<u>Curriculum Vitae</u> Patrick Belton MD belton@neurosurgery.wisc.edu

Education:

Medical Education:

SUNY Upstate Medical University, Syracuse, NY— MD, May 2015 Gold Humanism Honor Society: Selected by peers, 2014 Dean's Commendation: 2012-2013 Academic Year

Undergraduate Education:

Columbia College, Columbia University, New York, NY— B.A., Economics: 1992-1996 Classes included three semesters of engineering-level calculus, linear algebra, differential equations, statistics, and econometrics.

High School:

Illinois Mathematics and Science Academy, Aurora, IL- Diploma, 1992

Post-Graduate Education:

Fellowship: July 2022 – July 2023

Neurotrauma Fellowship, Department of Neurological Surgery University of California San Francisco, Zuckerberg San Francisco General Hospital Dr. Michael Huang, fellowship director; Dr. Geoff Manley, division chief In addition to providing patient clinical care, I did research work on the TRACK-TBI and TRACK-SCI teams, service on the UCSF Critical Care Committee, and quality improvement work on timing of imaging in spinal cord injury. I also designed, got approved, and managed the implementation of the system architecture plan for the TRACK-TBI research consortium.

Neurosurgery Residency: July 2015 – June 2022

University of Missouri, Columbia, Missouri Performed 1,650 logged surgical procedures for credit to ACGME minimums Chief Resident for 2021-2022 Clinical reporting quality improvement project (continuous during residency)

Job Experience:

Assistant Professor, Department of Neurosurgery, University of Wisconsin-Madison, Madison, WI — August 2023-present

Clinical concentration in Neurocritical Care and Neurotrauma. Site PI for the TRACK-TBI clinical trial consortium; grant funded collaborator with TRACK-LONG clinical studies.

Chief Operating Officer/ Partner, Prime Mover Capital Management; New York, NY-2006-2011

Vice President, JP Morgan Chase, Chase Home Finance Division, Secondary Marketing Risk Reporting Department of Capital Markets Group; Edison, NJ — 2004-2006

Independent Contractor/Consultant; Seattle, WA - 2002-2004

Senior Supervising Consultant, Arthur Andersen; New York, NY- 2000-2002

Analyst->Assistant Treasurer->Assistant Vice President->Vice President, HSBC Bank USA; New York, NY— 1996-2000

Research Experience:

Publications (102 citations to date, H-index 5, i10-index 4):

Etemad LL, Yue JK, Barber J, Nelson LD, Bodien YG, Satris GG, **Belton PJ,** et al. Longitudinal Recovery Following Repetitive Traumatic Brain Injury. JAMA Netw Open. 2023 Sep 5;6(9):e2335804.

Yue JK, Krishnan N, Kanter JH, Hansen D, Okonkwo DO, Puccio AM, Madhok DY, **Belton PJ** et al. Neuroworsening in the Emergency Department is a Predictor of Traumatic Brain Injury Intervention and Outcome: A TRACK-TBI Pilot Study. J. Clin. Med. 2023, 12, 2024.

Belton P, Ortiz M, Litofsky NS. Enhanced Recovery After Surgery: Keep the Concepts, Abandon the Term. The American Surgeon. December 2021.

Agunbiade S, **Belton P J**, Mesfin F B (December 28, 2020) Spinal Cord Transection in a Type II Odontoid Fracture from a Ground-Level Fall. Cureus 12(12): e12342.

Ortiz M, **Belton P**, Burton M, Litofsky NS. Subdural Drain versus Subdural Evacuating Port System for the Treatment of Nonacute Subdural Hematomas: A Single-Center Retrospective Cohort Study. World Neurosurgery. 2020 Jul;139:e355-e362.

Belton PJ, Litofsky NS, Humphries WE. Effect of Empiric Treatment of Asymptomatic Bacteriuria in Neurosurgical Trauma Patients on Surgical Site and Clostridium difficile Infection. Neurosurgery 85 (5), 664-671

Belton PJ, Nanda A, Alqadri SL, Khakh GS, Chandrasekaran PN, Newey C, Humphries WE. Paradoxical cerebral air embolism causing large vessel occlusion treated with endovascular aspiration. Journal of Neuroendovascular Surgery. 2016 Jul 25 (epub).

Skovrlj B, **Belton P,** Zarzour H, Qureshi SA. Perioperative outcomes in minimally invasive lumbar spine surgery: A systematic review. World Journal of Orthopedics. 2015 Dec 18;6(11):996-1005.

Belton, P, Sharngoe, T, Maguire, FM, Polhemus, M. (2013). Cardiac infection and sepsis in 3 intravenous bath salts drug users. Clinical Infectious Diseases. 56(11), e102-e104.

Continuing Medical Education Presentations:

"Traumatic Brain Injury: An ICU Perspective" University of Wisconsin Neuroscience Nursing continuing medical education presentation, October 4, 2023, October 11, 2023.

Conference Abstracts/Presentations:

"Updates in Traumatic Brain Injury." University of Wisconsin Neurosurgery Grand Rounds, October 25, 2023

Clinical Profile of Traumatic Brain Injury Patients Undergoing Acute Cranial Surgery: Report from the 18-Center TRACK-TBI. Yue JK, Krishnan N, Kanter JH, Barber J, Huang MC, Foreman B, Korley FK, van Essen TA, Pisica D, Belton PJ, et al. National Neurotrauma Meeting; June 25–28, 2023. Poster presentation. Performance of the IMPACT and Crash Prognostic Models for Traumatic Brain Injury in a Contemporary Multicenter Cohort: A TRACK-TBI Study. Yue JK, Lee YM, Jain S, Sun X, van Essen TA, Pisica D, Belton PJ, et al. National Neurotrauma Meeting; June 25–28, 2023. Poster presentation.

Relationships Between Pre-Injury Antiplatelet Therapy, Intracranial Injury Severity, and Outcome After Traumatic Brain Injury: A TRACK-TBI Pilot Study. Yue JK, Yuh EL, Madhok DY, Ambati VS, Deng H, Abedi AA, Belton PJ, et al. National Neurotrauma Meeting; June 25–28, 2023. Poster presentation.

The Impact of Repetitive Traumatic Brain Injury on Longitudinal Civilian Recovery at 1-Year and 3-7 Years Post-Injury: A TRACK-TBI Study. Etemad LL, Yue JK, Barber J, Satris GG, Nelson LD, Bodien YG, Madhok DY, Belton PJ, et al. National Neurotrauma Meeting; June 25–28, 2023. Poster presentation.

Matthew Burton, M.D.; Patrick Belton, M.D.; Diane McConnell, D.V.M, Ph.D.; N. Scott Litofsky, MD; Douglas Miller, M.D., Ph.D. Progesterone Receptor Expression Index Does Not Correlate with WHO Grade or Time to Recurrence in Meningioma Patients. Abstract accepted for 2020 AANS meeting; meeting cancelled due to COVID.

Belton PJ, Litofsky NS, Humphries WE. Effect of Empiric Treatment of Asymptomatic Bacteriuria in Neurosurgical Trauma Patients on Surgical Site and Clostridium difficile Infection. Presented orally at the 2018 AANS Conference, April 2018.

"Developments in the Pathology and Diagnosis of Back Pain/Sciatica (for Chemists)" Chemistry department seminar. University of Missouri-Columbia, Sept. 2015.

Neurology/Neurosurgery Grand Rounds presentations: "Trigeminal Neuralgia: Pathophysiology and Treatment" (2015); "Communicating Hydocephalus: Classical Theories, Recent Developments, New Treatments" (2016); "Worst Case Scenario: Newer Anticoagulants and Intracranial Hemorrhage" (2017). "Asymptomatic Bacteruria, Surgical Site Infections, and C. Difficile." (2018). "Updates in Radiosurgery." (2019).

Laboratory Work:

NYU Medical School, Department of Medical Parasitology, Ana Rodriguez Lab— Summer 2009-Winter 2010

ENCARP kinase study: Studied mosquito-stage effects of Plasmodium berghei with the ENCARP kinase gene knocked out. Results from the project were later published in International Journal for Parasitology. Malaria microscope project: Worked to develop a dye suitable for a new, ultra-inexpensive and portable diagnostic microscope, to be used in malaria endemic areas. Results were later published in PLOS One

Systems / Programming Skills:

AWS architecture, SAS, MySQL / relational database programming, Python, Obiba Opal, shell scripting; learning R

Professional Licenses:

WI Medical License; valid through October 2025; license number 81684 CA Medical License; valid through March 2025; license number A177054

Volunteer Work:

Recording Clerk/Property Committee Member/Auditor, 15th Street Monthly Meeting of the Religious Society of Friends (Quaker), New York, NY— 2009-2011, 2014-2015 Patient Educator, Gouverneur Hospital, New York, NY— Summer 2011 Alumni Organizer, Tri-State Region and Alumni Instructor, Illinois Mathematics and Science Academy, New York, NY and Aurora, IL — 2007-2011 Volunteer, Books Through Bars NYC, New York, NY— 2004-2008

Mentoring:

Illinois Mathematics and Science Academy Medical Interest Group. Alumni Mentor, Oct. 2025-present.

Hobbies and Interests: Gardening, cooking, antiques, art collecting