

Tye Patchana
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Education & Training

Stanford University
Palo Alto, CA 2026-2027
Spine Clinical Instructorship

Swedish Neuroscience Institute
Seattle, WA 2025-2026
Cerebrovascular & Endovascular Surgery Fellowship

Riverside University Health System Neurological Surgery Residency
Moreno Valley, CA 2018-2025
Enfolded fellowship in Neurocritical Care 2022

Lake Erie College of Osteopathic Medicine
Erie, PA 2014-2018
Doctor of Osteopathic Medicine

Bloomsburg University of Pennsylvania
Bloomsburg, PA 2010-2012
Master of Science, Molecular Biology

Wilkes University
Wilkes-Barre, PA 2006-2010
Bachelor of Arts, Philosophy

Examinations

American Osteopathic Board of Surgery (AOBS) Oral Exam, Salt Lake City, September 2025-Pending
American Osteopathic Board of Surgery (AOBS) Written Board Exam 2024 - First time PASS
American Board of Neurological Surgery (ABNS) Written Board Exam 2023 - First time PASS
Comprehensive Osteopathic Medical Licensing Exam (COMLEX) Level I, II, III 2019 - First time PASS
United States Medical Licensing Exam (USMLE) Step 1 2017 - First time PASS

Residency Achievement Award 2024
Orlando, Florida

Publications

A Right-Sided Approach to Anterior Communicating Artery Aneurysms: A Case Review and Technical Report. James Brazdzionis, Imran Siddiqi, **Tye Patchana**, Maxwell A Marino, Daniel Welsh, Sanjay C Rao, Dan E Miulli. *Cureus* 15 (9). 2023

Immunomodulatory effect of electromagnetic field in the treatment of traumatic brain injury. **Tye Patchana**, DK Agrawal, D Connett, D Baron, D Miulli. *Journal of Biotechnology & Biomedicine* 6 (1), 32. 2023.

Thoracic Pedicle Screw Placement Utilizing Hands-On Training Session on Three-Dimensional Models. **T Patchana**, A Ramnot, S Farr, A Ku, M Ghauri, A Crouch, DE Miulli. *Cureus* 14(8). 2022

External ventricular drain (EVD) placement using a hands-on training session on a simple three-dimensional (3D) model. S Podkovik, **T Patchana**, S Farr, J Brazdzionis, M Marino, P Savla. *Cureus* 14(8). 2022

The awake craniotomy: A patient's experience and a literature review. **T Patchana**, JA Lopez, G Majeed, A Ho, T Alarcon, N Plantak, P Vu. *Cureus* 14(6). 2022

Changing frequency of the use of intraoperative equipment among neurosurgeons, neurosurgery residency faculty, and neurosurgery residents. P Savla, **T Patchana**, A Ku, J Brazdzionis, J Wiginton, DE Miulli. *Cureus* 14(5). 2022

Measuring the electromagnetic field of the human brain at a distance using a shielded electromagnetic field channel. J Brazdzionis, J Wiginton IV, **T Patchana**, P Savla, J Hung, Y Zhang,. *Cureus* 14(3). 2022

Measuring electromagnetic field activity generated by neurons in vivo by humans with thoughts of repetitive motor activities and emotional thoughts. J Wiginton IV, J Brazdzionis, **T Patchana**, P Savla, J Hung, Y Zhang. *Cureus* 14 (3) 2022

Evaluating the intrinsic electromagnetic field generated by neurons from repetitive motor activities in humans with a non-contact non-invasive electromagnetic helmet. J Brazdzionis, J Wiginton IV, **T Patchana**, P Savla, J Hung, Y Zhang. *Cureus* 14(3). 2022

Novel method of electromagnetic field measurements of the human brain. J Wiginton IV, J Brazdzionis, **T Patchana**, J Hung, Y Zhang, DE Miulli. *Cureus* 14 (2). 2022

P13BP, a calpain-2-mediated breakdown product of PTPN13, is a novel blood biomarker for traumatic brain injury. Y Wang, J Brazdzionis, F Dong, **T Patchana**, H Ghanchi, S Podkovik, ... *Journal of Neurotrauma* 38 (22), 3077-3085. 2021

Medical Comorbidities Associated With Outcomes in Patients With Traumatic Epidural Hematomas. J Brazdzionis, **T Patchana**, P Savla, S Podkovik, J Browne, A Ohno. *Cureus* 13 (6). 2021

Timing of chemoradiation in newly diagnosed glioblastoma: comparative analysis between county and managed care health care models. H Toor, P Savla, S Podkovik, **T Patchana**, H Ghanchi, S Kashyap. World Neurosurgery 149, e1038-e1042 2021.

Using the decrease in trauma admissions during the COVID-19 pandemic to evaluate compliance with stay-at-home and social distancing guidelines. P Savla, J Wiginton IV, TM Taka, **T Patchana**, R Farahmandian, S Farr. Cureus 13(4). 2021

Osteopathic manipulative treatment to optimize the glymphatic environment in severe traumatic brain injury measured with optic nerve sheath diameter, intracranial pressure. S Kashyap, J Brazdzionis, P Savla, JA Berry, S Farr, **T Patchana**. Cureus 13 (3). 2021

Inflammatory markers in severity of intracerebral hemorrhage II: a Follow up study. JE Bernstein, JD Browne, P Savla, J Wiginton IV, **T Patchana**, DE Miulli. Cureus 13 (1). 2021

Use of endovascular simulator in training of neurosurgery residents—a review and single institution experience. **T Patchana**, J Wiginton IV, H Ghanchi, AW Favre, EC Tayag, M Schiraldi. Cureus 12 (12). 2020

Spinal arteriovenous malformation: Case report and review of the literature. **T Patchana**, P Savla, TM Taka, H Ghanchi, J Wiginton IV, M Schiraldi. Cureus 12(11). 2020

Generalized Dystonia Treated With Deep Brain Stimulator: An Institutional Single Surgeon Experience. H Ghanchi, JE Bernstein, TM Taka, **T Patchana**, S Kashyap, OR Hariri. Cureus 12(10). 2020

Racial Disparity Amongst Stroke Patients During the Coronavirus Disease 2019 Pandemic. H Ghanchi, **T Patchana**, J Wiginton IV, JD Browne, A Ohno. Cureus 12(9). 2020

Acquired Holmes tremor in a human immunodeficiency virus immune reconstitution inflammatory syndrome patient treated with deep brain stimulation. H Ghanchi, I Siddiqi, **T Patchana**, A Ananda World Neurosurgery 141, 253-259

Optimal Partial Pressure of Oxygen Affects Outcomes in Patients With Severe Traumatic Brain Injury. J Wiginton IV, J Brazdzionis, **T Patchana**, R Dorkoski, DE Miulli, R Sweiss, Cureus 12(8) 2020

Spontaneous Spinal Subdural Hematoma Mimicking Myocardial Infarction. H Ghanchi, I Siddiqi, A Takayanagi, **T Patchana**, FJ Fakhoury. Cureus 12(7). 2020

Case report: projectile into right frontal lobe from a nail gun. **T Patchana**, TM Taka, H Ghanchi, J Wiginton IV, M Wacker. Cureus 12(7). 2020

A Novel Method for Practicing Fascial Closure with Suture. T Patchana, P Savla, J Brazdzionis, J Wiginton IV, A Takayanagi. Cureus 12(4). 2020

Metastatic acetabular fracture: a rare disease presentation of recurrent head and neck paraganglioma. T Patchana, J Fan, M Jiganti, RD Gnass. Cureus 12(4). 2020

Increased brain tissue oxygen monitoring threshold to improve hospital course in traumatic brain injury patients. T Patchana, J Wiginton IV, J Brazdzionis, H Ghanchi, B Zampella, H Toor. Cureus 12(2). 2020

Pediatric sellar solitary fibrous tumor/hemangiopericytoma: a rare case report and review of the literature. H Ghanchi, T Patchana, E Christian, C Li, M Calayag. Surgical Neurology International 11

Subgaleal hematoma evacuation in a pediatric patient: A case report and review of the literature. T Patchana, H Ghanchi, T Taka, M Calayag. Surgical Neurology International 11. 2020

Intracatheter tissue plasminogen activator for chronic subdural hematomas after failed bedside twist drill craniostomy: a retrospective review. J Brazdzionis, T Patchana, JG Wiginton IV, MR Wacker, R Menoni. Cureus 11(12). 2020

Risks, benefits, and the optimal time to resume deep vein thrombosis prophylaxis in patients with intracranial hemorrhage. S Farr, H Toor, T Patchana, S Podkovik, JG Wiginton IV, R Sweiss. Cureus 11(10). 2020

Seizure prophylaxis in traumatic brain injury: a comparative study of levetiracetam and phenytoin cerebrospinal fluid levels in trauma patients with signs of increased. B Zampella, T Patchana, JG Wiginton IV, J Brazdzionis, M Billings. Cureus 11 (9). 2019

Impressions of Osteopathic Neurosurgeon on Preparedness for Practice: Survey Results from the American College of Osteopathic Surgeons. J Brazdzionis, H Toor, T Patchana, JG Wiginton IV, R Sweiss, MR Wacker. Cureus 11(9). 2019

Prevalence of catheter-associated urinary tract infections in neurosurgical intensive care patients—the overdiagnosis of urinary tract infections. S Podkovik, H Toor, M Gattupalli, S Kashyap, J Brazdzionis, T Patchana. Cureus 11 (8). 2019

The use of computed tomography perfusion on admission to predict outcomes in surgical and nonsurgical traumatic brain injury patients. T Patchana, R Dorkoski, B Zampella, JG Wiginton IV, RB Sweiss. Cureus 11 (7). 2019

Superior sagittal sinus: a review of the history, surgical considerations, and pathology. T Patchana, B Zampella, JA Berry, S Lawandy, RB Sweiss. Cureus 11(5). 2019

Carbon monoxide poisoning: the great imitator. C Velasquez, **T Patchana**, B McParland, J Lovy, A Maarouf, C Whitty. Spartan medical research journal 2(1). 2019

Medical Attributes of Panax spp.-Ginseng. **T Patchana**, A Otis, J Phillips, PA Wilkes-Barre. 2017

Talks & Presentations

American College of Osteopathic Surgeons Neurosurgery Mid-Year Meeting

Presentation on Innovations in NeuroIR: STA-Retrograde Approach to Embolization of Middle Meningeal Artery in Treatment of Chronic Subdural Hematoma
Charleston, SC
April 10-12, 2026

Washington Association of Neurological Surgeons

Expanding Indications for Thrombectomy
September 26-28, 2025
Cle Elum, Washington

Seattle Science Foundation

Mini-Med School: Introduction to Neurosurgery for High School and College Students
Seattle, Washington
August 8, 2025

Specialized Courses Attended

14th Annual Spine Masters Course, Seattle Science Foundation

Seattle, Washington
July 11, 2026

Washington State Association of Neurological Surgeons

Presentation on Expanding Indications for Thrombectomy
Cle Elum, WA
September 25-27, 2025

Transcranial Doppler Course

Fellows/Resident
Seattle, WA 09/2025

ATEC lateral spine course

May 5, 2025
Carlsbad, CA

Navigation Endovascular Complications

Washington DC

April 3-4, 2025

Southern California Residents & Fellows Spine Course

Carlsbad, California

January 11, 2025

Ohio State Spine Oncology Course

Columbus, Ohio

Drs. Sciubba, Chakravarthy

October 10-11, 2024

Seattle Science Foundation Resident & Fellows Spine Course

Swedish Neuroscience Institute, Seattle WA

Drs. Chapman, Oskouian

August 9-10, 2024

Pacific Spine & Pain Society Spine Fellow & Young Surgeon Workshop

Premier Outpatient Surgery Center, San Bernardino, CA

Dr. Nameth Hussain

May 18, 2024

Endovascular Discussion, Aneurysms & Carotid Disease

Mission Inn, Riverside CA

Drs. Dye, Cortez, Alastra

June 15, 2023

DePuy Synthes Spine future Leaders: Surgical Management of Spinal Trauma and Tumor

Johnson & Johnson Center, Irvine, CA

Drs. Bhalla, Theologis, Hussain

February 25, 2023

SeaSpine Residents & Fellows Course Thoracolumbar Techniques

MedtoMarket, Austin, TX

Drs. Cheng, Sabri, Shellock, Sullivan

October 28-29

Seattle Science Foundation, Fellows & Residents Course

Swedish Neuroscience Institute, Seattle WA

Drs. Chapman, Okonkwo, Oskouian

August 12-13, 2022

