

SUDHAKAR VADIVELU
Curriculum Vitae

Name

Sudhakar Vadivelu, DO, FACS, FACOS, FCNS

Current Address

Cincinnati, OH 45229-3039

CURRENT POSITION

7/2013-Present

Cincinnati Children's Hospital Medical Center, University of Cincinnati College of Medicine (OH), (NPI# 1265588925)

Associate Professor, Neurosurgery

Associate Professor, Radiology

Director, Cerebrovascular Disease and Stroke Center

Director, M3/4 UC Medical Student Neurosurgery Clerkship

Staff Neurosurgeon

Staff Neurointerventionalist

Safety Officer, Department of Surgery, Cincinnati Children's Hospital Medical Center

Director, Alliance for Cure, Cerebral Cavernoma Clinical Center of Excellence

Conference Director, Annual Aspen International Conference on Pediatric

Cerebrovascular Disease and Stroke

Course Director, Annual Pediatric Cerebral Bypass and Microsurgical Skills Lab

Course Director, Annual Pediatric Neurovascular Sonography Lab

Director, Annual Aspen PCVDS Resident Travelling Fellowship Award

CERTIFICATION

2024 Fellow, Congress of Neurological Surgeons (FCNS)

2016 Fellow, American College of Surgeons (FACS)

2016 Fellow, American College of Osteopathic Surgeons (FACOS)

01/16 Board Certified: ACOS Neurological Surgery

LICENSURE

8/2013-Current **Medical Board of Ohio** (#34.011050)

5/2021-Current **New York State Board of Medical Examiners** (#60-256117)

11/2012-11/2014 Texas Medical Board (#P4829)

HOSPITAL AFFILIATIONS

Cincinnati Children's Hospital Medical Center

Full-time Academic Faculty

University of Cincinnati Medical Center

University Hospital

Affiliate Clinical Faculty

Good Samaritan Hospital

TriHealth
Affiliate

EDUCATION

4/2025 **Teachers College-Columbia University (NY)** Physician Child Abuse Identifying and Reporting
7/2012-6/2013 **Texas Children's Hospital, Baylor College of Medicine (TX)**
Fellow, Pediatric Neurosurgery
7/2011-6/2012 **Hofstra North Shore – LIJ School of Medicine, and the Cushing Neuroscience Institute (NY)**
Chief Resident, Neurological Surgery
1/2012-6/2012 **Hofstra North Shore – LIJ School of Medicine, and the Cushing Neuroscience Institute (NY)**
Fellow, Cerebrovascular and Endovascular Neurosurgery
7/2007-6/2012 **Hofstra North Shore – LIJ School of Medicine, and the Cushing Neuroscience Institute (NY)**
Resident, Neurological Surgery
7/2006-6/2007 **Johns Hopkins University (MD), School of Medicine**
Halsted Resident, General Surgery
7/2002-6/2006 **Des Moines University (IA), College of Osteopathic Medicine**
Doctor of Osteopathic Medicine
5/2003-8/2003 **Johns Hopkins University (MD), School of Medicine**
Externship, Developmental Medicine and Child Neurology
12/2000-6/2002 **Washington University in St. Louis (MO)**
Neuroscience
8/1996-12/2000 **University of Missouri (MO), Columbia**
BS in Biological Sciences, BA in Communications

HONORS & AWARDS

2016-2025 Cincinnati Magazine, "Top Doctors" selection for Pediatric Neurosurgery
2016 **Top 40 under 40**, Cincinnati Business Journal
2012 **ACOS Resident Achievement Award**
2009, 2010, 2011 **Robert C. Erwin Literary Award**
2008 **Physician of the Year, Resident**: North Shore LIJ Health System
2008 AOA Annual meeting: **1st Place Basic Science** Poster Presentation
2008 AOA Annual meeting: **3rd Place Clinical Science** Poster Presentation
2007 AAN: **S. Weir Mitchell Award** Nomination
2004 **IOEF Award (grant no. 112-3128)**, Iowa Government Education Fund
2004 **DMU Academic Excellence and Research Scholarship**, Des Moines, IA
2004 **Oncology Honors Society**, Des Moines, IA
2003 **American Association of Anatomists Student Travel Award**, FASEB
2003 **Medical Student Externship**, Dept. of Neurology/Neurosurgery at Johns Hopkins University School of Medicine, Baltimore, MD
2003 **Neurodevelopmental Fellow - Predoctoral Training Fellowship**, Kennedy Krieger Institute, Baltimore, MD
1999 **Harry S Truman Veteran's Affairs Hospital Employee of the Month**, September, Columbia, MO

JOURNAL AND BOOK ACTIVITIES

2026-current **Guest Editor**, Nature: Scientific Reports, Pediatric Neuroimaging
2025-current **Editorial Board**, Nature: Scientific Reports

2025-current Co-Editor, *Advances in Cerebral Aneurysms*, Brain Sciences Textbook
2019-current **Deputy Editor**, Pediatric Stroke
2018-current **Ad hoc Reviewer**, Operative Neurosurgery
2014-current **Ad hoc Reviewer**, Journal of Neurosurgery: Pediatric
2014-2019 **Ad hoc Reviewer**, Pediatric Neurosurgery
2013-current **Ad hoc Reviewer**, Stem Cells
2012 **Ad hoc Reviewer**, Neurobiology of Disease
2011-2013 **Ad hoc Reviewer**, Neural Regeneration Research
2010-2015 **Ad hoc Reviewer**, Journal of Emergencies, Trauma, and Shock
2009-2015 **Ad hoc Reviewer**, Brain Research
2009-2015 **Ad hoc Reviewer**, Experimental Neurology

COMMITTEES, PROFESSIONAL MEMBERSHIP

2024 -current Secretary/Treasurer, ACOS Neurological Surgery Discipline
2018-current, Conference Director, Annual Aspen Conference on Pediatric Cerebrovascular Disease and Stroke, Snowmass Village, Aspen, Colorado
2021-current, Osteopathic Liaison of the AANS/CNS Section on Pediatric Neurosurgery
2018-2021, CCHMC Destination Excellence Medical Advisory Board Member
2017-current, UC Zuccarello Award Review Committee
2016-current, CCHMC Physicians Operations Leadership Team Committee
2016-2020, CCHMC IRB Committee
2016-current, CCHMC Credentials Committee
2016 Member, American College of Surgeons
2015 Member, Congress of Neurosurgical Surgeons
2014 Member, American Heart Association
2013 Member, International Society of Pediatric Neurosurgery
2011 Member, Osler Society, New York
2008 Member, American Osteopathic Association
2008 Member, American College of Osteopathic Surgeons
2003 Co-Founder, Oncology Club/ Honor's Society, Des Moines University

RESEARCH EXPERIENCE

July 2013-current Laboratory for Translational Neurovascular Development and Stem Cell Biology
Laboratory Research and Developmental Biology
July 2013-2017 Large Animal Lab, Neuromodulation and Spinal Cord Pain. Laboratory
Research and Developmental Biology
July 2009-2012 Laboratory of Biomedical Sciences, the Feinstein Institute for Medical
Research. Drs. Kevin J. Tracey and Ashesh Mehta
July – Sept 2009 Laboratory of Spinal Biomechanics, the Feinstein Institute for Medical
Research. Drs. Nadeen Chahine and Mitchell Levine
June 2006-2012 Dept. of Neuroscience, the International Center for Spinal Cord Injury,
Kennedy Krieger Inst, Johns Hopkins University. Dr. JW McDonald
2003-2006 Dept. Anatomy and Surgery, Des Moines University, IA.
Drs. EP Finnerty, D Matz, and KA Reed
June-Aug 2003 Department of Neurology/Neurosurgery, Johns Hopkins University, Baltimore, MD. Drs.
MV Johnston, S Mori, and PC vanZijl
2001-2003 Dept. of Neurology and Neurosurgery, Washington University in St.Louis, MO. Drs. DW
Choi and JW McDonald
1999-2000 Dept. of Family Medicine, University of Missouri, Columbia, MO
Drs. J Campbell
1998-1999 Plant Physiology lab, University of Missouri, Columbia, MO

Dr. J Erickson

PEER REVIEWED PUBLICATIONS

Vernile B, Palmisciano P, **Vadivelu S**, Zuccarello M. Anterior communicating aneurysm clipping: How I do it. *Acta Neurochir (Wien)*. 2025 Jan 27;167(1):25. doi: 10.1007/s00701-025-06440-8. PMID: 39869215; PMCID: PMC11772391.

Leach JL, Derinkuyu BE, Taylor JM, **Vadivelu S**. Imaging of Hemorrhagic Stroke in Children. *Neuroimaging Clin N Am*. 2024 Nov;34(4):615-636. doi: 10.1016/j.nic.2024.08.023. Epub 2024 Sep 16. PMID: 39461768.

Robert AP, Hanel RA, Adelson PD, Lang SS, Grabb P, Greene S, Johnston JM, Leonard J, Magge SN, Marupudi NI, Piatt J, De Oliveira Sillero R, Smith ER, Smith J, Strahle JM, **Vadivelu S**, Wellons JC, Wrubel D, Hatem A, Moody C, Han SH, Montaser A, Millican N, Pederson JM, Dain AS, Beslow LA, Aldana PR. Indications for cerebral revascularization for moyamoya syndrome in pediatric sickle cell disease determined by Delphi methodology. *J Neurosurg Pediatr*. 2024 Jul 19;34(4):402-413. doi: 10.3171/2024.5.PEDS2426. PMID: 39029127.

Larsh TR, Gilbert DL, **Vadivelu S**, Binder DK, Pedapati EV, Wu SW. Post Deep Brain Stimulation Time Course of Aperiodic Activity in Childhood and Young Adult Dystonia. *Mov Disord Clin Pract*. 2024 Oct;11(10):1305-1307. doi: 10.1002/mdc3.14159. Epub 2024 Jul 11. PMID: 38989718; PMCID: PMC11489614.

Dao L, You Z, Lu L, Xu T, Sarkar AK, Zhu H, Liu M, Calandrelli R, Yoshida G, Lin P, Miao Y, Mierke S, Kalva S, Zhu H, Gu M, **Vadivelu S**, Zhong S, Huang LF, Guo Z. Modeling blood-brain barrier formation and cerebral cavernous malformations in human PSC-derived organoids. *Cell Stem Cell*. 2024 Jun 6;31(6):818-833.e11. doi: 10.1016/j.stem.2024.04.019. Epub 2024 May 15. PMID: 38754427; PMCID: PMC11162335.

Kline O, Vishwanath K, Colbrunn B, Peachman A, Zhang J, **Vadivelu S**. Can diffuse reflectance spectroscopy identify shuntodynia in pediatric hydrocephalus patients? *J Biomed Opt*. 2024 Mar;29(3):037002. doi: 10.1117/1.JBO.29.3.037002. Epub 2024 Mar 12. PMID: 38476219; PMCID: PMC10929735.

Engel ER, Wusik K, Bright P, **Vadivelu S**, Taylor JM, Hammill A. Prevalence and Predictors of Hereditary Hemorrhagic Telangiectasia and Capillary-Malformation Arteriovenous Malformation Syndrome Among Children with Neurovascular Malformations. *J Pediatr*. 2024 Jan;264:113761. doi: 10.1016/j.jpeds.2023.113761. Epub 2023 Oct 4. PMID: 37797790.

Sun LR, Jordan LC, Smith ER, Aldana PR, Kirschen MP, Guilliams K, Gupta N, Steinberg GK, Fox C, Harrar DB, Lee S, Chung MG, Dirks P, Dlamini N, Maher CO, Lehman LL, Hong SJ, Strahle JM, Pineda JA, Beslow LA, Rasmussen L, Mailo J, Piatt J, Lang SS, Adelson PD, Dewan MC, Mineyko A, McClugage S, **Vadivelu S**, Dowling MM, Hersh DS. Pediatric Moyamoya Revascularization Perioperative Care: A Modified Delphi Study. *Neurocrit Care*. 2024 Apr;40(2):587-602. doi: 10.1007/s12028-023-01788-0. Epub 2023 Jul 20. PMID: 37470933; PMCID: PMC11023720.

Aldana PR, Hanel RA, Piatt J, Han SH, Bansal MM, Schultz C, Gauger C, Pederson JM, Iii JCW, Hulbert ML, Jordan LC, Qureshi A, Garrity K, Robert AP, Hatem A, Stein J, Beydler E, Adelson PD, Greene S, Grabb P, Johnston J, Lang SS, Leonard J, Magge SN, Scott A, Shah S, Smith ER, Smith J, Strahle J, **Vadivelu S**, Webb J, Wrubel D. Cerebral revascularization surgery reduces cerebrovascular events in

children with sickle cell disease and moyamoya syndrome: Results of the stroke in sickle cell revascularization surgery retrospective study. *Pediatr Blood Cancer*. 2023 Jul;70(7):e30336. doi: 10.1002/pbc.30336. Epub 2023 Apr 14. Erratum in: *Pediatr Blood Cancer*. 2023 Oct;70(10):e30558. doi: 10.1002/pbc.30558. PMID: 37057741.

Roth J, Perekopaiko Y, Kozyrev DA, Constantini S, **Vadivelu S**; Pediatric Colloid Cyst Study Group (PCCSG). Pediatric colloid cysts: a multinational, multicenter study. An IFNE-ISPEN-ESPN collaboration. *J Neurosurg Pediatr*. 2022 Feb 11:1-8. doi: 10.3171/2021.12.PEDS21482. Epub ahead of print. PMID: 35148518.

Larsh T, Wu SW, **Vadivelu S**, Grant GA, O'Malley JA. Deep Brain Stimulation for Pediatric Dystonia. *Semin Pediatr Neurol*. 2021 Jul;38:100896. doi: 10.1016/j.spen.2021.100896. Epub 2021 May 16

Grant N, Taylor JM, Plummer Z, Myers K, Burrow T, Luchtman-Jones L, Byars A, Hammill A, Wusick K, Smith E, Leach J, **Vadivelu S**. Case Report: Cerebral Revascularization in a Child With Mucopolysaccharidosis Type I. *Front Pediatr*. 2021 Jun 10;9:606905. doi: 10.3389/fped.2021.606905. eCollection 2021.

Abruzzo T, Abraham K, Karani KB, Geller JL, **Vadivelu S**, Racadio JM, Zhang B, Correa ZM. Correlation of Technical and Adjunctive Factors with Quantitative Tumor Reduction in Children Undergoing Selective Ophthalmic Artery Infusion Chemotherapy for Retinoblastoma. *AJNR Am J Neurol*. 2021 Jan;42(2):354-361. doi: 10.3174/ajnr.A6905. Epub 2020 Dec 24

Nagaraj UD, Kline-Fath BM, Calvo-Garcia MA, **Vadivelu S**, Venkatesa C. Fetal and Postnatal MRI Findings of Blake Pouch Remnant Causing Obstructive Hydrocephalus. *Radiol Case Rep* 2020 Oct 6;15(12):2535-2539. doi: 10.1016/j.radcr.2020.09.039. eCollection 2020 Dec

Sun LR, Linds A, Sharma M, Rafay M, **Vadivelu S**, Lee S, Brandao LR, Appavu B, Estepp JH, Hukin J, Hassanein SMA, Chan A, Beslow LA; International Pediatric Stroke Study Group. Cancer and Tumor-Associated Childhood Stroke: Results from the International Pediatric Stroke Study. *Pediatr Neurol*. 2020 Oct;111:59-65. doi: 10.1016/j.pediatrneurol.2020.06.002. Epub 2020 Jun 10

Falcone J, Ho C, Eskandari R, **Vadivelu S**, Madsen JR, Muhonen MG. A Noninvasive Retrograde Flushing System for Shunted Hydrocephalus: Initial Case Series of 25 Patients. *Cureus* 2020 Jul 1;12(7):e8940. doi: 10.7759/cureus.8940

Porter Z, Yang G, Vuong S, Hanna B, Madsen J, **Vadivelu S**. *In Situ* Clearance of a Proximal Shunt Malfunction in a Child with Hydrocephalus Post Cerebral Arteriovenous Malformation Rupture Noted Intraoperatively. *Surg Neurol Int*. 2020 May 16;11:116. doi: 10.25259/SNI_156)2020. eCollection 2020

Vadivelu S, Harker P, Zuccarello M. Letter to the Editor. Moyamoya: Patient Selection Rather than De-Selection in the Very Young. *J Neurosurg Pediatr*. 2019 Sep 27:1-2. doi: 10.3171/2019.6.PEDS 19346. Online ahead of print

Boucher AA, Gurunathan A, Taylor JM, Ricci KW, **Vadivelu S**, Quinn CT. Hemoglobin Southampton Complicated by Cerebral Ischemia, Moyamoya and Hydroxyurea-Induced Methemoglobinemia. *Am J Hematol*. 2019 Aug;94(8):949-954. doi: 10.1002/ajh.25509. Epub 2019 Jun 7

Chen AM, Karani KB, Taylor JM, Zhang B, Furthmiller A, De Vela G, Leach JL, **Vadivelu S**, Abruzzo TA. . Cervicocerebral Quantitative Arterial Tortuosity: A Biomarker of Arteriopathy in Children with

Intracranial Aneurysms. J. Neurosurg Pediatr. 2019 Jul 26;1-8. doi: 10.3171/2019.5.PEDS 1982. Online ahead of print

Kandil A, Smith G, Mahmoud M, Abruzzo T, **Vadivelu S**, Subramanyam R. Epidural Blood Patch in Children Under Anesthesia: Is There an Indication for Neuromonitoring? J Neurosurg Anesthesiol. 201 Jul;30(3):275-276. doi: 10.1097/ANA.0000000000000419

DeVela G, Taylor JM, Zhang B, Linscott LL, Chen Am, Karani KB, Furthmiller A, Leach JL, **Vadivelu S**, Abruzzo T. Quantitative Arterial Tortuosity Suggests Arteriopathy in Children With Cryptogenic Stroke. Stroke. 2018 Apr, 49(4):1011-1014. doi: 10.1161/STROKEAHA.117.020321. Epub 2018 Mar 14

Carpenter CD, Linscott LL, Leach JL, **Vadivelu S**, Abruzzo T. Spectrum of Cerebral Arterial and Venous Abnormalities in Alagille Syndrome. Pediatr Radiol. 2018 Apr;48(4):602-608. doi: 10.1007/s00247-017-4043-2. Epub 2018 Jan 23

Peeters S1, Skoch J, Holt H, Mubita L, Choudhary EA, Vadivelu KP, Gilbert DL, Wu SW, Keebaugh AC, Air E, **Vadivelu S**. Functional Neuroanatomy of Secondary Self-Injurious Behavior. Pediatr Neurosurg. 2018;53(2):71-80.doi: 10.1159/000485385. Epub 2018 Feb 3

Skoch J, Tahir R, Abruzzo T, Taylor JM, Zuccarello M, **Vadivelu S**. Predicting Symptomatic Cerebral Vasospasm after Aneurysmal Subarachnoid Hemorrhage with an Artificial Neural Network in a Pediatric Population. Childs Nerv Syst. 2017 Dec;33(12):2153-2157. doi: 10.1007/s00381-017-3573-0. Epub 2017 Aug 29

Vadivelu S, Xu, K, Tolj V, Rege R, Darkins L, Vishwanath K. Neurovascular Toxicity of N-Methyl-D-Aspartate is Markedly Enhanced in the Developing Mouse Central Nervous System. Neurosci Lett. 2017 Aug 10;655:1-6. doi: 10.1016/j.neulet.2017.06.027. Epub 2017 Jun 19

Larson PS, Willie JT, **Vadivelu S**, Azmi-Ghadimi H, Nichols A, Fauerbach LL, Johnson HB, Graham D. MRI-Guided Stereotactic Neurosurgical Procedures in a Diagnostic MRI Suite: Background and Safe Practice recommendations. J Healthc Risk Manag. 2017 Jul;37(1):31-39. doi: 10.1002/jhrm.21275

Sandquist MK, Clee MS, Patel SK, Howard KA, Yunger T, Nagaraj UD, Jones BV, Fei L, **Vadivelu S**, Wong HR. High Frequency of Neuroimaging Abnormalities Among Pediatric Patients With Sepsis Who Undergo Neuroimaging Pediatr Crit Care Med. 2017 Jul;18(7):607-613. doi: 10.1097/PCC.0000000000001173

Larson PS, Willie JT, **Vadivelu S**, Azmi-Ghadimi H, Nichols A, Fauerbach LL, Johnson HB, Graham D. MRI-Guided Stereotactic Neurosurgical Procedures in a Diagnostic MRI Suite: Background and Safe Practice Recommendations. J Healthc Risk Manag. 2017 Jul;37(1):37-39. doi: 10.1002/jhrm.21275

Vadivelu S, **Vadivelu S**, Mealy M, Patel S, Kosnik-Infinger L, Becker D. Chiari I Malformation in Children with Transverse Myelitis. Dev Neurorehabil. 2017 May 24:1-6. doi: 10.1080/17518423.2017.1323972

Larson P, **Vadivelu S**, Azmi-Ghadimi H, Nichols A, Fauerbach L, Boehm Johnson H. Neurosurgical Laser Ablation and MR-Thermometry: Risks of Multi-Site Workflow Pattern. J Healthc Risk Manag. 2017 Apr;36(4):7-18. doi: 10.1002/jhrm.21258

Vadivelu, S, Masood Z, Krueger B, Marciano R, Chen D, Houseman C, Insinga S. Long-Term Resolution of Delayed Onset Hypoglossal Nerve Palsy Following Occipital Condyle Fracture: Case

Report and Review of the Literature. J Craniovertebr Junction Spine. 2017 Apr-Jun;8(2):149-152. doi: 10.4103/jcvjs.JCVJS_34_17

Kandil A, Smith G, Mahmoud M, Abruzzo T, **Vadivelu S**, Subramanyam R. Epidural Blood Patch in Children Under Anesthesia: Is There an Indication for Neuromonitoring? J Neurosurg Anesthesiol. 2017 Feb 24. doi: 10.1097/ANA.0000000000000419

Vadivelu S, Rekate H, Ersenio-Jenssen D, Mittler M, Schneider S. Hydrocephalus Associated with Childhood Nonaccidental Head Trauma. Neurosurg Focus. 2016 Nov;41(5):E8. doi: 10.3171/2016.8.FOCUS 16266

Garzon MC, Epstein LG, Heyer GL, Frommelt PC, Orbach DB, Baylis AL, Blei F, Surrows PE, Chamlin SL, Chun RH, Hess CP, Joachim S, Johnson K, Kim W, Liang MG, Maheshwari M, McCoy GN, Metry DW, Monrad PA, Pope E, Powell J, Shwayder TA, Siegel DH, Tollefson MM, **Vadivelu S**, Lew SM, Frieden IJ, Drolet BA. PHACE Syndrome: Consensus-Derived Diagnosis and Care Recommendations. J Pediatr. 2016 Nov;178:24-33.e2. doi: 10.1016/j.jpeds.2016.07.054. Epub 2016 Sep 19

Stetson N, **Vadivelu S**, Li JY, Setton A, Chalif DJ. Angiographic Evidence of a Purely Pial Bihemispheric Intracranial Hemangiopericytoma. Case Rep Neurol Med. 2016;2016:5245078. doi:10.1155/2016/5245078. Epub 2016 Jan 5

Smith P, Linscott LL, **Vadivelu S**, Zhang B, Leach JL. Normal Development and Measurements of the Occipital Condyle-C1 Interval in Children and Young Adults. AJNR Am J Neuroradiol. 2016 May;37(5):952-7. doi: 10.3174/ajnr.A4543. Epub 2015 Oct 29.

Corcoran, B, Linscott, L, Leach, J, **Vadivelu, S**. Application of Normative Occipital Condyle-C1 Interval Measurements to Detect Atlanto-Occipital Injury in Children. AJNR Am J Neuroradiol. 2016 May;37(5):958-62. doi: 10.3174/ajnr.A4641. Epub 2016 Jan 5

Sandquist M, Clee M, Patel S, Nagaraj U, Jones B, **Vadivelu S**, Wong H . High Incidence of Neuroimaging Abnormalities after Pediatric Sepsis. Crit Care Med. 2015 Dec; 43 (12 Suppl 1)

Vadivelu, S. Screening and Management of Pediatric Concussion, AANS Neurosurgeon. 2015 24(2)

Vadivelu S, Stewart TJ, Qu Y, Horn K, Liu S, Li Q, Silver J, McDonald JW. NG2+ Progenitors Derived from Embryonic Stem Cells Penetrate Glial Scar and Promote Axonal Outgrowth into White Matter after Spinal Cord Injury. Stem Cells Transl Med. 2015 Apr;4(4):401-11. doi: 10.5966/sctm.2014-0107. Epub 2015 Feb 23

Vadivelu S, Ersenio-Jenssen D, Rekate H, Narayan RK, Mittler M, Schneider S. Delay in Arrival to Care in Perpetrator – Identified Nonaccidental Head Trauma: Observations and Outcomes. World Neurosurg. 2015 Nov;84(5):1340-6. doi: 10.1016/j.wneu.2015.06.023. Epub 2015 Jun 25

Sayama C, **Vadivelu S**, Livingston A, Ho A, Izaddoost SA, Briceño V, Luerssen TG, Jea A.J. Soft-Tissue Defects after Spinal Instrumentation in 5 Children: Risk Factors, Management Strategies, and Outcomes. Neurosurg Pediatr. 2014 Dec;14(6):644-53. doi: 10.3171/2014.8.PEDS13664. Epub 2014 Sep 26

Vadivelu S, Sivaganesan A, Patel A, Agadi S, Schmidt R, Mani P, Jea A. Practice Trends in the Utilization of Intraoperative Neurophysiological Monitoring in Pediatric Neurosurgery as a Function of Complication Rate, and Patient-, Surgeon-, and Procedure-Related Factors. World Neurosurg. Mar-Apr 2014;81(3-4):617-23. doi: 10.1016/j.wneu.2013.11.010. Epub 2013 Nov 13

Vadivelu S, Prasad P, Adesina A, Kim E, Luerssen T, Jea A. Giant Invasive Spinal Schwannoma in Children: A Case Report and Review of the Literature. *J Med Case Rep*. 2013 7:289. Published online 2013 Dec 30 doi: 10.1186/1752-1947-7-289

Vadivelu S, Wolf VL, Bollo RJ, Wilfong A, Curry DJ. Resting-State Functional MRI in Pediatric Epilepsy Surgery. *Pediatr Neurosurg*. 2013 49(5):261-73. doi: 10.1159/000363605. Epub 2014 Sep 24

Desai S, **Vadivelu S**, Patel A, Jea A. Isolated Cervical Spinal Canal Stenosis at C-1 in the Pediatric Population and in Williams Syndrome. *J Neurosurg Spine*. 2013 Jun;18(6):558-563. doi: 10.3171/2013.2.SPINE1351. Epub 2013 Mar 29

Patel A, **Vadivelu S**, Desai S, Jea A. Congenital Hypoplasia or Aplasia of the Lumbosacral Pedicle as an Unusual Cause for Spondylolisthesis in the Pediatric Age Group. *J Neurosurg Pediatr*. 2013 Jun;11(6):717-21. doi: 10.3171/2013.3.PEDS12579. Epub 2013 Apr 19

Vadivelu S, Effendi S, Starke J, Luerssen T, Jea A. A Review of the Neurological and Neurosurgical Implications of Tuberculosis in Children. *Clin. Pediatr*. 2013 Dec;52(12):1135-43. doi: 10.1177/0009922813493833. Epub 2013 Jul. 10

Vadivelu S, Kelley RI, Edelman M, Schneider S, Mittler M Choroid Plexus Papilloma and Pierpont Syndrome. *J Neurosurg Pediatr* 2013 Feb;11(2):115-118

Vadivelu S, Xin X, Loven T, Restrepo G, Chalif DJ, Setton A. Iatrogenic Dural Arteriovenous Fistula and Aneurysmal Subarachnoid Hemorrhage. *Neurosurg Focus*. 2012 May;32(5):E1. doi: 10.3171/2012.2.FOCUS1229

Vadivelu S, Bolognese P, Milhorat T, Mogilner AY. Occipital Nerve Stimulation for Refractory Headache in the Chiari Malformation Population. *Neurosurgery* 2012 Jun;70(6):1430-6. doi: 10.1227/NEU.0b013e3182545a1c

Vadivelu S, Bell R, Crandall B, DeGraba T, Armonda R. Delayed Detection of Carotid-Cavernous Fistulas Associated with Wartime Blast-Induced Craniofacial Trauma. *Neurosurg Focus* 2010 May;28(5):E6. doi: 10.3171/2010.2.FOCUS09257

Vadivelu S, Tomlinson K, Valles J, Hundert M, Bagdonas R, Eisenberg M. Acute Anti-Emetic withdrawal Associated with a Hemorrhagic Cerebellar Arteriovenous Malformation. *J Clin Neurosci*. 2010 Aug;17(8):1061-3. doi : 10.1016/j.jocn.2009.10.038

Vadivelu S, Sharer L, Schulder M. Regression of Multiple Intracranial Meningiomas after Cessation of Long-Term Progesterone Agonist therapy. *J Neurosurg*. 2010 May;112(5):920-4. doi: 10.3171/2009.8.JNS09201

Vadivelu S, Mangano FT, Miller CR, Leonard JR. Multifocal Langerhans Cell Histiocytosis of the Pediatric Spine: A Case Report and Literature Review. *Childs Nerv Syst*. 2007 Jan;23(1):127-31. doi: 10.1007/s00381-006-0172-x. Epub 2006 Sep 20

Vadivelu S, Platik M, Choi L, Lacy M, Shah A, Qu Y, Holekamp T, Becker D, Gottlieb D, Gidday J, McDonald J. Multi-Germ Layer Lineage Central Nervous System Repair: Nerve and Vascular Cell Generation by Embryonic Stem Cells Transplanted in the Injured Brain. *J Neurosurg* 2005 Jul;103(1):124-135. doi: 10.3171/jns.2005.103.1.0124

Vadivelu S, Becker D, McDonald J. Generating Chimeric Spinal Cord: A Novel Model for Transplantable Oligodendrocyte Progenitors Derived from Embryonic Stem Cells. *Neurosurg Focus*. 2005 Sep 15;19(3):E3. doi: 10.3171/foc.2005.19.3.4

McDonald J, Becker D, Holekamp T, Howard M, Liu S, Lu A, Lu J, Platik M, Qu Y, Stewart T, **Vadivelu S**. Repair of the Injured Spinal Cord and the Potential of Embryonic Stem Cell Transplantation. *J Neurotrauma* 2004 Apr;21(4):383-93. doi: 10.1089/089771504323004539

Qu Y, **Vadivelu S**, Choi L, Liu S, Lu A, Lewis B, Girgis R, Lee CS, Snider BJ, Gottlieb DI, McDonald JW. (2003) Neurons Derived from Embryonic Stem (ES) Cells Resemble Normal Neurons in their Vulnerability to Excitotoxic Death. *Experimental Neurology* 184(1), 326-336

Vadivelu S, Desai SK, Illner A, Luerssen TG, Jea A. Infected lumbar dermoid cyst mimicking intramedullary spinal cord tumor: Observations and outcomes. *J Pediatr Neurosci*. 2014 Jan;9(1):21-6. doi: 10.4103/1817-1745.131475. PMID: 24891897; PMCID: PMC4040026.

Sahni D, Prasad P, **Vadivelu S**, Luerssen T, Jea A. Thoracic, Lumbar, and Sacral Pedicle Screw (In)accuracy as a Function of Surgeon Experience, Patient Age, and Diagnosis in the Pediatric Spine and the Spine of the Transitional Patient: Postoperative Computed Tomography Assessment. Sahni, Deshdeepak et al. 'Pediatric Pedicle Screw (In)accuracy Based on Postoperative Computed Tomography'. 1 Jan. 2014 : 161 – 169. DOI: 10.3233/PNR-14193

Vadivelu S, Willsey M, Curry DJ, McDonald JW 3rd. Potential role of stem cells for neuropathic pain disorders. *Neurosurg Focus*. 2013 Sep;35(3):E11. doi: 10.3171/2013.6.FOCUS13235. PMID: 23991814.

INVITED PERIODICALS

Vadivelu S. Screening and management of pediatric concussion. *AANS Neurosurgeon : Features* Volume 24, Number 2, 2015

INVITED DOCUMENTARIES

“Chasing IndyCar dreams: Loveland student working toward becoming pro racecar driver,” WLWT5 Interview, and Documentary “Driven.” March 11, 2025

“Sriansh's Journey: Overcoming AADC with Gene Therapy | Cincinnati Children's,” March 2025

INVITED BOOKS

Co-Guest Editor: Pediatric Neuroimaging. *Nature Scientific Reports*, in preparation 2026 - 2027

Co-Editor: Advances in Cerebral Aneurysms. *Brain Sciences*, in preparation 2025 – 2026

INVITED CHAPTERS

Vadivelu S, Leach JL, Derinkuyu BE, Taylor JM, Imaging of Hemorrhagic Stroke in Children. Chapter in *Neuroimaging Clinics of North America*, Vol 34, Issue 4, November 2024

Vadivelu S, Chern J, Whitehead W, Illner A, Jea A. Spinal Column Tumors. Chapter in *Pediatric Neurosurgery: Tricks of the Trade*. Editor: A. Cohen. November 2015

Vadivelu S., Boyd J., Abruzzo T.A. Intracranial Arterial Aneurysmal Disease in Childhood. In: Lanzer P. (eds) *PanVascular Medicine*. Springer, Berlin, Heidelberg, 2015

Vadivelu, S, Patel, M, Hammill, A, Abruzzo, T. Vascular Malformations of the Extracranial Head and Neck in Children. Chapter.2015

Vadivelu S and Schulder M. MRI-Guided Interstitial Laser Therapy of Brain Tumors. Pgs. 575-580 in Intraoperative Imaging and Image-Guided Therapy. Ed. Ferenc Jolesz, 2014

Vadivelu S and Schulder M. Intracranial Meningiomas: Role of Exogenous Hormones. Edited by: Hayat MA: Tumors of the Central Nervous System, Vol 17, 29-38, 2012

Vadivelu S, Bolognese P, Milhorat T, Mogilner AY Occipital Neuromodulation for Refractory Headache in the Chiari Malformation Population, pp 118-125, in Peripheral Nerve Stimulation, Slavin KV ed., 2011

INVITED PRESENTATIONS and MEETING ABSTRACTS

Vadivelu, S, University of Cincinnati Neurosurgery Grand Rounds Presentation, “Pediatric Subdural Hematomas,” April 16, 2025

Vadivelu, S, “Vascular/Firearm Section,” Lead Moderator, 48th Annual Meeting, American Society of Pediatric Neurosurgeons, Ritz-Carlton, Aruba, January 26-31, 2025

Vadivelu, S, Brown, C, Greiner, H, Leach, M, Mangano, F, Skoch, J, Thomas, C, Vedala, K, “Serial Endovascular Embolization as a Novel Management Approach for Refractory Epilepsy in Hemispheric Overgrowth Syndromes: A Case Series,” Abstract at the 18th International Child Neurology Conference, Cape Town International Convention Center, Cape Town, Western Cape, South Africa, May 6-10, 2024

Vadivelu S, International Pediatric Stroke Organization Annual Conference, Innovation in Pediatric Cerebrovascular Disease and Stroke Moderator, March 2024, Toronto, Canada

Vadivelu, S, Annual Ozarks Neuroscience Educations Clinics, Ridgedale, MO, Grand Rounds Presentation, “Pediatric Brainstem Cavernomas,” September 2024

Vadivelu S, American Heart Association International Stroke Conference, Platform presentation: Transitioning children with pediatric cerebral arteriovenous malformations, Feb, 2024 Phoenix, AZ.

Vadivelu, S, University of Cincinnati Neurosurgery Grand Rounds Presentation,” Molecular Adjuvants to Pediatric Brainstem Cavernomas,” 2024

Vadivelu S, International Society for Pediatric Neurosurgery, Virtual Grand Rounds for Medical Students, Residents and Trainees Education Course, Module 8: Pediatric Vascular Disease. “Intracranial Arterial Aneurysms in Childhood”, February 24, 2023

Vadivelu S, Boston Children’s Moyamoya Research Summit, Biomarkers and Surgical Research Initiatives panel, Nov 7, 2023

Vadivelu S, Alliance to Cure International Webinar, Molecular Adjuvants to Pediatric Brainstem Cavernomas, October 2023

Vadivelu S, Surgical Perspective: Molecular Approaches to Ruptured Brainstem Cavernomas, October 2023

Vadivelu S, Alliance to Cure Cavernous Malformation, Cavernoma, Cavernous Angioma, August 2023

Vadivelu S, 45th Annual ASPN Meeting, “Asymmetry of the Occipital Condyle-C1 Interval in Children with Atlanto-Occipital Dislocation”, February 2022

Vadivelu S, Dayton Children’s Hospital Virtual Pediatric Neurosciences Symposium, Pediatric Neuro-endovascular surgery: Acute Pediatric Stroke, November 2021

Vadivelu S, Angioma Alliance International Scientific Meeting, November 2021

Vadivelu S, University of Cincinnati, Ohio Ocular Oncology Symposium 2021, “Clinical/Technical Approaches to IAC”, September 2021

Vadivelu S, IPSO, IPSO Virtual Conference 2021, “Medical and surgical management of Moyamoya”, July 2021

Vadivelu, S, Massachusetts General Hospital, Harvard Medical School of Neurosurgery Grand Rounds, “Endovascular Thrombectomy for Pediatric Stroke Patients with COVID-19,” September 2020

Hammill, AM, Wusik, K, Patel, M, Parrott, A, **Vadivelu, S**, Taylor, JM, Brown, NM, Palermo, J, Weaver, KN, “Toward an Integrated Approach for Screening for Complications of HHT, JPS, and Connective Tissue Disorder in SMAD4”, 13th HHT International Scientific Conference, June 13-16, 2019, Rio Grande, Puerto Rico

Lee, JA, Monahan S, Vuong S, Smith DF, Haitham M, Babiker E, **Vadivelu A**, van Aalst JA, Hart CA, de Alarcon A, Skoch JM, Pan BS, “Endoscopic Endonasal Approach for the Resection of Nasal Dermoid Cysts with Intracranial Extension”, ISCF 2019, September 16-19, 2019, Paris, France

Vadivelu, S, CCHMC Neurology Grand Rounds, “Pediatric Brain Stimulation,” March 2018

Vadivelu S, CCHMC Hematology Grand Rounds, “Treatment for HHT Associated Brain AVMs”, February 2018

Vadivelu, S, CCHMC Anesthesia Grand Rounds, “Pediatric AVMs, a Role for Recovering Surgery,” February 2018

Vadivelu S, ‘Diagnosis and Surgical Management of Rotational Vertebral Artery Occlusion in Children’. International Stroke Conference 2018 January 24-26, 2018

Vadivelu S, “Utility of intraoperative neuromonitoring in pediatric cases requiring spinal cord stimulation” The 45th Annual Meeting of International Society for Pediatric Neurosurgery. October 8 – 12, 2017

Vadivelu S, Long J, Garcia, M. Clinical Outcome and Kinematic Analysis of a Young Child with DYT6 after GPi DBS. 2017 CHILD NEUROLOGY SOCIETY, 46th Annual Meeting, October 4-7, 2017

Taylor, JM, AM Hammill, C Thomas, **S Vadivelu**, JL Leach, T Abruzzo. MRI-based Arterial Spin Labelling in Sturge-Weber Syndrome: An early non-invasive biomarker of progressive venopathy. Sturge-Weber Foundation Conference. Atlanta, GA, August 2016

Fouladi M, Gilger E, Hummel T, Jones B, Sallum R, Stevenson S, **Vadivelu S**, Leach . “Pediatric Tectal Plate Gliomas with Pilomyxoid Histologic Features. Report case of three cases”. Society for Neuro-Oncology’s 21st Annual Scientific Meeting November 17-20, 2016

Vadivelu S, “Correlation of Cerebral Artery Growth and Biometric Parameters in Healthy Children” Child Neurology Society, Vancouver Convention Center, Vancouver, BC, October 26-29, 2016

Skoch, J, Dumont, T, Taylor, J, Abruzzo, T, **Vadivelu, S**. “Predicting Symptomatic Cerebral Vasospasm After Spontaneous Aneurysmal Rupture With An Artificial Neural Network In A Pediatric Population”10th Annual Thomas F. Boat Lectures on Tuesday, March 29, 2016

AANS/CNS Presentation; Predicting Symptomatic Cerebral Vasospasm After Spontaneous Aneurysmal Rupture With An Artificial Neural Network In A Pediatric Population. December 11, 2015

Mcallister, A, Leach, J, Linscott, L, Sjoblom, M, **Vadivelu, S**. Pediatric Acetazolamide Challenge Using Arterial Spin Labeling with and without Sedation. ASNR meeting 2015

Skoch, J, Dumont, T, Taylor, J, Abruzzo, T, **Vadivelu, S**. Predicting symptomatic cerebral vasospasm after aneurysmal subarachnoid hemorrhage with an artificial neural network in the pediatric population. Peds section meeting Dec. 2015

Tewari, A, Mohamed, M, Castle, J, Francis, L, McAuliffe, J, **Vadivelu, S**. Intraoperative Motor-Evoked Potential Recovery Following Craniocervical Decompression in Chiari II Malformation. Report of Two Cases, Neuroanesthesia Aug. 2015

Corcoran, B, Linscott, L, Leach, J, **Vadivelu, S**. AJNR Am J Neuroradiol. E Pub 2015. Application of Normative Occipital Condyle-C1 Initial Measurement to Detect Atlanto-Occipital Imaging in Children

Vadivelu S, Agadi S, Schmidt R, Mani P, Patel A, Desai S, Glover C, Jea A. Practice Trends in the Utilization of Intraoperative Neurophysiological Monitoring in Pediatric Neurosurgery. 2012 AANS/CNS Pediatric Section meeting. Taylor, JM, Vadivelu S, Abruzzo T. Carotid dysplasia and cerebrovascular insufficiency as a novel manifestation of the PTEN Hamartoma syndrome. Poster for Child Neurology Society Meeting, Columbus 2014

Vadivelu S, Wilfong A, Curry D. MR Morphometry of Uncal Ablative Zones and Temporal Changes after Laser Interstitial Thermal Therapy, American Epilepsy Society (AES) 67th Annual Meeting, Washington, DC December 6-10, 2013

Desai S, **Vadivelu S**, Curry D, Efficacy of Occipital Nerve Decompression in the Pediatric Population, 41st Annual Meeting of the AANS/CNS Section on Pediatric Neurological Surgery, St. Louis Union Station Hotel, November 27-30, 2012, St. Louis, MO

Vadivelu S, Bolognese P, Milhorat T, Mogilner AY, Selection Strategies and Techniques for ONS in Refractory Headache. Robert C. Erwin Literary Award, 2012

Vadivelu S, Dancho M, McCarty M, Chavan S, Tracey KJ, Mehta AD. Modulation of the Inflammatory

Response: A Potential Novel Use for Vagal Nerve Stimulation. Platform Presentation – 2012 Annual CNS Meeting, Oct 6-10, Chicago, IL

Vadivelu S and Curry, D. MRI Morphometry of the Uncal Angle: Targeting Medial Epileptic Zones for Both Surgery Resection or Thermal Ablation. 41st Annual Meeting of the AANS/CNS Section on Pediatric Neurological Surgery, St. Louis, MO, Nov 27-30, 2012

Vadivelu S, Agadi S, Schmidt R, Mani P, Patel A, Desai S, Glover C, Jea A. Practice Trends in the Utilization of Intraoperative Neurophysiological Monitoring in Pediatric Neurosurgery. 41st Annual Meeting of the AANS/CNS Section on Pediatric Neurological Surgery, St. Louis, MO, Nov 27-30, 2012

Vadivelu S, Becker D, Patel A, Effendi S, Desai S, Vadivelu S, Jea A, Whitehead W, Dauser RC. Conservative Management of Chiari Malformation in Childhood Transverse Myelitis. 41st Annual Meeting of the AANS/CNS Section on Pediatric Neurological Surgery, St. Louis, MO, Nov 27-30, 2012

Desai S, **Vadivelu S**, Patel A, Jea A. Isolated Cervical Spinal Canal Stenosis in the Pediatric Population and in Williams Syndrome. 41st Annual Meeting of the AANS/CNS Section on Pediatric Neurological Surgery, St. Louis, MO, Nov 27-30, 2012

Vadivelu S, Stewart TJ, Mori S, Ojemann J, Finnerty EF, Reed KA, Matz DG, Johnston MV. Diffusion Tensor Imaging – White Matter Asymmetry in the Dentatothalamic Tract. Robert C. Erwin Literary Award, 2011

Vadivelu S, Rekate H, Ersenio-Jenssen D, Duhaime AC, Narayan RK, Mittler M, Schneider S. Temporal

Delay Association with Post-Traumatic Ventriculomegaly and Childhood Non-Accidental Head Trauma. New York State Neurosurgical Society Resident Research Meeting, 2011

Vadivelu S, Bolognese P, Milhorat T, Mogilner AY, Occipital Neuromodulation for Refractory Headache in the Chiari Malformation Population. Biannual Meeting for Stereotactic and Functional Neurosurgery, Invited Platform Presentation, 2011

Vadivelu S, Rekate H, Ersenio-Jenssen D, Duhaime AC, Narayan RK, Mittler M, Schneider S, Hydrocephalus Associated with Childhood Non-Accidental Head Trauma. 40th Annual Meeting of the AANS/CNS Section on Pediatric Neurological Surgery, Nov 29-Dec 2, Hilton Austin Hotel, Austin, TX, 2011

Vadivelu S, Bolognese P, Milhorat T, Mogilner AY, Occipital Nerve Stimulation Refractory Headache in the Chiari Malformation Population. Robert C. Erwin Literary Award, 2010

Vadivelu S, Ersenio-Jenssen D, Rekate H, Duhaime AC, Narayan RK, Mittler M, Schneider S, Temporal Profile of Delay in Arrival to Care in Perpetrator – Identified Non-Accidental Head Trauma: Observations and Outcomes, 2010 Annual CNS Meeting, Oct 16-21, San Francisco, CA

Vadivelu S, Rekate H, Ersenio-Jenssen D, Duhaime AC, Narayan RK, Mittler M, Schneider S, Post-Traumatic Ventriculomegaly Associated with Childhood Non-Accidental Head Trauma, 39th Annual Meeting of the AANS/CNS Section on Pediatric Neurological Surgery, Renaissance Cleveland Hotel, Cleveland, OH, Nov 30-Dec 3, 2010

Vadivelu S, Stewart TJ, Liu S, Qu Y, Li Q, Silver J, McDonald JW, Oligodendrocytes Derived from ES

Cells Penetrate the Glial Scar and Promote Axon Outgrowth in White Matter after Adult Spinal Cord Injury. Robert C. Erwin Literary Award, 2009

Vadivelu S, Bolognese P, Milhorat T, Mogilner AY, Occipital Neuromodulation for Refractory Headache, 2009 Annual CNS Meeting, Oct 24-29, New Orleans, LA

Vadivelu S, Sharer L, Schulder M, Regression of Multiple Intracranial Meningioma after Cessation of Long Term Progesterone Agonist Therapy, International Meeting for Meningioma and Cerebral Venous System, 2009

Vadivelu S, Silver J, McDonald JW, Oligodendrocytes Derived from ES Cells Penetrate the Glial Scar and Promote Axon Outgrowth in White Matter after adult spinal cord injury. Invited talk. University of Virginia, Department of Neurosurger, 2007

Vadivelu S, Stewart TJ, Liu S, Qu Y, Li Q, Silver J, McDonald JW, ES, Cells Transplantation Prefers White Matter Rather Than Gray Matter Long Distance Axon Outgrowth. ACOS, 1st Place Prize Abstract/Poster

Vadivelu S, Bolognese P, Milhorat T, Mogilner AY, Occipital Nerve Stimulation for Refractory Headache in the Chiari Malformation Population, ACOS, 3rd Place Prize Abstract/Poster

Vadivelu S, Stewart TJ, Mori S, Ojemann J, Johnston MV, Finnerty EF, Reed KA, Matz DG, Diffusion Tensor Imaging–White Matter Asymmetry in the Dentatothalamic Tract. Annual Academy of American Anatomists, Invited platform presentation, 2004

Vadivelu S, Stewart TJ, Liu S, Qu Y, Li Q, Silver J, McDonald JW, Oligodendrocytes Derived from ES Cells Penetrate the Glial Scar and Promote Axon Outgrowth in White Matter after Adult Spinal Cord Injury, Society for Neuroscience, 2001

Vadivelu S, Stewart TJ, Liu S, Qu Y, Li Q, Silver J, McDonald JW, Transplantation of ES Cells Regenerate Preferential Long Distance Axon Outgrowth, Society for Neuroscience, 2000

CURRENT FUNDED RESEARCH

2U54NS065705-II

\$1,759,941.00

NIH/NINDS: Brain Vascular Malformation Consortium: Modifier's of Disease Severity and Progression in Cerebral Cavernous Malformation

(PI: Kim, H; Site PI: Vadivelu, S, 0.6 cal)

8/15/19- 6/30/24

Kim, H (Principal Investigator) NIH/NINDS Grant. Brain Vascular Malformation Consortium (BVMC): Predictor's of Clinical Course. Purpose: The overall goal of the BVMC is to facilitate and advance high-quality clinical research in CCM, SWS, and HHT by providing research infrastructure and maintaining longitudinal patient registries and biorepositories (**Aim 1**), by identifying and validating clinical outcomes and biomarkers for use in clinical trials (**Aim 2**), and by training the next generation of rare disease researchers and funding high-risk/high-payoff pilot studies (**Aim 3**). 8/15/19-6/30/24. **Role: Site-PI**

COMPLETED FUNDED RESEARCH

PTC: PTC-AADC-G002

\$940,245.00

“An Open-Label Trial to Address the Safety of the SmartFlow® MR Compatible Ventricular Cannula for Administering Eladocogene Exuparvovec to

AADC Deficient Pediatric Subjects
(Site PI: Vadivelu, S 0.2 cal) 12/03/21 – 06/30/27

TRAINED INTERNATIONAL PEDIATRICS CEREBROVASCULAR, STROKE

Bruno Vernile 09/1/2024-12-31/2024, Verona, Italy

Pablo Harker 01/2019-6/2019, Bogota, Columbia

TRAINED ANNUAL ASPEN PEDIATRIC CVDS RESIDENTS TRAVELLING FELLOWSHIP
AWARD

ADVISED NEUROSURGERY CLERKSHIP, CEREBROVASCULAR MEDICAL STUDENTS

2017-2018 Alexander Bader Barth Stewart Cody Pack Gabriel Pham Jerome Hoke Jonathan Ellis Justin Streicher Kevin Polacek Mark Johnson Michael Rentz Nisha Giridharan Paul Hochwalt Raymond Scott Sanjit Shah Shenwen Huang Zachary Crawford	2018-2019 Abhijith Matur Adam Miller Alaina Body Alexander Heilman Caleb Winner Chelsea Minoughan Cody Woodhouse David Buchberger Hardy Evans Hector Oliveras Cordero Jaylun Smith Jeffrey Kuerbitz Keagan Gertz Lauren Yoder Mark Johnson Olajide Abiola Patricia Latimer Roxanne Rezaei Sam Faught Zach Porter Zi-Rou Liew	2019-2020 Abhijith Matur Alaina Body Allison Perry Andrew Benza Aron Bercz Atticus Coscia Cody Woodhouse Diana Le Elizabeth Hellman Emily Secrist Eric Dornoff Harold Covert James Nichols Janki Shukla Jeffrey Talarek Justin Hamilton Kaitlyn Hegewald Katherine Sykes Lindsey Wattley Matthew Mendoza Max Yang Sam Marucci Sarah Cunningham Seth Reighard Shane Rayos Del Sol Tyson Matern William Miller Zach Porter Zachary Briggs
---	---	--

2020-2021 Andrew Giltmier Camille Sullivan Caroline Lynch Colin Cotton Daniel Solomon Devin John Diane Le Grace Anastasio James Castiglione Kaelan Chan Kara Farnes Kevin Zhang Kinsey Barhorst Marshall Lukacs Meredith Moore Michael Petrany "Nicholas Auteri" Nora Elson Tatiana Kozin Thomas Troy Titiana Capizzano "Tristan Toca" Udoka Oji Victoria "Tori" Simon Camille Sullivan	2021-2022 Adam Brown Alex Gregath Alexander Cody Alexander Fritz Andrew "Scottie" Emmert Andrew Stephenson Annabelle Gordon Anne Poindexter Antonio Malkoun Apurva Choubey Ayad Ali Benjamin Wissel Caroline Folz Dakota Lipps Delcora Huggins Emilie Buisson Gabriel Gonzalez Gabrielle Petito Gracie Garcia James Castiglione Jared Iding Joonhyuk Lee Julia Spaczai Kiersten Woodyard Laura Somppi Matthew Valenti Michele Christy Monica Lee Natalie Ivey Nathan Lawera Santino Cua Sara Pierpoint Spencer Warden Vanja Tolj Victoria Walker Weston Troja	2022-2023 Alexander Cody Alexander Ortiz Jr. Ali Yamani Amy Cherry Andrew "Scottie" Emmert "Andrew Ku California University of Science and Medicine School of Medicine" Ashley Schulz Benjamin Wissel Caroline Folz Chitra Kumar Christina Feller Claire Weinstein Dallas Soyland Ermina Lee Franco Bull Geet Shukla Jaclyn Youngs Jennifer Meyer Jesse Hsu Jocelyn Meyer Jonathan Blalock Junhwi Yoo Justin Meinert Kimberly Kraus Michaela Reuter Olivia Kerekes Phillip Vorster Shushma Gudla Stefan Marasligiller Troy Carnwath Uchenna Okakpu Xu Tao
--	---	--

2023-2024 Adithya Kumar Alexis Brown Andrew Wu Giancarlo Javier Ventre Jack Reifenberg Janesh Karnati Jenna Slone Katherine Smith Kelson Pike Kevin Gaitonde Max Nutkiewicz Nana Agyeman Nancy Pateqi Nykira Dixon Seth Spencer Street Yara Alfawares	2024-2025 Gabriella Harper Bal Eugene Cho Lauren Schaffer Raghad Kodvawala Kennedy Bates Jeeva Jagabandhu Caroline Hazapis Judy Yoo Raghdad Kodvawala Janesh Karnati	2025-2026
---	--	-----------

TRAINED ASPEN PEDIATRICS CEREBROVASCULAR CONFERENCE INTERNS

Sarah Hoffmann (University of Kentucky) Medical student 2023

Jai Narayan (Duke University) undergraduate student 2023, 2024

Roshan Mehta (Ohio State) undergraduate student 2025

Kavan Vadivelu (Cornell University) undergraduate student 2025

NATIONAL COURSES

2024 Microvascular Anastomoses Lab, Mayfield Education and Research Foundation Keller Lectureship in Surgical Neuroanatomy and Research, Tumor Skull Base sessions, December 12-14, 2024, Mayfield Surgical Innovation Center, Cincinnati, OH

2024 The Ozarks Neuroscience Education (ONE) Clinics Cerebrovascular Bypass Lab, Big Cedar Lodge, Ridgedale, MO

2024 Director of Aspen Conference on Pediatric Cerebrovascular Disease and Stroke Sonography Lab

2023-2024 Director of Aspen Pediatric Cerebrovascular Disease and Stroke Bypass Lab

2023 Attendees: Sarah Hoffman Jai Narajan Phillip Aldana, MD	2024 Attendees: Kelsi Chesney, MD Pranish Kantak, MD
---	--

MENTORSHIP

2025 – 2026 PI AOA National Medical Student Research Initiative for Growth and Innovation in Surgery (ORIGINS)

ACTIVITIES/INTERESTS

1996-1999 University of Missouri Ice Hockey (ACHA, Div. II)

1991-current Concert/Jazz Percussionist

Updated 4/9/2025