

CURRICULUM VITAE

Name: Michael Christopher Dewan, M.D., M.S.C.I.

Office Address: Vanderbilt Children's Hospital
Department of Neurological Surgery
Division of Pediatric Neurological Surgery
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EDUCATION

2007 B.S. University of Notre Dame
Notre Dame, Indiana

2012 M.D. Yale School of Medicine
New Haven, Connecticut

2017 M.S.C.I. Vanderbilt University School of Medicine
Nashville, Tennessee

Postgraduate Training:

2012-2019 Residency in Neurological Surgery
Vanderbilt University School of Medicine
Nashville, Tennessee

2016-2017 Research Fellow
Department of Global Health and Social Medicine
Harvard Medical School
Boston, Massachusetts

2016-2017 Global Neurosurgery Fellow
Program of Global Surgery and Social Change
Boston's Children Hospital
Harvard Medical School
Boston, Massachusetts

2019-2020 Pediatric Neurosurgery Chief Fellow
Hospital for Sick Children
University of Toronto
Toronto, Ontario, Canada

LICENSURE AND CERTIFICATION:

2020-	Tennessee	license # 61344
2019-	Ontario	license #119166

ACADEMIC APPOINTMENTS:

2020 Assistant Professor
Department of Neurological Surgery
Division of Pediatric Neurosurgery
Vanderbilt University School of Medicine

HOSPITAL APPOINTMENTS:

2020- Attending Physician
Department of Neurological Surgery
Division of Pediatric Neurosurgery
Vanderbilt University Medical Center
Monroe Carell Jr Children's Hospital at Vanderbilt

PROFESSIONAL ORGANIZATIONS:

2012	American Association of Neurological Surgeons (Resident Member)
2012	Congress of Neurological Surgeons (Resident Member)

PROFESSIONAL ACTIVITIES:

Intramural

2015-2019	Vanderbilt University SOM Trauma Committee Advisor
2020-	VU SOM Pediatric Neurosurgery Task Force

Extramural

2016-	WFNS Global Neurosurgery Workforce Initiative Member
2017-	<i>InterSurgeon</i> Trustee
2018-	Asian Australasian Pediatric Neurosurgery Workforce Research Group Member
2018-present	<i>Neurosurgery</i> Ad hoc reviewer
2019-present	<i>World Journal of Surgery</i> Ad hoc reviewer
2019-present	<i>Journal of Neuro-Oncology</i> Ad hoc reviewer
2018-present	<i>World Neurosurgery</i> Ad hoc reviewer
2018-present	<i>Pediatric Neurosurgery</i> Ad hoc reviewer
2019-present	<i>British Medical Journal Open</i> Ad hoc reviewer
2020-present	<i>Epilepsia</i> Ad hoc reviewer

HONORS:

2004	Father Edward Malloy Award of Excellence University of Notre Dame (UND)
2006	Bernard F. Leroy International Social Service Award UND
2007	Joseph E. Walther Healthcare Award UND
2007	John W. Gardner Leadership Scholar UND

- 2008 Yale University Summer Research Fellowship
Yale School of Medicine (YSOM)
- 2010 Kellogg Institute Grant – Healthcare Initiatives in Uganda
UND
- 2010 Yale International Medical Student Education Scholarship
YSOM
- 2011 Yale University Research Scholarship
YSOM
- 2011 Farr Research Scholar
YSOM
- 2012 Frank Parker Prize
YSOM
- 2013 Augustus McCravey Award
Southern Neurosurgical Society
- 2013 Top Paper “Comparative effectiveness and cost-benefit analysis of topical
vancomycin powder in posterior spinal fusion for spine trauma and degenerative
spine disease”
The 29th AANS/CNS Section on Disorders of the Spine and Peripheral Nerves
annual meeting
- 2013 Best Paper - Basic Science and Socioeconomics
NASS
- 2013 Best Paper – Surgery
NASS
- 2015 The MSCI Scholarship
Vanderbilt University SOM (VUSOM)
- 2016 Paul Farmer Global Surgery Research Fellow (PGSSC)
Harvard Medical School
- 2016 Top Poster (winner) “Treatment practices and outcomes following blunt
cerebrovascular injury in children”
The 45th AANS/CNS Section on Pediatric Neurological Surgery annual meeting
- 2017 The MSCI Scholarship
VUSOM

- 2018 Resident Teaching & Leadership Award
VUSOM
- 2018 A.J. Raimondi Award
International Society for Pediatric Neurosurgery highest annual award for original
Research
- 2019 Best Paper of the Year Award in 2018
Global Spine Journal
- 2019 Alpha Omega Alpha Medical Honor Society – Resident Awardee
VUSOM Chapter

TEACHING ACTIVITIES:

Continuing Medical Education: Programs

- 2019-2020 Organizer and Leader
Pediatric Neurosurgery Grand Rounds
The Hospital for Sick Children
University of Toronto
Weekly multi-disciplinary conference
- 2019-2020 Organizer and Leader
Pediatric Neurosurgery Morbidity and Mortality
The Hospital for Sick Children
University of Toronto
Monthly M&M Conference
- 2019-2020 Organizer and Lecturer
Pediatric Neuro-Oncology Conference
The Hospital for Sick Children
University of Toronto
Weekly Case Discussion

Other CME Lectures:

1. Dewan MC. Tethered Cord Syndrome. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. June 20, 2013
2. Dewan MC. Aortoiliac vascular injury after malpositioned spinal instrumentation. Focus Case. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. July 25, 2013

3. Dewan MC. Sturge-Weber Syndrome. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. October 9, 2013
4. Dewan MC. Cervical collar clearance in the trauma patient. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. December 3, 2013
5. Dewan MC. Management of Type II odontoid fractures in the elderly. Focus Presentation. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. December 11, 2013
6. Dewan MC. Persistent Fetal Carotid-Vertebrobasilar Anastomoses. Resident Pearls. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. March 15, 2014
7. Dewan MC. Seizure prophylaxis in brain tumor surgery. Focus Presentation. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. April 17, 2014
8. Dewan MC. Adjuvant radiotherapy for high-grade glioma. Focus Presentation. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. May 20, 2014
9. Dewan MC. Treatment and outcomes in pediatric ependymoma. Focus Presentation. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. August 24, 2014
10. Dewan MC. Hypothalamic hamartoma. Resident Pearls. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. November 10, 2014
11. Dewan MC. Lhermitte-Duclos Disease. Resident Pearls. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. April 4, 2015
12. Dewan MC. The value of extent of resection in glioma. Focus Presentation. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. April 14, 2015
13. Dewan MC. IDH mutation in glioma. Focus Presentation. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. April 23, 2015
14. Dewan MC. Seizure reduction and neuropsychological morbidity following anterior temporal lobectomy. Focus Case. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. May 27, 2015
15. Dewan MC. Skull lesions. Resident Pearls. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. October 7, 2015
16. Dewan MC. Laser therapy for pediatric epilepsy. Focus Presentation. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. February 3, 2016
17. Dewan MC. Hemorrhagic risk in HHT-related cerebral AVM. Focus Case. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. June 8, 2016
18. Dewan MC. Seizure prophylaxis after traumatic brain injury. RACE Presentation. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. June 15, 2016
19. Dewan MC. VP shunt evaluation. Emergency Medicine Weekly Conference, Department of Emergency Medicine, Vanderbilt University School of Medicine. January 25, 2016

20. Dewan MC. A forgotten stepchild: the plight of global surgery. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. May 12, 2016
21. Dewan MC. Reverse Innovation. Big Ideas. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. January 9, 2018
22. Dewan MC. Embryology of Spinal Cord Development. Neurosurgery Grand Rounds, Department of Neurosurgery, Vanderbilt University School of Medicine. April 26, 2018
23. Dewan MC. Sutures and Sinuses. Chief Conference, Department of Neurosurgery, Vanderbilt University School of Medicine. July 15, 2018
24. Dewan MC. Skull lesion & tumors. Chief Conference, Department of Neurosurgery, Vanderbilt University School of Medicine. January 31, 2019
25. Dewan MC. Moyamoya. Chief Conference, Department of Neurosurgery, Vanderbilt University School of Medicine. April 1, 2019
26. Dewan MC. Split Cord Malformation. Chief Conference, Department of Neurosurgery, Vanderbilt University School of Medicine. April 29, 2019
27. Dewan MC. Global Neurosurgery: a single perspective. Brain School. University of Toronto, Department of Neurosurgery. May 29, 2020
28. Dewan MC. Neurosurgery for the Neuro-Oncologist. Neuro-Oncology Lecture Series. The Hospital for Sick Children. June 23, 2020

Clinical Teaching

2019-2020	Pediatric Neurosurgery Morning Report The Hospital for Sick Children Daily Case based learning
2019-2020	Pediatric Neurosurgery Operative Technique The Hospital for Sick Children Daily Direct demonstration, instruction, and critique to University of Toronto Residents and International Fellows

RESEARCH TRAINING:

2015-2017	Master of Science in Clinical Investigation (MSCI) Vanderbilt University School of Medicine
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RESEARCH SUPERVISION:

2013-2015	Travis Ladner, MD Neurosurgery Resident Icahn School of Medicine at Mount Sinai
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New York, NY

2015-2018	Jaims Lim, MD Neurosurgery Resident University of Buffalo Buffalo NY
2015-2017	Brie White-Dzuro, MD Neurosurgery Resident University of Washington Seattle, WA
2015-	Abbas Rattani, MD Resident in Radiation Oncology University of Louisville
2016-	Andrew Hale, MS Medical Scientist Training Program Vanderbilt University School of Medicine Nashville TN
2016-	Nishit Mummareddy, MD Neurosurgery Resident Vanderbilt University School of Medicine Nashville TN
2019-	Juliet Nalwanga, MS Pediatric Neurosurgeon Mulago National Referral Hospital Makere University Kampala Uganda
2017-	Ronnie Baticulon Pediatric Neurosurgeon Philippines General Hospital University of the Philippines College of Medicine Manila, the Philippines

RESEARCH PROGRAM/GRANT SUPPORT:

Completed:

Title: A Global Surgical Training Module for Endoscopic Third Ventriculostomy with Choroid Plexus Cauterization (ETV/CPC)

Year: 2016-2019
Source: Kellogg Institute Development Grant
Role: PI

Title: Seizure Prophylaxis for Resection of Intracranial Tumors (SPRINT)
Year: 2015-2017
Source: MSCI Scholarship for Future Clinical and Translational Investigators
Role: Co-I

Title: Clinical outcomes following ETV/CPC for Dandy-Walker complex-associated hydrocephalus
Year: 2010-2011
Source: Yale University Research Fellowship
Role: Co-I

Title: Healthcare initiatives in Uganda
Year: 2010-2016
Source: Kellogg Institute Research Grant
Role: PI

Title: Endovascular vs. open repair of abdominal aortic aneurysms
Year: 2009
Source: Yale University Short-term Institutional Research Training Grant
Role: Co-I

PUBLICATIONS AND PRESENTATIONS:

Articles

1. Huddle MG, Schlosser FJ, **Dewan MC**, Indes J, Muhs BE. Can laboratory tests predict the prognosis of patients after endovascular aneurysm repair? Current status and future directions. *Vascular*. 2009 May-Jun;17(3):129-37.
2. Jonker FH, Schlosser FJ, **Dewan M**, Huddle M, Sergi M, Dardik, Muhs BE. Influence of obesity on in-hospital and midterm outcomes after endovascular repair of abdominal aortic aneurysm. *J Endovasc Ther*. 2009 Jun;16(3):302-9
3. Chaar CI, Fitzgerald TN, **Dewan M**, Huddle M, Schlosser FJ, Perkal M, Muhs BE, Dardik A. Endovascular aneurysm repair is associated with less malnutrition than open abdominal aortic repair. *Am J Surg*. 2009 Nov;198(5):623-7.
4. Jonker FH, Schlosser FJ, **Dewan MC**, Huddle M, Sergi M, Dardik A, Muhs BE. Patients with abdominal aortic aneurysm and chronic obstructive pulmonary disease have improved outcomes with endovascular aneurysm repair compared with open repair. *Vascular*. 2009 Nov-Dec;17(6):316-24.
5. Jonker FH, Schlosser FJ, **Dewan MC**, Huddle M, Sergi M, Indes JE, Dardik A, Muhs BE. Abdominal aortic aneurysm repair in obese patients: improved outcome after endovascular treatment compared with open surgery. *Vasc Endovascular Surg*. 2010 Feb;44(2):105-9.

6. Warf BC, **Dewan MC**, Mugamba, J. Management of Dandy-Walker complex-associated infant hydrocephalus by combined endoscopic third ventriculostomy and choroid plexus cauterization (ETV/CPC). *J Neurosurg Ped.* 2011 Oct; 8(4):377-83.
7. Zuckerman SL, Green CS, Carr KR, **Dewan MC**, Morone PJ, Mocco J. Neurosurgical checklists: a review. *Neurosurg Focus.* 2012 Nov; 33(5).
8. Zuckerman SL, Kuhn A, **Dewan MC**, Morone PJ, Forbes JA, Solomon GS, Sills AK. Structural brain injury in sports-related concussion. *Neurosurg Focus.* 2012 Dec; 33(6).
9. Turk AS, Spiotta A, Frei D, Mocco J, Baxter B, Fiorella D, Siddiqui A, Mokin M, **Dewan M**, Woo H, Turner R, Hawk H, Miranpuri A, Chaudry I. Initial clinical experience with the ADAPT technique: A direct aspiration first pass technique for stroke thrombectomy. *J Neurointerv Surg.* 2013 Apr.
10. Fargen KM, Mocco J, Neal D, **Dewan MC**, Reavey-Cantwell J, Woo HH, Fiorella DJ, Mokin M, Siddiqui AH, Turk AS, Turner RD, Chaudry I, Kalani MY, Albuquerque F, Hoh BL. A multicenter study of stent-assisted coiling of cerebral aneurysms with a Y configuration. *Neurosurgery* Sep 2013.
11. Kistka H, **Dewan MC**, Mocco J. Evidence-based cerebral vasospasm surveillance. *Neurol Res Int.* June 2013.
12. **Dewan MC**, Mocco J. Current practice regarding seizure prophylaxis in aneurysmal subarachnoid hemorrhage across academic centers. *J Neurointerv Surg.* 2014 Jan 28.
13. **Dewan MC**, Godil SS, Mendenhall SK, Devin CJ, McGirt MJ. C2 nerve root transection during C1 lateral mass screw fixation: Does it affect functionality and quality of life? *Neurosurgery.* 2014 Jan 28.
14. Zuckerman SL, Eli IM, Morone PJ, **Dewan MC**, Mocco J. Novel technologies in the treatment of intracranial aneurysms. *Neurol Res.* 2014 Apr; 36(4):368-82.
15. Turk AS, Frei D, Fiorella D, Mocco J, Baxter B, Siddiqui A, Spiotta A, Mokin M, **Dewan M**, Quarfordt S, Battenhouse H, Turner R, Chaudry I. ADAPT FAST study: a direct aspiration first pass technique for acute stroke thrombectomy. *J Neurointerv Surg.* 2014 Feb 25.
16. Ladner TR, **Dewan MC**, Day MA, Shannon CN, Tomycz L, Tulipan N, Wellons JC 3rd. Evaluating the relationship of the pbC2 line to clinical outcomes in a 15-year single-center cohort of pediatric Chiari I malformation. *J Neurosurg Pediatr.* 2015; 15(2): 178-88.
17. Ladner TR, **Dewan MC**, Day MA, Shannon CN, Tomycz L, Tulipan N, Wellons JC 3rd. Posterior odontoid angulation in pediatric Chiari I malformation: an MRI morphometric external validation study. *J Neurosurg Pediatr.* 2015 May22:1-8.
18. Morgan CD, Stephens M, Zuckerman SL, Waitara MS, Morone PJ, **Dewan MC**, Mocco J. Physiologic imaging in acute stroke: Patient selection. *Interv Neuroradiol.* 2015 Aug; 21(4):499-510.
19. O'Lynnner TM, Zuckerman SL, Morone PJ, **Dewan MC**, Vasquez-Castellanos RA, Cheng JS. Trends for Spine Surgery for the Elderly: Implications for Access to Healthcare in North America. *Neurosurgery.* 2015 Oct;77 Suppl 4.
20. **Dewan MC**, Morone PJ, Zuckerman SL, Mummareddy BA, Ghiassi May., Ghiassi Mah. Paradoxical ischemia in bilateral Eagle syndrome: a case of false-localization from carotid compression. *Clin Neurol Neurosurg.* Feb;141:30-2.

21. Zuckerman SL, Sivaganesan A, Zhang C, **Dewan MC**, Morone PJ, Ganesh Kumar N, Mocco J. Maximizing efficiency and diagnostic accuracy triage of acute stroke patients: A case-control study. *Interv Neuroradiol*. 2016 Feb 2.
22. **Dewan MC**, White-Dzuro GA, Brinson PR, Thompson RC, Chambless LB. Perioperative seizure in patients with glioma is associated with longer hospitalization, higher readmission, and decreased overall survival. *J Neurosurg*. 2016 Feb 19:1-9.
23. Ganesh Kumar N, Zuckerman SL, Khan IS, **Dewan MC**, Morone PJ, Mocco J. Treatment of intracerebral hemorrhage: a selective review and future directions. *J Neurosurg Sci*. 2016 Mar 18.
24. **Dewan MC**, Mummareddy BA, Wellons JC 3rd, Bonfield CM. The epidemiology of global pediatric traumatic brain injury: a qualitative review. *World Neurosurg*. 2016 Mar 24.
25. **Dewan MC**, Ravindra VM; Limbrick D, Jea A, Riva-Cambrin J, Naftel RP. Treatment practices and outcomes following blunt cerebrovascular injury in children. *Neurosurgery*. 2016 Jul 25.
26. **Dewan MC**, Thompson RC, Kalkanis SN, Barker FG, Hadjipanayis CG. Prophylactic antiepileptic drug administration following brain tumor resection: results of a recent AANS/CNS Tumor Section Survey. *J Neurosurg*. 2016 Jun 24:1-7.
27. **Dewan MC**, Lim J, Morgan CD, Gannon SR, Shannon CN, Wellons JC III, Naftel, RP. ETV/CPC outcome: distinguishing success from failure. *J Neurosurg Pediatr*. 2016 Dec;25(6):655-662.
28. **Dewan MC**, Naftel RP. The Global Rise of Endoscopic Third Ventriculostomy with Choroid Plexus Cauterization in Pediatric Hydrocephalus. *Pediatr Neurosurg*. 2016 Dec 22.
29. Zuckerman SL, Magarik JA, Espaillat KB, Kumar NG, Bhatia R, **Dewan MC**, Morone PJ, Hermann LD, O'Duffy AE, Riebau DA, Kirshner HS, Mocco J. Implementation of an institution-wide acute stroke algorithm: Improving stroke quality metrics. *Surg Neurol Int*. 2016 Dec 21;7.
30. Mistry AM, **Dewan MC**, White-Dzuro GA, Brinson PR, Weaver KD, Thompson RC, Ihrie RA, Chambless LB. Decreased survival in glioblastomas is specific to contact with the ventricular-subventricular zone, not subgranular zone or corpus callosum. *J Neurooncol*. 2017 Jan 10.
31. Zuckerman SL, Mistry A, **Dewan MC**, Morone PJ, Sills AK, Wellons JC 3rd, Thompson RC. In Reply to: Medical Student Recruitment into Neurosurgery: Maximizing the Pool of Talent. *World Neurosurg*. 2017 Feb;98:860
32. **Dewan MC**, Jaims L, Shannon CN, Wellons JC III. The durability of endoscopic third ventriculostomy and ventriculoperitoneal shunts in children with hydrocephalus following posterior fossa tumor resection: a systematic review and time-to-failure analysis. *J Neurosurg Pediatr*. 2017 Mar 10:1-7.
33. Zuckerman SL, Morone PJ, **Dewan MC**. Letter: Implications of Duty Hour Regulations From the Neurosurgery Resident Perspective: Eliminate "Post-call" From Your Vocabulary. *Neurosurgery*. 2017 Apr 10.
34. Mummareddy N, **Dewan MC**, Mercier MR, Naftel RP, Wellons JC 3rd, Bonfield CM. Scoliosis in myelomeningocele: epidemiology, management, and functional outcome. *J Neurosurg Pediatr*. 2017 Apr 28:1-10.

35. **Dewan MC**, White-Dzuro GA, Brinson PR, Zuckerman SL, Morone PJ, Thompson RC, Wellons JC 3rd, Chambless LB. The Influence of Perioperative Seizure Prophylaxis on Seizure Rate and Hospital Quality Metrics Following Glioma Resection. *Neurosurgery*. 2017 Apr 1;80(4):563-570.
36. Ravindra VM, **Dewan MC**, Akbari H, Bollo RJ, Limbrick D, Jea A, Naftel RP, Riva-Cambrin JK. Management of Penetrating Cerebrovascular Injuries in Pediatric Trauma: A Retrospective Multicenter Study. *Neurosurgery*. 2017 May 5.
37. Rattani A, **Dewan MC**, Hannig V, Naftel RP, Wellons JC 3rd, Jordan LC. Cerebral hemorrhage in monozygotic twins with hereditary hemorrhagic telangiectasia: case report and hemorrhagic risk evaluation. *J Neurosurg Pediatr*. 2017 May 19:1-6.
38. Cleary RK, Meshman J, **Dewan M**, et al. (May 26, 2017) Postoperative Fractionated Stereotactic Radiosurgery to the Tumor Bed for Surgically Resected Brain Metastases. *Cureus* 9(5): e1279. Doi:10.7759/cureus.1279.
39. **Dewan MC**, Mummareddy N, Bonfield CM. The influence of pregnancy on women with adolescent idiopathic scoliosis. *Eur Spine J*. 2017 June 29.
40. Hale AT, **Dewan MC**, Patel B, Geck MJ, Tomycz LD. Instrumented fusion in a 12-month-old with atlanto-occipital dislocation: case report and literature review of infant occipitocervical fusion. *Childs Nerv Syst*. 2017 Jul 6.
41. Estevez-Ordóñez D, **Dewan MC**, Feldman MJ, Montalvan-Sánchez EE, Montalvan-Sánchez DM, Rodríguez-Murillo AA, Urrutia-Argueta SA, Cherry CB, Morgan DR, Alvarez-Rodríguez R, Bonfield CM. Congenital Malformations of the Central Nervous System in Rural Western Honduras: A 6-Year Report on Trends. *World Neurosurgery*. 2017 Nov; 107:249-254.
42. Zuckerman SL, Kelly PD, **Dewan MC**, Morone PJ, Yengo-Kahn AM, Magarik JA, Baticulon RE, Zusman EE, Solomon GS, Wellons JC 3rd. Predicting resident performance from pre-residency factors: a systematic review and applicability to neurosurgical training. *World Neurosurg*. 2017 Nov 23.
43. **Dewan MC**, Shults R, Hale A, Sukul V, Englot DJ, Konrad PE, Yu H, Neimat JS, Rodríguez W, Dawant B, Pallavaram S, Naftel RP. Stereo EEG via multiple single-path omnidirectional trajectories within a single platform: institutional experience with a novel technique. *J Neurosurg*. Dec 15:1-9.
44. Bell JS, Koffie RM, Rattani A, **Dewan MC**, Baticulon RE, Qureshi MM, Wahjoepramono EJ, Rosseau G, Park KB, Nahed BV. Apparent global incidence of brain and spinal tumors by geographic region and income level based on data available from cancer registries. *Neuroepidemiology*. In Press – accepted 2018 Jun 14.
45. Chotai S, Basem J, Gannon S, **Dewan MC**, Shannon CN, Wellons JC, Bonfield CM. Effect of posterior fossa decompression for Chiari malformation-I on Scoliosis. *Pediatr Neurosurg*. 2018 Jan 4.
46. Punchak M, Mukhopadhyay S, Sachdev S, Hung Y, Peeters S, Rattani A, **Dewan MC**, Johnson WD, Park KB. Neurosurgical care: Availability and access in low- and middle-income countries. *World Neurosurg*. 2018 Jan 8.
47. **Dewan MC**, Lim Jaims, Gannon SR, Heaner D, Davis MC, Vaughn B, Chern JJ, Rocque B, Klimo P, Wellons JC, Naftel RP. A comparison of hydrocephalus metrics between infants successfully treated with ETV/CPC or VPS: a multicenter matched cohort analysis. *J Neurosurg Pediatr*. 2018 Feb 2:1-7.

48. Kumar R, Lim J, Mekary RA, Rattani A, **Dewan MC**, Sharif SY, Osorio-Fonseca E, Park KB. Traumatic spinal injury: global epidemiology and worldwide volume. *World Neurosurg.* 2018 Feb 14.
49. Hughes JD, Bond KM, Mekary RA, **Dewan MC**, Rattani A, Baticulon R, Kato Y, Azevedo-Filho H, Morcos JJ, Park KB. Estimating the global incidence of aneurysmal subarachnoid hemorrhage: a systematic review for central nervous system vascular lesions and meta-analysis of ruptured aneurysms. *World Neurosurg.* 2018 Apr 9.
50. **Dewan MC**, Rattani A, Mekary R, Glancz L, Yunusa I, Baticulon RE, Fieggen G, Wellons JC, Park KB, Warf BC. Global hydrocephalus: epidemiology and incidence. *J Neurosurg.* 2018 Apr 27:1-15.
51. **Dewan MC**, Rattani A, Gupta S, Baticulon RE, Hung YC, Punchak M, Agrawal A, Adeleye AO, Shrime MG, Rubiano AM, Rosenfeld JV, Park KB. Estimating the global incidence of traumatic brain injury. *J Neurosurg.* 2018 Apr 27:1-10.
52. **Dewan MC**, Rattani A, Fieggen G, Arraez MA, Servadei F, Boop FA, Johnson WD, Warf BC, Park KB. Global Neurosurgery: the current capacity and deficit in the provision of essential neurosurgical care; Executive Summary of the Global Neurosurgery Initiative at the Program in Global Surgery and Social Change. *J Neurosurg.* 2018 Apr 27:1-18.
53. **Dewan MC**, Rattani A, Baticulon RE, Faruque S, Johnson WD, Dempsey R, Haglund MM, Alkire BC, Park KB, Warf BC, Shrime MG. The operative proportion of neurosurgical disease worldwide: an estimation from the surgeon perspective. *J Neurosurg.* 2018 May 11:1-9.
54. Rudolfson N, **Dewan MC**, Park KB, Shrime MG, Meara JG, Alkire BC. The economic consequences of neurosurgical disease in low- and middle-income countries. *J Neurosurg.* 2018 May 18:1-8.
55. Robertson F, Lepard J, Mekary R, Davis MC, Yunusa I, Gormley W, Mahmud M, Misra B, Rattani A, **Dewan MC**, Park KB. Epidemiology of CNS Infectious Diseases: a meta-analysis and implications for neurosurgeons worldwide. *J Neurosurg.* 2018 Jun 15:1-20.
56. Greenberg JK, Jeffe D, Carpenter CR, Yan Y, Pineda JA..(6)..**Dewan MC**..(12)..Limbrick DD. North American Survey on the Post-Neuroimaging Management of Children with Mild Head Injuries. *J Neurosurg Ped.* (Accepted for publication 26 Jul 2018).
57. **Dewan MC**, Baticulon RE, Rattani A, Johnston JM, Warf BC, Harkness W. Pediatric neurosurgical workforce, access to care, equipment and training needs worldwide. *Neurosurgical Focus.* (Accepted for publication 3 Jul 2018).
58. **Dewan MC**, Onen J, Bow H, Ssenyonga P, Howard C, Warf BC. Subspecialty pediatric neurosurgery training: a skill-based training model for neurosurgeons in low-resourced health systems. *Neurosurgical Focus.* (Accepted for publication 3 Jul 2018).
59. **Dewan MC**, Baticulon RE, Ravindran K, Bonfield CM, Poenaru D, Harkness W. Pediatric neurosurgical bellwether procedures for infrastructure capacity building in hospitals and healthcare systems worldwide. *Childs Nerv Syst.* 2018 Jul 21. (Epub ahead of print).
60. Vaughan KA, Ramos CL, Buch V, Mekary R, Amundson J, Shah M, Rattani A, **Dewan MC**, Park KB. An estimation of Global Volume of Surgically Treatable Epilepsy

Based on a Systematic Review and Meta-analysis of Epilepsy. *J Neurosurg.* 2018 Sept 14 (Epub ahead of print).

61. Hughes JD, **Dewan MC**, Park KB. In Reply to “Demographics of Aneurysmal Subarachnoid Hemorrhage”. *World Neurosurg.* 2018 Dec;120:593.
62. **Dewan MC**, Zuckerman SL, Sivaganesan A, Chatterjee S, Figaji A, Bonfield CM. Addressing the global burden of neurosurgical disease beyond the operating theatre. *World Neurosurg.* 2018 Nov 21. [Epub ahead of print]
63. Ravindra VM, Senglaub SS, Rattani A, **Dewan MC**, Hartl R, Bisson E, Park KB, Shrime MG. Degenerative Lumbar Spine Disease: Estimating Global Incidence and Worldwide Volume. *Global Spine J.* 2018 Dec;8(8)784-794.
64. Mukhopadhyay S, Punchak M, Rattani A, Hung YC, Dahm J, Faruque S, **Dewan MC**, Peeters S, Sachdev S, Park KB. The global neurosurgical workforce: a mixed-methods assessment of density and growth. *J Neurosurg.* 2019 Jan 4:1-7.
65. Hale AT, Say I, Shah S, **Dewan MC**, Anderson RCE, Tomycz LD. Traumatic Occipitocervical Distraction Injuries in Children: A Systematic Review. *Pediatr Neurosurg.* 2019;54(2):75-84.
66. Punchak M, Mbabazi KE, Ogwal M, Nalule E, Nalwoga J, Ssenyonga P, Mugamba J, Rattani A, **Dewan MC**, Kulkarni AV, Schiff SJ, Warf B. The incidence of postoperative seizures following treatment of Postinfectious hydrocephalus in Ugandan infants: a post hoc comparison of endoscopic treatment vs shunt placement in a randomized controlled trial. *Neurosurgery.* 2019 May 13.
67. Mummareddy N, **Dewan MC**, Huang A, Basem J, Bennett KA, Shannon CN, Wellons JC. Intrauterine closure of myelomeningocele is associated with superior long-term quality of life than postnatal closure: a single-center study. *J Neurosurg Pediatr.* 2019 May 17:1-5.
68. Bell JS, Koffie RM, Rattani A, **Dewan MC**, Baticulon RE, Qureshi MM, Wahjoepramono EJ, Rosseau G, Park K, Nahed BV. Global incidence of brain and spinal tumors by geographic region and income level based on cancer registry data. *J Clin Neurosci.* 2019 May 24.
69. **Dewan MC**, Wellons JC. Fetal surgery for spina bifida. *J Neurosurg Pediatr.* 2019 Aug 1.
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Book Chapters, Invited Review Articles

1. **Dewan MC**, Zuckerman SL, Morone PJ, Mocco J. “Penumbra Aspiration System” in *Neurointerventional Techniques: Tricks of the Trade* by Gonzalez LF, Albuquerque FC, McDougall C. (Ed.) New York: Thieme; 2015.
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5. **Dewan MC**, Wellons JC: “Cerebellar Astrocytomas” in *Oncology of CNS Tumors, 3E*. Tonn J, Reardon D, Rutka JT, and Westphal M (Eds), Springer Nature Switzerland AG 2019

Presentations at Scientific Meetings - National/International (Peer Reviewed):

1. **Dewan MC**, Warf BC, Mugamba J. Management of Dandy-Walker complex-associated hydrocephalus by combined endoscopic third ventriculostomy and choroid plexus cauterization (ETV/CPC) in 42 East African Children. Congress of Neurological Surgeons – Annual Meeting. Washington DC. Oct 2011.
2. **Dewan MC**, Godil SS, Zuckerman SL, Mendenhall SK, Shau DN, Parker SL, Devin CJ, McGirt MJ. Comparative effectiveness and cost-benefit analysis of topical vancomycin powder in posterior spinal fusion for spine trauma and degenerative spine disease. Southern Neurosurgical Society – Annual Meeting. Sarasota, FL. Feb 2013.
3. **Dewan MC**, Godil SS, Devin CJ, McGirt MJ. C2 Nerve Root Transection during C1 lateral mass screw fixation: does it affect functionality and quality of life? International Meeting on Advanced Spine Techniques (IMAST). Vancouver, Canada. July 2013
4. **Dewan MC**, Godil SS, McGirt MJ. Mechanical versus chemical prophylaxis for deep venous thrombosis in patients undergoing lumbar spinal fusion: comparative effectiveness and cost-benefit. Congress of Neurological Surgeons. San Francisco, CA. Oct 2013.
5. **Dewan MC**, Mocco J. Seizure prophylaxis in aneurysmal subarachnoid hemorrhage: a survey of leading cerebrovascular centers. Congress of Neurological Surgeons – Annual Meeting. San Francisco, CA. Oct 2013.
6. **Dewan MC**, White-Dzuro GA, Brinson PR, Thompson RC, Chambless LB. Perioperative seizure in patients with glioma is associated with longer hospitalization, higher readmission, and decreased overall survival. Congress of Neurological Surgeons – Annual Meeting. New Orleans, LA. Oct 2015.
7. **Dewan MC**, White-Dzuro GA, Brinson PR, Thompson RC, Chambless LB. The influence of perioperative seizure prophylaxis on seizure rate and hospital quality metrics after glioma surgery. Society of Neuro-Oncology – Annual Meeting. San Antonio, TX. Nov 2015.
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9. Rattani A, Hung YC, Punchak MA, **Dewan MC**, Park KB. Comparing the unmet neurosurgical burden in Sub-Saharan Africa to Low Income Countries Globally: An initial estimation

proposal. International Conference on Recent Advances in Neurotraumatology; 2016 Dec 8-11; Bogota, Colombia.

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Poster Presentations

INNOVATIONS

Singer R, Morone PJ, **Dewan MC**, Zuckerman SL, Root B. Central Venous Line Insertion. Surgical Simulation – **Touch Surgery**. March 2015. <http://dx.doi.org/10.18556/touchsurgery/2015.s0042>

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