Professor of Neurology.

Department of Neurology

The Creation and Launch of Medical Education Curriculum: Aquifer Neurology



In collaboration with two of our alumni, **Drs. Alexandra Hovaguimian, Jason Yoon** and **Jonah Zuflacht** have created [Aquifer Neurology](#), a new online curriculum for medical students which launched in July! It is the first widely available peer-reviewed neurology education curriculum for medical students in the US and adopted by 203 medical schools already.

Department of Neurology

Clinical Trials

Current Studies

Autonomic Lab

The Functional Neuroanatomy of the Human Physiological Stress Response

PI: Roy Freeman, MD

From Nerve to Brain: Toward a Mechanistic Understanding of Spinal Cord Stimulation in Human Subjects

PI: Roy Freeman, MD

Sensitivity of Orthostatic Hypotension Questionnaire

PI: Roy Freeman, MD

Huntington's Disease

A Randomized, Placebo-Controlled, Double-Blind Study to Evaluate the Effect of SAGE-718 on Cognitive Function in Participants with Huntington's Disease

PI: Simon Laganieri, MD

Audio Markers of Speech and Cognition in Huntington's Disease (Audio-HD)

PI: Simon Laganieri, MD

Enroll HD: A Prospective Registry Study in a Global Huntington's Disease Cohort

PI: Sam Frank, MD

Adaptive Keyboard Solutions for Computer use in Movement Disorders (Qwerty-MD)

PI: Sam Frank, MD

A Phase II, Randomized, Double-Blind, Placebo-Controlled, Dose-Finding Study To Evaluate The Safety, Biomarkers, And Efficacy Of Tominersen In Individuals With Prodromal And Early Manifest Huntington's Disease

PI: Sam Frank, MD

Department of Neurology

Clinical Trials

Current Studies

Parkinson's Disease

Yoga for Parkinson's Disease

PI: Balachundhar Subramaniam, MD, MPH

Functional and Structural Connectivity of Subthalamic Deep Brain Stimulation for Improving Parkinsonian Gait

PI: Lan Luo, MD

Abbott DBS Post-Market Study of Outcomes for Indications over Time (ADROIT)

PI: Lan Luo, MD

Remote Optimization, Adjustment and Measurement for Deep Brain Stimulation (ROAM)

PI: Lan Luo, MD

A Randomized Placebo-controlled Trial of Zoledronic Acid for Prevention of Fractures in Patients with Parkinson's Disease (Trial of Parkinson's and Zoledronic Acid) (TOPAZ)

PI: David Simon, MD

A Phase 2b, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Determine the Efficacy and Safety of BIIB122 in Participants with Parkinson's Disease

PI: Shabbir Merchant, MD

Center for Noninvasive Brain Stimulation

Brain Plasticity in Cognitive Aging

PI: Peter Fried, PhD

Brain Plasticity in Type-2 Diabetes

PI: Peter Fried, PhD

Effectiveness of Independent Component Analysis for Identifying and Removing Auditory and Somatosensory Evoked Potentials from TMS Evoked Brain Responses

PI: Recep Ozdemir, PhD

Department of Neurology

Clinical Trials

Current Studies

Multiple Sclerosis

Longitudinal Assessment of Neuroprotection, Treatment, and Repair in Multiple Sclerosis (LANTERN)

PI: Jacob Sloane, MD, PhD

Prevalence and impact of obstructive sleep apnea in multiple sclerosis

PI: Jacob Sloane, MD, PhD

The MS Leadership and Innovation Network (MS-LINK™) Outcomes Study: A Comprehensive Prospective Longitudinal Assessment of Patient and Clinical Reported Outcomes in Multiple Sclerosis Patients across North America

PI: Jacob Sloane, MD, PhD

Effect of Ocrelizumab on Neuroinflammation in Multiple Sclerosis as Measured by 11C-PBR28 MR-PET Imaging of Microglia Activation

PI: Caterina Mainero, MD, PhD

Dystonia, PSP, and MSA

Web-Based Automated Imaging Differentiation of Parkinsonism (AID-P)

PI: David Simon, MD

Dystonia Coalition Projects-3

PI: Sam Frank, MD

Department of Neurology

Clinical Trials

Current Studies

Stroke

Sleep for Stroke Management And Recovery Trial (Sleep SMART): an investigator-initiated, phase 3 multicenter, prospective randomized open-, blinded-endpoint (PROBE) controlled trial to test whether treatment of obstructive sleep apnea (OSA) with continuous positive airway pressure is effective for secondary prevention and recovery after stroke

PI: Jennifer Dearborn MD, MPH

Multi-arm Optimization of Stroke Thrombolysis (MOST) Stroke Trial is a single blinded, randomized controlled adaptive, multi-arm, adjunctive-thrombolysis efficacy trial in ischemic stroke

PI: Sandeep Kumar, MD

Comparison of Anti-Coagulation and Antiplatelet Therapies for Intracranial Vascular Atherostenosis (CAPTIVA). This is a randomized, two-stage Phase III 3-arm, double-blind trial conducted in subjects age 30-80 with a symptomatic infarct attributed to 70-99% stenosis of a major intracranial artery (middle cerebral, intracranial carotid, intracranial vertebral, or basilar).

PI: Sandeep Kumar, MD

Anticoagulation in ICH Survivors for Stroke Prevention and Recovery (ASPIRE). A Phase III, double-blind, randomized, placebo-controlled clinical trial designed to test the efficacy and safety of anticoagulation, compared with aspirin, in patients with a recent ICH and high-risk non-valvular AF (ASPIRE Trial)

PI: Magdy Selim, MD, PhD

STATINS USE IN INTRACEREBRAL HEMORRHAGE PATIENT (SATURN). This is a multi-center, pragmatic, prospective, randomized, open-label, and blinded end-point assessment (PROBE) clinical trial. A total of 1,456 patients presenting within 7 days of a spontaneous lobar ICH while taking statins will be randomized to one of two treatment strategies: discontinuation vs. continuation of statin therapy

PI: Magdy Selim, MD, PhD

Department of Neurology

Clinical Trials

Current Studies

Neuromuscular Disease

HEALEY ALS Platform Trial

PI: Courtney McIllduff, MD

Extracellular RNA biomarkers of myotonic dystrophy

PI: Seward Rutkove, MD

A neuronal electrical excitability recording system for improved diagnosis and biomarker assessment of the therapeutic impact of drugs in peripheral sensory and pain disorders

PI: Seward Rutkove, MD

Evaluating a Novel Class of Objective Myofascial Pain Assessments

PI: Seward Rutkove, MD

Long-Term, Observational, Registry of Patients With Generalized Myasthenia Gravis Who Have Received Treatment With Complement C5 Inhibition Therapies

PI: Pushpa Narayanaswami, MD

Epilepsy

Evaluation of Cortical Excitability and Excitation/Inhibition Balance in Patients with a New Diagnosis of Epilepsy Starting AEDs (Epi-AED)

PI: Mouhsin Shafi, MD, PhD

Safety and Therapeutic Measures of Transcranial Cathodal Direct Current Stimulation (TDCS) in Patients with Refractory Focal Epilepsy

Mouhsin Shafi, MD, PhD

Botox Effects on Seizure Severity and Susceptibility

PI: Rami Burstein, PhD

Department of Neurology

Clinical Trials

Current Studies

Alzheimer's Disease & Memory Disorders

Non-invasive Brain Stimulation for Gamma-induction and Cognitive Enhancement in FTD (GIFTeD)
PI: Lorella Battelli, PhD

Gamma Induction for Amyloid Clearance in Alzheimer's Disease
PI: Lorella Battelli, PhD

Visual Restoration of Losses Caused by Cortical Damage: A New Protocol to Promote Fast Recovery
PI: Lorella Battelli, PhD

Syn-D Study
PI: Dan Press, MD

New IDEAS: Imaging Dementia—Evidence for Amyloid Scanning Study
PI: Dan Press, MD

Understanding the structural, functional, and prognostic implications of cortical excitability in Alzheimer's disease: The AHeAD Study
PI: Stephanie Buss, MD

Treating hyperexcitability in Alzheimer's disease with levetiracetam to improve brain function and cognition The LeAD Study
PI: Mouhsin Shafi, MD, PhD

Department of Neurology

Publications

Publications

Das AS, Gökçal E, Fouks AA, Horn MJ, Regenhardt RW, Viswanathan A, Singhal AB, Schwamm LH, Greenberg SM, Gurol ME. Left ventricular hypertrophy and left atrial size are associated with ischemic strokes among non-vitamin K antagonist oral anticoagulant users. *J Neurol*. 2023 Aug 7.

Wilson M, Wang JY, Andreev A, Katsanos AH, **Selim M**, **Lioutas VA**. Diagnostic utility of brain MRI in spontaneous intracerebral hemorrhage: A retrospective cohort study and meta-analysis. *Eur Stroke J*. 2023 Aug 11:23969873231192761

Vannuscorps G, **Galaburda A**, Caramazza A. From intermediate shape-centered representations to the perception of oriented shapes: response to commentaries. *Cogn Neuropsychol*. 2023 Mar;40(2):71-94. doi: 10.1080/02643294.2023.2250511. Epub 2023 Aug 29. PMID: 37642330.

Goldenholz DM, Goldenholz EB, Kaptchuk TJ. Quantifying and controlling the impact of regression to the mean on randomized controlled trials in epilepsy. *Epilepsia*. 2023 Jul 28. doi: 10.1111/epi.17730. Epub ahead of print. PMID: 37505116.

Hwang DY, Bannon SM, Meurer K, Kubota R, Baskaran N, Kim J, Zhang Q, Reichman M, Fishbein NS, Lichstein K, Motta M, Muehlschlegel S, Reznik ME, Jaffa MN, Creutzfeldt CJ, **Fehnel CR**, Tomlinson AD, Williamson CA, Vranceanu AM; COMA-F Investigators. Thematic Analysis of Psychosocial Stressors and Adaptive Coping Strategies Among Informal Caregivers of Patients Surviving ICU Admission for Coma. *Neurocrit Care*. 2023 Jul 31. doi: 10.1007/s12028-023-01804-3. Epub ahead of print. PMID: 37523110.

Department of Neurology

Publications

Publications

Mazzu MA, Campbell ML, Schwartzstein RM, White DB, Mitchell SL, **Fehnel CR**. Evidence Guiding Withdrawal of Mechanical Ventilation at the End of Life: A Review. *J Pain Symptom Manage*. 2023 Sep;66(3):e399-e426. doi: 10.1016/j.jpainsymman.2023.05.009. Epub 2023 May 26. PMID: 37244527.

Mandeville R, Sanchez B, Johnston B, Bazarek S, Thum JA, Birmingham A, See RHB, Leochico CFD, Kumar V, Dowlatshahi AS, Brown J, Stashuk D, **Rutkove SB**. A scoping review of current and emerging techniques for evaluation of peripheral nerve health, degeneration, and regeneration: part 1, neurophysiology. *J Neural Eng*. 2023 Jul 24;20(4). doi: 10.1088/1741-2552/acdbeb. PMID: 37279730.

Farid AR, Golden E, Hu A, Robicheau S, **Rutkove S**, Al-Hertani W, Upadhyay J. A pilot investigation of muscle integrity in patients with ADSSL1 myopathy using electrical impedance myography. *Muscle Nerve*. 2023 Sep 8. doi: 10.1002/mus.27971. Epub ahead of print. PMID: 37682022.

Rutkove SB, Chen ZZ, Pandeya S, Callegari S, Mourey T, Nagy JA, Nath AK. Surface Electrical Impedance Myography Detects Skeletal Muscle Atrophy in Aged Wildtype Zebrafish and Aged *gpr27* Knockout Zebrafish. *Biomedicine*. 2023 Jul 7;11(7):1938. doi: 10.3390/biomedicine11071938. PMID: 37509577; PMCID: PMC10377526.

Pandeya S, Sanchez B, Nagy JA, **Rutkove SB**. Combining electromyographic and electrical impedance data sets through machine learning: A study in D2-mdx and wild-type mice. *Muscle Nerve*. 2023 Sep 2. doi: 10.1002/mus.27963. Epub ahead of print. PMID: 37658820.