

Curriculum Vitae
Mahesh V. Jayaraman M.D.

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EDUCATION

Undergraduate	Brown University B.Sc., Biochemistry and Molecular Biology 1994
Medical School	Brown University School of Medicine M.D., with Honors 1998

POSTGRADUATE TRAINING

Internship	Transitional Internship Santa Clara Valley Medical Center 1998-1999
Residency	Diagnostic Radiology Rhode Island Hospital/Brown University 1999-2003 Chief Resident, 2002-2003
Fellowship	Diagnostic Neuroradiology Stanford University 2003-2004
Fellowship	Interventional Neuroradiology Stanford University 2004-2006

POSTGRADUATE HONORS AND AWARDS

Radiology Resident research award RSNA National meeting, November 2002

RSNA Research award –Brown University, June 2003

Fellow of the Year award – Stanford University, June 2004

Attending Service award – Brown University, June 2016

MILITARY SERVICE

None

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

Board Certification	Diagnostic Radiology American Board of Radiology June, 2003
Board Certification	Certificate of Additional Qualification in Neuroradiology American Board of Radiology November, 2005
Medical Licensure	State of California, License #A83084 (Retired Status) State of Rhode Island, License #12030 State of Massachusetts, License #227635

ACADEMIC APPOINTMENTS

Clinical Instructor in Radiology	Stanford University July 2003-June 2006
Assistant Professor of Diagnostic Imaging	The Warren Alpert Medical School of Brown University September 2006-June 2013
Assistant Professor of Neurosurgery	The Warren Alpert Medical School of Brown University June 2008-June 2013
Associate Professor of Diagnostic Imaging	The Warren Alpert Medical School of Brown University June 2013 – Present
Associate Professor of Neurosurgery	The Warren Alpert Medical School of Brown University June 2013 – Present
Associate Professor of Neurology	The Warren Alpert Medical School of Brown University February 2015 – Present

HOSPITAL APPOINTMENTS

Staff Physician	Rhode Island Hospital Providence, RI August 2006 – Present
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The Miriam Hospital
Providence, RI
August 2006 – Present

Women & Infants' Hospital
Providence, RI
August 2006 - Present

OTHER APPOINTMENTS

HOSPITAL COMMITTEES

Member	Executive Committee Rhode Island Hospital Stroke Center August 2006 – Present
Interim Co-Director	Rhode Island Hospital Stroke Center November 2009 – September 2010
Director	Rhode Island Hospital Neurovascular Center June 2015 - Present

UNIVERSITY COMMITTEES

Member	Education Committee Department of Diagnostic Imaging September 2007 – May 2009
Member	PLME Selection Advisory Board Brown University September 2011 – September 2015

MEMBERSHIP IN SOCIETIES

American Society of Neuroradiology	Senior Member, 2006 - present Scientific session moderator, 2008 annual meeting Editorial Board, AJNR, 2009 – present Member, Clinical Practice Committee, 2012- present Member, Health Policy Committee, 2014-present
Society of NeuroInterventional Surgery	Senior Member, 2006 - present Program Committee, 2009 SNIS Practicum Program Committee, 2010 SNIS Annual Meeting Program Committee, 2012 SNIS Annual Meeting Program Committee, 2014 IESC CV Section Meeting Program Committee, 2015 SNIS Annual Meeting Ad hoc reviewer, Journal of NeuroInterventional Surgery

Member, Membership committee, Oct 2011-2014
Chair, Standards and Guidelines committee, Jan 2013-2016
Program Co-Chair, 2016 SNIS Annual Meeting
Member at Large, SNIS Board, 2016-2017
Audit chair, SNIS Board, 2017-2019

Radiological Society of North America Member, 2000 – present

PUBLICATIONS LIST

ORIGINAL PUBLICATIONS IN PEER REVIEWED JOURNALS

1. Gady J, Boyan S, **Jayaraman M**, et al. HIV risk: no impact on medical student specialty choice. *R I Med* 1995; 78:293-294.
2. **Jayaraman MV**, Mayo-Smith WW, Movson JS, Dupuy DE, Wallach MT. CT of the duodenum: an overlooked segment gets its due. *Radiographics*, Radiographics. 2001 Oct; 21 Spec No: S147-60.
3. **Jayaraman M**, Davis LM. Schwannoma, Cranial Nerve. eMedicine from WebMD. Updated March 17, 2010. Available at: <http://emedicine.medscape.com/article/336141-overview>.
4. Watabe B, **Jayaraman M**, Ramos D. A torsed uterine fibroid presenting as a radiologic challenge. *Med Health R I*. 2003 Jan;86(1):21
5. **Jayaraman MV**, Mayo-Smith WW, Doberstein CE. Intracranial aneurysm of the anterior inferior cerebellar artery: demonstration by multi-detector CT angiography. *AJNR Am J Neuroradiol*. 2003 Aug;24(7):1338-40.
6. Mayo-Smith WW, **Jayaraman MV**, Han RS, Dupuy DE, Movson JS. Multi-institutional computer database for recording nonvascular image-guided interventions. *AJR Am J Roentgenol*. 2003 Dec;181(6):1491-3.
7. **Jayaraman MV**, Mayo-Smith WW, Tung GA, Haas RA, Rogg JM, Mehta NR, Doberstein CE. Detection of intracranial aneurysms: multi-detector row CT angiography compared with DSA. *Radiology*. 2004 Feb;230(2):510-8.
8. **Jayaraman MV**, Mayo-Smith WW. Multi-detector CT angiography of the intra-cranial circulation: normal anatomy and pathology with angiographic correlation. *Clin Radiol*. 2004 Aug;59(8):690-698.
9. Lansberg MG, Fields JD, Albers GW, **Jayaraman MV**, Do HM, Marks MP. Mechanical thrombectomy following intravenous thrombolysis in the treatment of acute stroke. *Arch Neurol* 2005; 62:1763-1765.
10. Marks MP, Wojack JC, Al-Ali F, **Jayaraman M**, Marcellus ML, Connors JJ, Do HM. Angioplasty for symptomatic intracranial stenosis: Clinical outcome. *Stroke* 2006 Apr;37(4):1016-1020.
11. Li G, **Jayaraman MV**, Lad SP, Adler J, Do H, Steinberg GK. Carotid and vertebral rete mirabile in man presenting with intraparenchymal hemorrhage: A case report. *Journal of Stroke and Cerebrovascular Disease* Sep 2006 (15) 228-231.
12. Yoon W, Seo JJ, Kim TS, Do HM, **Jayaraman MV**, Marks MP. Dissection of the V4 segment of the vertebral artery: clinicoradiologic manifestations and endovascular treatment. *Eur Radiol* . 2007 Apr;17(4):983-93. Epub 2006 May 3.

13. **Jayaraman MV**, Do HM, Marks MP. Treatment of traumatic cervical arteriovenous fistulas with N-butyl-2-cyanoacrylate. *AJNR Am J Neuroradiol* 2007; 28(2):352-354.
14. **Jayaraman MV**, Marcellus ML, Do HM, Chang SD, Rosenberg JK, Steinberg GK, Marks MP. Hemorrhage rate in patients with Spetzler-Martin grades IV and V arteriovenous malformations. Is treatment justified? *Stroke* 2007; 38(2):325-329.
15. **Jayaraman MV**, Do HM, Versnick EJ, Steinberg GK, Marks MP. Morphological assessment of middle cerebral artery aneurysms for endovascular treatment. *Journal of Stroke and Cerebrovascular Disease* Mar Apr 2007 (16) 52-56.
16. Mellion ML, **Jayaraman MV**. Use of Neuroimaging in the workup of headache. *Med Health R I.* 2007 Aug; 90(8):249-250.
17. **Jayaraman MV**, Marcellus ML, Hamilton S, Do HM, Campbell D, Chang SD, Steinberg GK, Marks MP. Neurologic Complications of Arterio-venous malformation embolization using liquid embolic agents. *AJNR Am J Neuroradiol.* 2008 Feb;29(2):242-6.
18. Diehn M, Nardini C, Wang DS, McGovern S, **Jayaraman M**, Liang Y, Aldape K, Cha S, Kuo MD. Identification of noninvasive imaging surrogates for brain tumor gene-expression modules. *Proc Natl Acad Sci U S A.* 2008 Apr 1;105(13):5213-8.
19. **Jayaraman MV**. Neurovascular imaging. *Top Magn Reson Imaging.* 2008 Oct;19(5):223
20. **Jayaraman M**, Cloft HJ. Embolization of Brain Arteriovenous Malformations for Cure: Because We Could or Because We Should? *AJNR Am J Neuroradiol.* 2009 Jan;30(1):107-8.
21. **Jayaraman MV**, Chang HS, Ahn SH. An easily identifiable anatomic landmark for fluoroscopically guided sacroplasty: Anatomic description and validation with treatment in 13 patients. *AJNR Am J Neuroradiol.* 2009 May; 30(5): 1070-3.
22. Baek H, **Jayaraman MV**, Karniadakis G. Wall Shear Stress and Pressure Distribution on Aneurysms and Infundibulae in the Posterior Communicating Artery Bifurcation. *Ann Biomed Eng.* 2009 Dec;37(12):2469-87.
23. Vance AZ, **Jayaraman MV**, Dubel GJ, Doberstein CE, Haas RA. Safety of intravenous heparin administration after endovascular treatment of ruptured intracranial aneurysms. *J NeuroIntervent Surg* Dec 2009;1:136-141
24. Baek H, **Jayaraman MV**, Richardson PD, Karniadakis GE. Flow instability and Wall Shear Stress variation in intracranial aneurysms. *J R Soc Interface.* 2009 Dec 18.
25. McTaggart RA, **Jayaraman MV**, Haas RA, Feldman E. Intracranial atherosclerotic disease: epidemiology, imaging and treatment. *Med Health R I.* 2009 Dec;92(12):412-4.
26. Vance AZ, **Jayaraman MV**, Haas RA, Doberstein CE. Intracranial aneurysms: perspectives on the disease and endovascular therapy. *Med Health R I.* 2009 Dec;92(12):388-93.
27. Ahn SH, **Jayaraman MV**. What is interventional radiology? *Med Health R I.* 2009 Dec;92(12):388.
28. **Jayaraman MV**, Haas RA, Do HM, Meyers PM. Should routine CT angiography be performed in patients with suspected aneurysmal subarachnoid hemorrhage? NO!. *Radiology.* 2010 Jan;254(1):314-5;
29. **Jayaraman MV**, McTaggart RA, Sachs GM, Doberstein CE. Cerebellar pial AVM presenting with medullary venous hypertension: imaging and endovascular treatment *J NeuroIntervent Surg.* 2010;2:38-40
30. McTaggart RA, Raghavan D, Haas RA, **Jayaraman MV**. StarClose Vascular Closure Device: Safety and Efficacy of Deployment and Reaccess in a Neurointerventional Radiology Service. *AJNR Am J Neuroradiol.* 2010 Jun;31(6):1148-50

31. Prince EA, **Jayaraman MV**, Haas RA. The use of self expanding intracranial stents in the treatment of acute ischemic stroke. *JVIR Journal of Vascular Interventional Radiology*. 2010 Nov;21(11):1755-9
32. Spader HS, Doberstein CE, Rao AJ, **Jayaraman MV**. Central fever as an early predictor of vasospasm in a child with isolated IVH. *Clinical Neurology Neurosurgery*. 2010 Oct 26.
33. Anor T, Grinberg L, Baek H, Madsen JR, **Jayaraman MV**, Karniadakis GE. Modeling of blood flow in arterial trees. *Wiley Interdiscip Rev Syst Biol Med*. 2010 Sep-Oct;2(5):612-23
34. Prince EA, **Jayaraman MV**, Haas RA. Angiographically documented hemorrhagic conversion of a left MCA embolic stroke during intraarterial thrombolysis. *J NeuroInterv Surg*. 2011(3):246-248.
35. McGillen KA, **Jayaraman MV**, Haas RA. Fluoroscopy markers for minimizing patient and operator radiation exposure during neurointerventional procedures – A call to arms. *J Neurointerv Surg*. 2011 Dec 1;3(4):312-3.
36. Grossberg JA, Potter NS, **Jayaraman MV**. Asymptomatic carotid stenosis: screening and management. *Med Health R I*. 2011 Apr;94(4):89-92
37. Vasudevan K, Spader HS, Grossberg JA, Murphy T, **Jayaraman MV**. Successful endovascular treatment of a holo-hemispheric cerebral arteriovenous fistula in an infant. *J Neurointerv Surg*. 2012 Sep;4(5):e26.
38. Gupta AC, Yoo AJ, Stone J, Barr JC, Brook A, Tutton S, Ortiz O, Hirsch AE, Larvie M, Frey ME, **Jayaraman MV**, Hirsch JA. Percutaneous sacroplasty. *J Neurointerv Surg*. 2012 Sep;4(5):385-9
39. **Jayaraman MV**, Meyers PM, Derdeyn CP, Fraser JF, Hirsch JA, Hussain MS, Blackham KM, Eskey CJ, Jensen ME, Moran CJ, Prestigiacomo CJ, Rasmussen PA, McDougall CG. Reporting Standards for Angiographic Evaluation and Endovascular Treatment of Cerebral Arteriovenous Malformations. *J Neurointerv Surg*. 2012 Sep;4(5):325-30.
40. **Jayaraman MV**, Boxerman JL, Davis LM, Haas RA, Rogg JM. Incidence of extrinsic venous compression of the internal jugular vein in unselected patients undergoing CT angiography. *AJNR Am J Neuroradiol*. 2012 Aug;33(7):1247-50.
41. Blackham KA, Meyers PM, Abruzzo TA, Albuquerque FC, Fiorella D, Fraser J, Frei D, Gandhi CD, Heck DV, Hirsch JA, Hsu DP, **Jayaraman M**, Narayanan S, Prestigiacomo C, Sunshine JL; on behalf of the Society for NeuroInterventional Surgery. Endovascular therapy of acute ischemic stroke: report of the Standards of Practice Committee of the Society of NeuroInterventional Surgery. *J Neurointerv Surg*. 2012 Mar 1;4(2):87-93. Epub 2012 Jan 24.
42. **Jayaraman MV**, Haas RA, Ahn SH. Intra-arterial therapy for acute stroke: Trials and Tribulations. *Med Health RI*. 2011 Dec;94(12):357-9. Review.
43. Boxerman JL, **Jayaraman MV**, Mehan W, Haas RA, Rogg JM. Clinical Stroke Penumbra: Use of NIH Stroke Scale as a Surrogate for CT Perfusion in Patient Triage for Intra-arterial MCA Stroke Therapy. *AJNR Am J Neuroradiol*. 2012 Nov;33(10):1893-900.
44. Cockroft KM, **Jayaraman MV**, Meyers PM, Connolly ES, Derdeyn CP, Amin-Hanjani S, Wilson J, McDougall CG. A Perfect Storm: How ARUBA's Trial Design Challenges Notions of External Validity. *Stroke*. 2012 Jul;43(7):1979-81.
45. Duffis EJ, Gandhi CD, Prestigiacomo CJ, Abruzzo T, Albuquerque F, Bulsara K, Derdeyn CP, Fraser FJ, Hirsch JA, Hussain MS, **Jayaraman MV**, Meyers PM, Narayanan S. Head, neck and brain tumor embolization guidelines. *J Neurointerv Surg*. 2012 Jul;4(4):251-5.
46. **Jayaraman MV**, Grossberg JA, Meisel KM, Shaikhouani A, Silver B. The clinical and radiographic importance of distinguishing partial from near-complete reperfusion following intra-arterial stroke therapy. *AJNR Am J Neuroradiol*. 2013 Jan;34(1):135-9.

47. Hussain MS, Fraser JF, Abruzzo T, Blackham KA, Bulsara KR, Derdeyn CP, Gandhi CD, Hirsch JA, Hsu DP, **Jayaraman MV**, Meyers PM, Narayanan S, Prestigiacomo CJ, Rasmussen PA; On behalf of the Society for NeuroInterventional Surgery. Standard of practice: endovascular treatment of intracranial atherosclerosis. *J Neurointerv Surg.* 2012 Nov;4(6):397-406.
48. Narayanan S, Hurst RW, Abruzzo TA, Albuquerque FC, Blackham KA, Bulsara KR, Derdeyn CP, Gandhi CD, Hirsch JA, Hsu DP, Hussain MS, **Jayaraman MV**, Meyers PM, Patsalides A, Prestigiacomo CJ. Standard of practice: embolization of spinal arteriovenous fistulae, spinal arteriovenous malformations, and tumors of the spinal axis. *J Neurointerv Surg.* 2013 Jan 1;5(1):3-5.
49. **Jayaraman MV**. Cerebral Angiography: Not Yet ready to Join the Dinosaurs. *AJNR Am J Neuroradiol.* 2013 Mar 14. [Epub ahead of print]
50. Hirsch JA, Becker GJ, Derdeyn CP, **Jayaraman MV**, Traynelis VC, Meyers PM. Maintenance of certification: part 2--continuous certification. *J Neurointerv Surg.* 2013 Mar 15. [Epub ahead of print]
51. Patsalides A, Bulsara KR, Hsu DP, Abruzzo T, Narayanan S, **Jayaraman MV**, Duckwiler G, Klucznik RP, Kelly M, Hirsch JA, Heck D, Sunshine J, Frei D, Alexander MJ, Do HM, Meyers PM. Standard of practice: embolization of ruptured and unruptured intracranial aneurysms. *J Neurointerv Surg.* 2013 Apr 10. [Epub ahead of print]
52. Fraser JF, Hussain MS, Eskey C, Abruzzo T, Bulsara K, English J, Blackham K, Do HM, Prestigiacomo C, **Jayaraman MV**, Patsalides A, Kelly M, Sunshine JL, Meyers P; on behalf of the Society for NeuroInterventional Surgery. Reporting standards for endovascular chemotherapy of head, neck and CNS tumors. *J Neurointerv Surg.* 2013 Jul 4. [Epub ahead of print] PubMed PMID: 23828325.
53. Narayanan S, Singer R, Abruzzo TA, Hussain MS, Powers CJ, Prestigiacomo CJ, Heck DV, Sunshine JL, Kelly M, **Jayaraman MV**, Meyers PM; on behalf of the Standards and Guidelines Committee of the Society of NeuroInterventional Surgery. Reporting standards for balloon test occlusion. *J Neurointerv Surg.* 2013 Jun 22. [Epub ahead of print] PubMed PMID: 23794674.
54. Ratanaprasatporn L, Grossberg JA, Spader HS, **Jayaraman MV**. Endovascular treatment of acute carotid occlusion. *Clin Neurol Neurosurg.* 2013 Oct 23. doi:pii: S0303-8467(13)00416-2. 10.1016/j.clineuro.2013.10.008. [Epub ahead of print]
55. Powers CJ, Hirsch JA, Hussain MS, Patsalides AT, Blackham KA, Narayanan S, Lee SK, Fraser JF, Bulsara KR, Prestigiacomo CJ, Gandhi CD, Abruzzo T, Do HM, Meyers PM, Albuquerque FC, Frei D, Kelly ME, Pride GL, **Jayaraman MV**; on behalf of the Standards and Guidelines committee of the Society of NeuroInterventional Surgery. Standards of practice and reporting standards for carotid artery angioplasty and stenting. *J Neurointerv Surg.* 2013 Nov 12. doi: 10.1136/neurintsurg-2013-011013. [Epub ahead of print]
56. Chandra RV, Meyers PM, Hirsch JA, Abruzzo T, Eskey CJ, Hussain MS, Lee SK, Narayanan S, Bulsara KR, Gandhi CD, Do HM, Prestigiacomo CJ, Albuquerque FC, Frei D, Kelly ME, Mack WJ, Pride GL, **Jayaraman MV**; on behalf of the Society of NeuroInterventional Surgery. Vertebral augmentation: report of the Standards and Guidelines Committee of the Society of NeuroInterventional Surgery. *J Neurointerv Surg.* 2013 Nov 6. doi: 10.1136/neurintsurg-2013-011012.
57. March BT, **Jayaraman MV**. Aneurysms, arteriovenous malformations, and dural arteriovenous fistulas: diagnosis and treatment. *Semin Roentgenol.* 2014 Jan;49(1):10-21.
58. Hirsch JA, Turk AS, Mocco J, Fiorella DA, **Jayaraman MV**, Meyers PM, Yoo AJ, Manchikanti L. Evidence-based clinical practice for the neurointerventionalist. *J*

- Neurointerv Surg. 2014 Feb 27. doi: 10.1136/neurintsurg-2014-011155. [Epub ahead of print]
59. **Jayaraman MV**, McTaggart RA. Future acute ischemic stroke trials should randomize on the angio table. *J Neurointerv Surg.* 2014 May 20. pii: neurintsurg-2014-011263. doi: 10.1136/neurintsurg-2014-011263. [Epub ahead of print] PubMed PMID: 24850155.
 60. Gandhi CD, Bulsara KR, Fifi J, Kass-Hout T, Grant RA, Delgado Almandoz JE, English J, Meyers PM, Abruzzo T, Prestigiacomo CJ, Powers CJ, Lee SK, Albani B, Do HM, Eskey CJ, Patsalides A, Hetts S, Hussain MS, Ansari SA, Hirsch JA, Kelly M, Rasmussen P, Mack W, Pride GL, Alexander MJ, **Jayaraman MV**; SNIS Standards and Guidelines Committee. Platelet function inhibitors and platelet function testing in neurointerventional procedures. *J Neurointerv Surg.* 2014 Oct;6(8):567-77. doi: 10.1136/neurintsurg-2014-011357. Epub 2014 Jul 23. PubMed PMID: 25056369.
 61. Gross R, Ali R, Kole M, Dorbeistein C, **Jayaraman MV**, Khan M. Tentorial dural arteriovenous fistula presenting as myelopathy: Case series and review of literature. *World J Clin Cases.* 2014 Dec 16;2(12):907-11. doi: 10.12998/wjcc.v2.i12.907. PubMed PMID: 25516869; PubMed Central PMCID: PMC4266842.
 62. McTaggart RA, Jovin TG, Lansberg MG, Mlynash M, **Jayaraman MV**, Choudhri OA, Inoue M, Marks MP, Albers GW. Alberta Stroke Program Early Computed Tomographic Scoring Performance in a Series of Patients Undergoing Computed Tomography and MRI: Reader Agreement, Modality Agreement, and Outcome Prediction. *Stroke.* 2015 Feb;46(2):407-12.
 63. **Jayaraman MV**, Hussain MS, Abruzzo T, Albani B, Albuquerque FC, Alexander MJ, Ansari SA, Arthur AS, Baxter B, Bulsara KR, Chen M, Delgado-Almandoz JA, Fraser JF, Heck DV, Hetts SW, Kelly M, Lee SK, Leslie-Mawzi T, McTaggart RA, Meyers PM, Prestigiacomo C, Pride GL, Patsalides A, Starke RM, Tarr RW, Frei D, Rasmussen P; Standards and Guidelines Committee of the Society of NeuroInterventional Surgery (SNIS). Embolectomy for stroke with emergent large vessel occlusion (ELVO): report of the Standards and Guidelines Committee of the Society of NeuroInterventional Surgery. *J Neurointerv Surg.* 2015 May;7(5):316-21.
 64. Antevy P, McTaggart RA, **Jayaraman MV**. A revolution in stroke care. The results of recent stroke trials will have a profound impact on the EMS community. *EMS World.* 2015 May;44(5):21-5.
 65. Goyal M, Menon BK, Demchuk A, Saver JL, Eesa M, Majoie C, **Jayaraman M**, Hill MD. Proposed methodology and classification of Infarct in New Territory (INT) after endovascular stroke treatment. *J Neurointerv Surg.* 2015 Jun 16. pii: neurintsurg 2015-011839. doi: 10.1136/neurintsurg-2015-011839. [Epub ahead of print] Review.
 66. McTaggart RA, Ansari SA, Goyal M, Abruzzo TA, Albani B, Arthur AJ, Alexander MJ, Albuquerque FC, Baxter B, Bulsara KR, Chen M, Almandoz JE, Fraser JF, Frei D, Gandhi CD, Heck DV, Hetts SW, Hussain MS, Kelly M, Klucznik R, Lee SK, Leslie-Mawzi T, Meyers PM, Prestigiacomo CJ, Pride GL, Patsalides A, Starke RM, Sunenshine P, Rasmussen PA, **Jayaraman MV**; Standards and Guidelines Committee of the Society of NeuroInterventional Surgery (SNIS). Initial hospital management of patients with emergent large vessel occlusion (ELVO): report of the standards and guidelines committee of the Society of NeuroInterventional Surgery. *J Neurointerv Surg.* 2015 Aug 31. pii: neurintsurg-2015-011984. doi: 10.1136/neurintsurg-2015-011984. [Epub ahead of print] PubMed PMID: 26323793.
 67. Wojak JC, Abruzzo TA, Bello JA, Blackham KA, Hirsch JA, **Jayaraman MV**, Dariushnia SR, Meyers PM, Midia M, Russell EJ, Walker TG, Nikolic B. Quality Improvement Guidelines for Adult Diagnostic Cervicocerebral Angiography: Update Cooperative Study

- between the Society of Interventional Radiology (SIR), American Society of Neuroradiology (ASNR), and Society of NeuroInterventional Surgery (SNIS). *J Vasc Interv Radiol*. 2015 Nov;26(11):1596-608. doi: 10.1016/j.jvir.2015.07.002. Epub 2015 Sep 12. PubMed PMID: 26372000.
68. Lee SK, Hetts SW, Halbach V, terBrugge K, Ansari SA, Albani B, Abruzzo T, Arthur A, Alexander MJ, Albuquerque FC, Baxter B, Bulsara KR, Chen M, Delgado Almandoz JE, Fraser JF, Frei D, Gandhi CD, Heck D, Hussain MS, Kelly M, Klucznik R, Leslie-Mazwi T, McTaggart RA, Meyers PM, Patsalides A, Prestigiacomo C, Pride GL, Starke R, Sunenshine P, Rasmussen P, **Jayaraman MV**; Standard and Guidelines Committee for the Society of Neurointerventional Surgery. Standard and Guidelines: Intracranial Dural Arteriovenous Shunts. *J Neurointerv Surg*. 2015 Nov 27. pii: neurintsurg-2015-012116. doi: 10.1136/neurintsurg-2015-012116. [Epub ahead of print] PubMed PMID: 26614491.
 69. Tracy A, Klinge P, Morrison J, **Jayaraman MV**, Kriz PK. Traumatic Superficial Temporal Artery Pseudoaneurysm in a Helmeted Lacrosse Player. *Curr Sports Med Rep*. 2016 Jan-Feb;15(1):13-15. PubMed PMID: 26745163.
 70. Heit JJ, Do HM, Prestigiacomo CJ, Delgado-Almandoz JA, English J, Gandhi CD, Albuquerque FC, Narayanan S, Blackham KA, Abruzzo T, Albani B, Fraser JF, Heck DV, Hussain MS, Lee SK, Ansari SA, Hetts SW, Bulsara KR, Kelly M, Arthur AS, Patsalides A, Pride GL, Powers CJ, Alexander MJ, Meyers PM, **Jayaraman MV**; SNIS Standards and Guidelines committee. Guidelines and parameters: percutaneous sclerotherapy for the treatment of head and neck venous and lymphatic malformations. *J Neurointerv Surg*. 2016 Jan 22. pii: neurintsurg-2015-012255. doi: 10.1136/neurintsurg-2015-012255. [Epub ahead of print] PubMed PMID: 26801946.
 71. Goyal M, Menon BK, Krings T, Patil S, Qazi E, McTaggart RA, Almekhlafi MA, Jehan R, Saver J, **Jayaraman MV**. What constitutes the M1 segment of the middle cerebral artery? *J Neurointerv Surg*. 2016 Jan 11. pii: neurintsurg-2015-012191. doi: 10.1136/neurintsurg-2015-012191. [Epub ahead of print] PubMed PMID: 26863104.
 72. Lavine SD, Cockroft K, Hoh B, Bambakidis N, Khalessi AA, Woo H, Riina H, Siddiqui A, Hirsch JA, Chong W, Rice H, Wenderoth J, Mitchell P, Coulthard A, Signh TJ, Phatorous C, Khangure M, Klurfan P, terBrugge K, Iancu D, Gunnarsson T, Jansen O, Muto M, Szikora I, Pierot L, Brouwer P, Gralla J, Renowden S, Andersson T, Fiehler J, Turjman F, White P, Januel AC, Spelle L, Kulcsar Z, Chapot R, Spelle L, Biondi A, Dima S, Taschner C, Szajner M, Krajina A, Sakai N, Matsumaru Y, Yoshimura S, Ezura M, Fujinaka T, Iihara K, Ishii A, Higashi T, Hirohata M, Hyodo A, Ito Y, Kawanishi M, Kiyosue H, Kobayashi E, Kobayashi S, Kuwayama N, Matsumoto Y, Miyachi S, Murayama Y, Nagata I, Nakahara I, Nemoto S, Niimi Y, Oishi H, Satomi J, Satow T, Sugiu K, Tanaka M, Terada T, Yamagami H, Diaz O, Lylyk P, **Jayaraman MV**, Patsalides A, Gandhi CD, Lee SK, Abruzzo T, Albani B, Ansari SA, Arthur AS, Baxter BW, Bulsara KR, Chen M, Delgado Almandoz JE, Fraser JF, Heck DV, Hetts SW, Hussain MS, Klucznik RP, Leslie-Mawzi TM, Mack WJ, McTaggart RA, Meyers PM, Mocco J, Prestigiacomo CJ, Pride GL, Rasmussen PA, Starke RM, Sunenshine PJ, Tarr RW, Frei DF, Ribo M, Nogueira RG, Zaidat OO, Jovin T, Linfante I, Yavagal D, Liebeskind D, Novakovic R, Pongpech S, Rodesch G, Soderman M, terBrugge K, Taylor A, Krings T, Orbach D, Biondi A, Picard L, Suh DC, Tanaka M, Zhang HQ. Training Guidelines for Endovascular Ischemic Stroke Intervention: An International Multi-Society Consensus Document. *AJNR Am J Neuroradiol*. 2016 Feb 18. [Epub ahead of print] PubMed PMID: 26892982.
 73. Teleb MS, Ver Hage A, Carter J, **Jayaraman MV**, McTaggart RA. Stroke vision, aphasia, neglect (VAN) assessment-a novel emergent large vessel occlusion screening tool: pilot study and comparison with current clinical severity indices. *J Neurointerv Surg*. 2016 Feb

17. pii: neurintsurg-2015-012131. doi: 10.1136/neurintsurg-2015-012131. [Epub ahead of print] PubMed PMID: 26891627.
74. **Jayaraman MV**, Iqbal A, Silver B, Siket MS, Amedee C, McTaggart RA, Paolucci G, Rhodes J, Potvin J, Tucker M, Alexander-Scott N. Developing a statewide protocol to ensure patients with suspected emergent large vessel occlusion are directly triaged in the field to a comprehensive stroke center: how we did it. *J Neurointerv Surg*. 2016 Mar 3. pii: neurintsurg-2016-012275. doi: 10.1136/neurintsurg-2016-012275. [Epub ahead of print]
 75. Yaghi S, Rostanski SK, Boehme AK, Martin-Schild S, Samai A, Silver B, Blum CA, **Jayaraman MV**, Siket MS, Khan M, Furie KL, Elkind MS, Marshall RS, Willey JZ. Imaging Parameters and Recurrent Cerebrovascular Events in Patients With Minor Stroke or Transient Ischemic Attack. *JAMA Neurol*. 2016 Mar 21. doi: 10.1001/jamaneurol.2015.4906. [Epub ahead of print] PubMed PMID: 26998948.
 76. Yakhkind A, McTaggart RA, **Jayaraman MV**, Siket MS, Silver B and Yaghi S (2016) Minor Stroke and Transient Ischemic Attack: Research and Practice. *Front. Neurol*. 7:86. doi: 10.3389/fneur.2016.00086
 77. Doberstein CA, Bouley A, Silver B, Morrison JF, **Jayaraman MV**. Ruptured aneurysms of the intradural artery of adamkiewicz: Angiographic features and treatment options. *Clin Neurol Neurosurg*. 2016 Jul;146:152-5. doi: 10.1016/j.clineuro.2016.05.013. Epub 2016 May 12. Review. PubMed PMID: 27259283.
 78. McTaggart RA, Yaghi S, Baird G, Haas RA, **Jayaraman MV**. Decreasing procedure times with a standardized approach to ELVO cases. *J Neurointerv Surg*. 2016 Jul 8. pii: neurintsurg-2016-012518. doi: 10.1136/neurintsurg-2016-012518. [Epub ahead of print] PubMed PMID: 27402859.
 79. Khan MA, Baird GL, Miller D, Patel A, Tsekhan S, Yaghi S, Puri A, **Jayaraman M**, Henninger N, Silver B. Endovascular treatment of acute ischemic stroke in nonagenarians compared with younger patients in a multicenter cohort. *J Neurointerv Surg*. 2016 Jul 11. pii: neurintsurg-2016-012427. doi: 10.1136/neurintsurg-2016-012427. [Epub ahead of print] PubMed PMID: 27402857.
 80. Satti S, Chen J, Sivapatham T, **Jayaraman M**, Orbach D. Mechanical thrombectomy for pediatric acute ischemic stroke: review of the literature. *J Neurointerv Surg*. 2016 Jul 22. pii: neurintsurg-2016-012320. doi: 10.1136/neurintsurg-2016-012320. [Epub ahead of print] Review. PubMed PMID: 27448827.
 81. Pride GL, Fraser JF, Gupta R, Alberts MJ, Rutledge JN, Fowler R, Ansari SA, Abruzzo T, Albani B, Arthur A, Baxter B, Bulsara KR, Chen M, Delgado Almandoz JE, Gandhi CD, Heck D, Hets SW, Hirsch JA, Hussain MS, Klucznik R, Lee SK, Mack WJ, Leslie-Mazwi T, McTaggart RA, Meyers PM, Mocco J, Prestigiacomo C, Patsalides A, Rasmussen P, Starke RM, Sunenshine P, Frei D, **Jayaraman MV**; Standards and Guidelines Committee of the Society of NeuroInterventional Surgery (SNIS).. Prehospital care delivery and triage of stroke with emergent large vessel occlusion (ELVO): report of the Standards and Guidelines Committee of the Society of Neurointerventional Surgery. *J Neurointerv Surg*. 2016 Oct 5. pii: neurintsurg-2016-012699. doi: 10.1136/neurintsurg-2016-012699. PubMed PMID: 27707873.
 82. McTaggart RA, Tung EL, Yaghi S, Cutting SM, Hemendinger M, Gale HI, Baird GL, Haas RA, **Jayaraman MV**. Continuous aspiration prior to intracranial vascular embolectomy (CAPTIVE): a technique which improves outcomes. *J Neurointerv Surg*. 2016 Dec 16. PubMed PMID: 27986848
 83. McTaggart RA, Yaghi S, Sacchetti DC, Haas RA, Hemendinger M, Arcuri D, Rogg JM, Furie KL, **Jayaraman MV**. Mechanical embolectomy for acute ischemic stroke beyond six

- hours from symptom onset using MRI based perfusion imaging. *Journal of Neurological Sciences*. 15 Apr 2017. (375) 395-400.
84. McTaggart RA, Yaghi S, Cutting SM, Hemendinger M, Baird GL, Haas RA, Furie KL, **Jayaraman MV**. Association of a Primary Stroke Center Protocol for Suspected Stroke by Large-Vessel Occlusion With Efficiency of Care and Patient Outcomes. *JAMA Neurol*. 2017 Jul 1;74(7):793-800. doi: 10.1001/jamaneurol.2017.0477. PubMed PMID: 28492918.
 85. Patil MS, **Jayaraman MV**, Ahn SH. Vascular closure devices in stroke patients receiving tissue plasminogen activator: A retrospective analysis from an academic tertiary medical center and a teaching community hospital stroke database. *Clin Neurol Neurosurg*. 2017 Mar 29;157:22-24. doi: 10.1016/j.clineuro.2017.03.023. [Epub ahead of print] PubMed PMID: 28384594.
 86. Doberstein CA, Torabi R, Yan SC, McTaggart R, Doberstein C, **Jayaraman M**. Current Strategies in the Surgical Management of Ischemic Stroke. *R I Med J* (2013). 2017 Jun 1;100(6):25-29. PubMed PMID: 28564665.
 87. **Jayaraman MV**, McTaggart RA, Goyal M. Unresolved Issues in Thrombectomy. *Curr Neurol Neurosci Rep*. 2017 Sep;17(9):69. doi: 10.1007/s11910-017-0776-4. Review. PubMed PMID: 28744672.
 88. Goyal M, Wilson AT, Kamal N, McTaggart RA, **Jayaraman MV**, Fisher M, Hill MD. Amartya Sen and the Organization of Endovascular Stroke Treatment. *Stroke*. 2017 Aug;48(8):2310-2312. doi: 10.1161/STROKEAHA.117.017136. Epub 2017 Jul 13. PubMed PMID: 28706120.
 89. Dakay K, Chang AD, Hemendinger M, Cutting S, McTaggart RA, **Jayaraman MV**, Chu A, Panda N, Song C, Merkler A, Gialdini G, Kummer B, Lerario MP, Kamel H, Elkind MSV, Furie KL, Yaghi S. Left Atrial Enlargement and Anticoagulation Status in Patients with Acute Ischemic Stroke and Atrial Fibrillation. *J Stroke Cerebrovasc Dis*. 2017 Sep 13. pii: S1052-3057(17)30435-4. doi: 10.1016/j.jstrokecerebrovasdis.2017.08.025. [Epub ahead of print] PubMed PMID: 28918087.
 90. Tung EL, McTaggart RA, Baird GL, Yaghi S, Hemendinger M, Dibiasio EL, Hidlay DT, Tung GA, **Jayaraman MV**. Rethinking Thrombolysis in Cerebral Infarction 2b: Which Thrombolysis in Cerebral Infarction Scales Best Define Near Complete Recanalization in the Modern Thrombectomy Era? *Stroke*. 2017 Sep;48(9):2488-2493. doi: 10.1161/STROKEAHA.117.017182. Epub 2017 Aug 3. PubMed PMID: 28775136.
 91. Yaghi S, Herber C, Boehme AK, Andrews H, Willey JZ, Rostanski SK, Siket M, **Jayaraman MV**, McTaggart RA, Furie KL, Marshall RS, Lazar RM, Boden-Albala B. The Association between Diffusion MRI-Defined Infarct Volume and NIHSS Score in Patients with Minor Acute Stroke. *J Neuroimaging*. 2017 Jul;27(4):388-391. doi: 10.1111/jon.12423. Epub 2017 Jan 9. PubMed PMID: 28066971; PubMed Central PMCID: PMC5518742.
 92. Leslie-Mazwi T, Chen M, Yi J, Starke RM, Hussain MS, Meyers PM, McTaggart RA, Pride GL, Ansari S, Abruzzo T, Albani B, Arthur AS, Baxter BW, Bulsara KR, Delgado Almandoz JE, Gandhi CD, Heck D, Hetts SW, Klucznik RP, **Jayaraman MV**, Lee SK, Mack WJ, Mocco J, Prestigiacomo C, Patsalides A, Rasmussen P, Sunenshine P, Frei D, Fraser JF; Standards and Guidelines committee of the Society of NeuroInterventional Surgery (SNIS). Post-thrombectomy management of the ELVO patient: Guidelines from the Society of NeuroInterventional Surgery. *J Neurointerv Surg*. 2017 Sep 29. pii: neurintsurg-2017-013270. doi: 10.1136/neurintsurg-2017-013270. [Epub ahead of print] PubMed PMID: 28963364.
 93. Yaghi S, Chang AD, Ricci BA, **Jayaraman MV**, McTaggart RA, Hemendinger M, Narwal P, Dakay K, MacGrory B, Cutting SM, Burton TM, Song C, Mehanna E, Siket M, Madsen TE, Reznik M, Merkler AE, Lerario MP, Kamel H, Elkind MSV, Furie KL. Early Elevated

- Troponin Levels After Ischemic Stroke Suggests a Cardioembolic Source. *Stroke*. 2017 Nov 22. pii: STROKEAHA.117.019395. doi: 10.1161/STROKEAHA.117.019395. [Epub ahead of print] PubMed PMID: 29167390.
94. Gandhi CD, Al Mufti F, Singh IP, Abruzzo T, Albani B, Ansari SA, Arthur AS, Bain M, Baxter BW, Bulsara KR, Caplan JM, Chen M, Dabus G, Frei D, Hetts SW, Hussain MS, **Jayaraman MV**, Kayan Y, Klucznik RP, Lee SK, Mack WJ, Leslie-Mazwi T, McTaggart RA, Meyers PM, Mokin M, Patsalides AT, Prestigiacomo CJ, Pride GL Jr, Starke RM, Sunenshine PJ, Fraser JF; Standards and Guidelines committee of the Society of NeuroInterventional Surgery (SNIS). Neuroendovascular management of emergent large vessel occlusion: update on the technical aspects and standards of practice by the Standards and Guidelines Committee of the Society of NeuroInterventional Surgery. *J Neurointerv Surg*. 2018 Mar;10(3):315-320. doi: 10.1136/neurintsurg-2017-013554. Epub 2018 Jan 11. PubMed PMID: 29326380.
 95. Furie KL, **Jayaraman MV**. 2018 Guidelines for the Early Management of Patients With Acute Ischemic Stroke. *Stroke*. 2018 Mar;49(3):509-510. doi: 10.1161/STROKEAHA.118.020176. Epub 2018 Jan 24. PubMed PMID: 29367335.
 96. **Jayaraman MV**, McTaggart RA. Endovascular Treatment of Anterior Circulation Large Vessel Occlusion in the Elderly. *Front Neurol*. 2018 Jan 19;8:713. doi: 10.3389/fneur.2017.00713. eCollection 2017. Review. PubMed PMID: 29403421; PubMed Central PMCID: PMC5780400.
 97. Sacks D, Baxter B, Campbell BCV, Carpenter JS, Cognard C, Dippel D, Eesa M, Fischer U, Hausegger K, Hirsch JA, Hussain MS, Jansen O, **Jayaraman MV**, Khalessi AA, Kluck BW, Lavine S, Meyers PM, Ramee S, Rüfenacht DA, Schirmer CM, Vorwerk D. Multisociety Consensus Quality Improvement Revised Consensus Statement for Endovascular Therapy of Acute Ischemic Stroke: From the American Association of Neurological Surgeons (AANS), American Society of Neuroradiology (ASNR), Cardiovascular and Interventional Radiology Society of Europe (CIRSE), Canadian Interventional Radiology Association (CIRA), Congress of Neurological Surgeons (CNS), European Society of Minimally Invasive Neurological Therapy (ESMINT), European Society of Neuroradiology (ESNR), European Stroke Organization (ESO), Society for Cardiovascular Angiography and Interventions (SCAI), Society of Interventional Radiology (SIR), Society of NeuroInterventional Surgery (SNIS), and World Stroke Organization (WSO). *J Vasc Interv Radiol*. 2018 Feb 23. pii: S1051-0443(17)31073-4. doi: 10.1016/j.jvir.2017.11.026. [Epub ahead of print] PubMed PMID: 29478797.
 98. James B, Chang AD, McTaggart RA, Hemendinger M, Mac Grory B, Cutting SM, Burton TM, Reznik ME, Thompson B, Wendell L, Mahta A, Siket M, Madsen TE, Sheth KN, Nouh A, Furie KL, **Jayaraman MV**, Khatri P, Yaghi S. Predictors of symptomatic intracranial haemorrhage in patients with an ischaemic stroke with neurological deterioration after intravenous thrombolysis. *J Neurol Neurosurg Psychiatry*. 2018 Feb 27. pii: jnnp-2017-317341. doi: 10.1136/jnnp-2017-317341. [Epub ahead of print] PubMed PMID: 29487169.
 99. Sacchetti DC, Cutting SM, McTaggart RA, Chang AD, Hemendinger M, Mac Grory B, Siket MS, Burton T, Thompson B, Rostanski SK, Prabhakaran S, Willey JZ, Marshall RS, Elkind MS, Khatri P, Furie KL, **Jayaraman MV**, Yaghi S. Perfusion imaging and recurrent cerebrovascular events in intracranial atherosclerotic disease or carotid occlusion. *Int J Stroke*. 2018 Jan 1:1747493018764075. doi: 10.1177/1747493018764075. [Epub ahead of print] PubMed PMID: 29502498.
 100. Goyal M, Menon BK, Wilson AT, Almekhlafi MA, McTaggart R, **Jayaraman M**, Demchuk AM, Hill MD. Primary to comprehensive stroke center transfers:

- Appropriateness, not futility. *Int J Stroke*. 2018 Jan 1:1747493018764072. doi: 10.1177/1747493018764072. [Epub ahead of print] PubMed PMID: 29508654.
101. Ricci B, Chang AD, Hemendinger M, Dakay K, Cutting S, Burton T, MacGrory B, Narwal P, Song C, Chu A, Mehanna E, McTaggart R, **Jayaraman M**, Furie K, Yaghi S. A Simple Score That Predicts Paroxysmal Atrial Fibrillation on Outpatient Cardiac Monitoring after Embolic Stroke of Unknown Source. *J Stroke Cerebrovasc Dis*. 2018 Feb 28. pii: S1052-3057(18)30044-2. doi: 10.1016/j.jstrokecerebrovasdis.2018.01.028. [Epub ahead of print] PubMed PMID: 29501269.
 102. Yaghi S, Chang AD, Hung P, Mac Grory B, Collins S, Gupta A, Reynolds J, Finn CB, Hemendinger M, Cutting SM, McTaggart RA, **Jayaraman M**, Leasure A, Sansing L, Panda N, Song C, Chu A, Merkle A, Gialdini G, Sheth KN, Kamel H, Elkind MSV, Greer D, Furie K, Atalay M. Left Atrial Appendage Morphology and Embolic Stroke of Undetermined Source: A Cross-Sectional Multicenter Pilot Study. *J Stroke Cerebrovasc Dis*. 2018 Feb 2. pii: S1052-3057(17)30710-3. doi: 10.1016/j.jstrokecerebrovasdis.2017.12.036. [Epub ahead of print] PubMed PMID: 29398537.
 103. Eskey CJ, Meyers PM, Nguyen TN, Ansari SA, **Jayaraman M**, McDougall CG, DeMarco JK, Gray WA, Hess DC, Higashida RT, Pandey DK, Peña C, Schumacher HC; American Heart Association Council on Cardiovascular Radiology and Intervention and Stroke Council. Indications for the Performance of Intracranial Endovascular Neurointerventional Procedures: A Scientific Statement From the American Heart Association. *Circulation*. 2018 Apr 19. pii: CIR.0000000000000567. doi: 10.1161/CIR.0000000000000567. [Epub ahead of print] Review. PubMed PMID: 29674324.
 104. Reznik ME, Yaghi S, **Jayaraman MV**, McTaggart RA, Hemendinger M, Mac Grory BC, Burton TM, Cutting SM, Thompson BB, Wendell LC, Mahta A, Potter NS, Daiello LA, Kosar CM, Jones RN, Furie KL. Level of consciousness at discharge and associations with outcome after ischemic stroke. *J Neurol Sci*. 2018 Jul 15;390:102-107. doi: 10.1016/j.jns.2018.04.022. Epub 2018 Apr 14. PubMed PMID: 29801867.
 105. **Jayaraman MV**, Kishkovich T, Baird GL, Hemendinger ML, Tung EL, Yaghi S, Cutting S, Saad A, Burton TM, Mac Grory B, Haas RA, Furie KL, McTaggart RA. Association between age and outcomes following thrombectomy for anterior circulation emergent large vessel occlusion is determined by degree of recanalisation. *J Neurointerv Surg*. 2018 Jun 1. pii: neurintsurg-2018-013964. doi: 10.1136/neurintsurg-2018-013964. [Epub ahead of print] PubMed PMID: 29858396.
 106. Reznik ME, Yaghi S, **Jayaraman MV**, McTaggart RA, Hemendinger M, Mac Grory BC, Burton TM, Cutting SM, Siket MS, Madsen TE, Thompson BB, Wendell LC, Mahta A, Potter NS, Furie KL. Baseline NIH Stroke Scale is an inferior predictor of functional outcome in the era of acute stroke intervention. *Int J Stroke*. 2018 Jan 1:1747493018783759. doi: 10.1177/1747493018783759. [Epub ahead of print] PubMed PMID: 29956598.
 107. Hidayat DT, McTaggart RA, Baird G, Yaghi S, Hemendinger M, Tung EL, Dibiasio EL, Haas RA, **Jayaraman MV**. Accuracy of smartphone-based evaluation of Emergent Large Vessel Occlusion on CTA. *Clin Neurol Neurosurg*. 2018 Jun 11;171:135-138. doi: 10.1016/j.clineuro.2018.06.012. [Epub ahead of print] PubMed PMID: 29909185.
 108. Madsen TE, DeCroce-Movson E, Hemendinger M, McTaggart RA, Yaghi S, Cutting S, Furie KL, Saad A, Siket MS, **Jayaraman MV**. Sex differences in 90-day outcomes after mechanical thrombectomy for acute ischemic stroke. *J Neurointerv Surg*. 2018 Aug 10. pii: neurintsurg-2018-014050. doi: 10.1136/neurintsurg-2018-014050. [Epub ahead of print] PubMed PMID: 30097482.
 109. Pierot L, **Jayaraman MV**, Szikora I, Hirsch JA, Baxter B, Miyachi S, Mahadevan J, Chong W, Mitchell PJ, Coulthard A, Rowley HA, Sanelli PC, Tampieri D, Brouwer PA, Fiehler J,

Kocer N, Vilela P, Rovira A, Fischer U, Caso V, van der Worp B, Sakai N, Matsumaru Y, Yoshimura SI, Anxionnat R, Desal H, Biscoito L, Pumar JM, Diaz O, Fraser JF, Linfante I, Liebeskind DS, Nogueira RG, Hacke W, Brainin M, Yan B, Soderman M, Taylor A, Pongpech S, Tanaka M, Karel T; Asian Australian Federation of Interventional and Therapeutic Neuroradiology (AAFITN), Australian and New Zealand Society of Neuroradiology (ANZSNR), American Society of Neuroradiology (ASNR), Canadian Society of Neuroradiology (CSNR), European Society of Minimally Invasive Neurological Therapy (ESMINT), European Society of Neuroradiology (ESNR), European Stroke Organization (ESO), Japanese Society for NeuroEndovascular Therapy (JSNET), The French Society of Neuroradiology (SFNR) Ibero-Latin American Society of Diagnostic and Therapeutic Neuroradiology (SILAN), Society of NeuroInterventional Surgery (SNIS), Society of Vascular and Interventional Neurology (SVIN), World Stroke Organization (WSO), World Federation of Interventional Neuroradiology (WFITN). Standards of practice in acute ischemic stroke intervention: international recommendations. *J Neurointerv Surg*. 2018 Aug 28. pii: neurintsurg-2018-014287. doi:10.1136/neurintsurg-2018-014287. [Epub ahead of print] PubMed PMID: 30154252.

OTHER PEER REVIEWED PUBLICATIONS

BOOKS AND BOOK CHAPTERS

1. Lim M, Sinclair J, **Jayaraman MV**, Chang SD. Neurobase. Vein of Galen Malformations. Gilman S, Goldstein GW, Waxman SG. Medlink.com. 2004.
2. Lim M, Sinclair J, **Jayaraman MV**, Chang SD. Neurobase. Vein of Galen Malformations. Gilman S, Goldstein GW, Waxman SG. Medlink.com. 2005.
3. **Jayaraman MV**. Preoperative and Therapeutic endovascular approaches for spinal tumors. Tumors of the Spine. Kim DH, Chang U, Kim S et al. Saunders Philadelphia. 2008.
4. Vertinsky T, **Jayaraman MV**, Do HM. Radiographic Evaluation of Lesions within the Vertebrae. Tumors of the Spine. Kim DH, Chang U, Kim S et al. Saunders Philadelphia. 2008.
5. Vertinsky T, **Jayaraman MV**, Lane B. Radiographic Evaluation of Spinal Canal Tumors. Tumors of the Spine. Kim DH, Chang U, Kim S et al. Saunders Philadelphia. 2008.
6. **Jayaraman MV**, Boxerman JL. Adult Brain Tumors. Magnetic Resonance Imaging of the Brain and spine, 4th edition. Atlas SW. Lippincott, Williams and Wilkins. Philadelphia. 2009.
7. **Jayaraman MV**, Rizvi SA. Is MS a Vascular Disease? Clinical Neuroimmunology, 1st edition. Rizvi SA, Coyle P. Springer. In Press.

OTHER NON PEER-REVIEWED PUBLICATIONS

CORPORATE AUTHORSHIP OR MULTICENTER TRIALS

PUBLICATIONS SUBMITTED OR IN PREPARATION

ABSTRACTS

1. **Jayaraman MV**, Kimia BB, Tek H, Tung GA, Rogg JM. Semiautomated image segmentation of primary brain tumors based on deformable bubbles.[abstr]. RSNA '97

- Scientific Program, 83th Scientific Assembly and Annual Meeting, Radiological Society of North America, Chicago, IL.
2. Mainiero MB, **Jayaraman MV**, Mayo-Smith WW, Lazarus E, Koelliker S, Schepps B. Multi-Institutional Computer Database for Tracking Percutaneous Image-Guided Breast Procedures. [abstr]. ARRS '01 Scientific Program, 102nd Annual Meeting, American Roentgen Ray Society, Atlanta, GA.
 3. **Jayaraman MV**, Masson V, Dupuy DE., Cronan JJ. Color Doppler Ultrasound in the evaluation of thyroid nodules: A dream unfulfilled. [abstr]. ARRS '01 Scientific Program, 102nd Annual Meeting, American Roentgen Ray Society, Atlanta, GA.
 4. **Jayaraman MV**, Mayo-Smith WW, Han RS, Dupuy DE, Movson, JS. Multi-Institutional Database for tracking CT and US-guided procedures. [abstr]. RSNA '01 Scientific Program, 87th Scientific Assembly and Annual Meeting, Radiological Society of North America, Chicago, IL.
 5. **Jayaraman MV**, Dupuy DE, Hoell B, Mayo-Smith WW. Maximizing Radiologist Efficiency: Use of a Nurse Practitioner and Custom Database Software to Streamline a Busy Tumor Ablation Service. [abstr]. RSNA '02 Scientific Program, 88th Scientific Assembly and Annual Meeting, Radiological Society of North America, Chicago, IL.
 6. **Jayaraman MV**, Mayo-Smith WW, Tung GA, Haas RA, Rogg JM, Mehta NR, Doberstein CE. Multidetector CT Angiography compared with Digital Subtraction Angiography in the Detection of Intracranial Aneurysms. [abstr]. RSNA '02 Scientific Program, 88th Scientific Assembly and Annual Meeting, Radiological Society of North America, Chicago, IL.
 7. **Jayaraman MV**, Mayo-Smith WW, Haas RA, Doberstein CE. Does Multidetector CT Angiography Alone Provide Sufficient Information for Planning Endovascular or Surgical Treatment of Ruptured Intracranial Aneurysms? [abstr]. RSNA '03 Scientific Program, 89th Scientific Assembly and Annual Meeting, Radiological Society of North America, Chicago, IL.
 8. **Jayaraman MV**, Do HM, Versnick EJ, Steinberg GK, Marks MP. Morphological assessment of Middle Cerebral Artery aneurysms for endovascular treatment. [abstr]. ASNR '04 Scientific Program, 42nd Annual Meeting, American Society of Neuroradiology, Seattle, WA.
 9. Do HM, Arakawa H, Curtis L, **Jayaraman MV**, Marks MP. Correlation of Pretreatment MR Imaging and Clinical Outcomes in Patients with Osteoporotic Vertebral Body Compression Fractures Treated with Percutaneous Vertebroplasty. [abstr]. ASNR '04 Scientific Program, 42nd Annual Meeting, American Society of Neuroradiology, Seattle, WA.
 10. **Jayaraman MV**, Marcellus ML, Do HM, Steinberg GK, Chang SD, Marks MP. Hemorrhage rate in patients with Spetzler-Martin Grade IV and V AVMs: Is treatment justified? [abstr]. AANS/ASITN Joint Meeting '05 Scientific Program, 8th Annual Joint Session meeting, American Association of Neurological Surgeons and American Society of Interventional and Therapeutic Neuroradiology, New Orleans, LA.
 11. **Jayaraman MV**, Marcellus ML, Do HM, Steinberg GK, Chang SD, Marks MP. Hemorrhage rate in patients with Spetzler-Martin Grade IV and V AVMs: Is treatment justified? [abstr]. ASNR '05 Scientific Program, 43rd Annual Meeting, American Society of Neuroradiology, Toronto, Canada.
 12. Marks MP, Wojack JC, Al-Ali F, **Jayaraman MV**, Marcellus ML, Connors JJ, Do HM. Angioplasty of Intracranial Stenosis: Long-term clinical outcome. [abstr]. ASNR '05 Scientific Program, 43rd Annual Meeting, American Society of Neuroradiology, Toronto, Canada.

13. Arakawa H, Vavao J, **Jayaraman MV**, Do HM. Core Bone Biopsy and Percutaneous Vertebroplasty for Patients with Suspected Pathologic Vertebral Compression Fractures. [abstr]. ASNR '06 Scientific Program, 44th Annual Meeting, American Society of Neuroradiology, San Diego, CA.
14. Kuo M, Diehn M, Nardini C, Cha S, Wang D, **Jayaraman M**. MR Imaging correlation with Gene Expression Profiling Identifies Clinically Distinct Subtypes in Glioblastoma Multiforme. [abstr]. RSNA '06 Scientific Program, 92nd Scientific Assembly and Annual Meeting, Radiological Society of North America, Chicago, IL.
15. Baek H, **Jayaraman MV**, Karniadakis GE. Distribution of WSS on the internal carotid artery with an aneurysm: A CFD sensitivity test. 2007 ASME International Mechanical Engineering Congress and Exposition, Seattle, WA.
16. Powers K, **Jayaraman MV**. Non-invasive imaging of brain AVMs: Look beyond the nidus! (Educational Exhibit). RSNA '07 Scientific Program, 93rd Scientific Assembly and Annual Meeting, Radiological Society of North America, Chicago, IL.
17. Heit JJ, Georganos SA, Dodd RL, **Jayaraman MV**, Do HM. Extra-Vertebral Osteoplasty Using Cement for the Treatment of Non-Healing Fractures of Pubic Ramus and Clavicle. [abstr]. 2008 Scientific Program, 33rd Society of Interventional Radiology Annual Meeting. Washington, D.C.
18. Baek H, **Jayaraman MV**, Karniadakis GE, Wall shear stress distribution on aneurysms in the supraclinoid internal carotid artery, Fifth International Bio-Fluid Symposium and Workshop, California Institute of Technology, Pasadena, CA, 2008.
19. Champion V, **Jayaraman MV**, Haas RA. Coils, stents and glue: Tools of the neurointerventional trade. (Educational Exhibit). RSNA '08 Scientific Program, 94th Scientific Assembly and Annual Meeting, Radiological Society of North America, Chicago, IL.
20. Mehan WA, Boxerman JL, Rogg JM, Haas RA, **Jayaraman MV**. What Is the Added Value of CTP above CTA in Decision Making for Intra-Arterial Stroke Therapy? [abstr] RSNA '10 Scientific Program, 96th Scientific Assembly and Annual Meeting, Radiological Society of North America, Chicago, IL.
21. **Jayaraman MV**, Beland M.D., Atalay M.K., Ahn S.H., DiBisaio E., Rizvi S.A. Doppler waveform analysis of jugular venous flow in patients with and without Multiple Sclerosis. [abstr]. ASNR '11 Scientific Program. 49th Annual meeting, American Society of Neuroradiology, Seattle, WA.
22. Grossberg JA, **Jayaraman MV**, Shaikhouni A, Meisel K, Haas RA. Does pre-treatment CT perfusion decrease hemorrhage in intra-arterial stroke therapy? [abstr]. ASNR '11 Scientific Program. 49th Annual meeting, American Society of Neuroradiology, Seattle, WA.
23. **Jayaraman MV**, Boxerman JL, Silver B, Rogg JM. Can Patient selection for IA stroke therapy be optimized without "advanced imaging"? ePoster. ASNR '12 Scientific Program. 50th Annual meeting, American Society of Neuroradiology, New York, NY
24. **Jayaraman MV**, Kishkovich T, Baird GL, Hemendinger ML, Tung EL, Yaghi S, Cutting SM, Saad A, Burton T, Mac Grory B, Haas RA, Furie KL, McTaggart RA. Older Patients Benefit More From Complete Recanalization Following Thrombectomy [abstr]. Presented at International Stroke Conference 2018. Los Angeles CA.
25. **Jayaraman MV**, Hemendinger ML, Baird GL, Yaghi S, Cutting SM, Saad A, Siket MS, Madsen TE, Williams K, Furie KL, McTaggart RA. EMS Triage to CSC Reduces Time To Treatment And Improves Outcomes In Patients With Large Vessel Occlusion [abstr]. Presented at International Stroke Conference 2018. Los Angeles CA.
26. McTaggart RA, Moldovan KL, Oliver L, Baird GL, Hemendinger ML, Yaghi S, Haas RA, **Jayaraman MV**. Door-in Door-out Time at Primary Stroke Centers Predicts Outcome for

INVITED PRESENTATIONS

1. “Advances in Interventional Therapy for Ischemic Cerebrovascular Disease.” Stanford University Cardiovascular Nursing Symposium, Palo Alto, CA. October 18th, 2005 – Regional
2. “Advances in Therapy for Ischemic Cerebrovascular Disease” Cerebrovascular Disorders: Pathophysiology and Treatment, Stanford University, Stanford, CA. April 25th, 2006 – Regional
3. “Noninvasive imaging of Brain AVMs”. American Society of Interventional and Therapeutic Neuroradiology (ASITN) Practicum, San Diego, CA. May 5th, 2006 – National
4. “Intracranial Atherosclerosis” – Stanford University Neuroscience Nursing Symposium, Stanford, CA. March 8th, 2007 - Regional
5. “Interventional Neuroradiology: Minimally Invasive therapy for Stroke” – Ann Leveillee Neuroscience Nursing Conference, Providence, RI. March 28th, 2007 – Regional
6. “Interventional Neuroradiology: New horizons in minimally invasive therapy” – Grand Rounds, St. Luke’s Hospital, New Bedford, MA. April 12th, 2007 – Regional
7. “Interventional Neuroradiology: New horizons” – Indian medical association of New England annual CME course, Waltham, MA. April 14th, 2007 – Regional.
8. “Meet the professor session: Imaging of CNS Vasculitis/Vasculopathy” – American College of Rheumatology Annual Meeting, Boston, MA. November 3, 2007 – National.
9. “Brain AVMs: Natural History, Hemorrhage Risk and Endovascular Therapy” – Grand Rounds, Department of Neurology, University of Massachusetts Medical Center, Worcester, MA. April 8th, 2008 – Regional.
10. “Imaging and Endovascular Therapy for Acute Stroke” – Grand Rounds, Memorial Hospital, Pawtucket, RI. December 10th, 2008 – Regional.
11. “Practical Management of Venous Sinus Thrombosis” – Society of NeuroInterventional Surgery Practicum, Vancouver, Canada. May 16, 2009 – International
12. “Sacroplasty and extra-spinal osteoplasty” – Society of NeuroInterventional Surgery Practicum, Vancouver, Canada. May 17, 2009 – International
13. “CTA vs. DSA for SAH: Why DSA is the best” – Society of NeuroInterventional Surgery Practicum, Vancouver, Canada. May 17, 2009 – International
14. “MR Imaging of Hemorrhage”. New England Roentgen Ray Society. March 5, 2010 (Regional)
15. “Penumbra Imaging does not help select patients for intraarterial therapy”. Eastern Neuroradiology Society Meeting. September 16, 2011. (Regional)
16. “Curative embolizations for Brain AVMs and AVFs; Ready for Prime Time?”. Stanford University Department of Neurosurgery Grand Rounds. Stanford, CA. April 6, 2012. (Regional)
17. “MOC Review: Cerebrovascular”. 50th Annual meeting, American Society of Neuroradiology, New York, NY, April 25th, 2012. (International).
18. “NCCT Alone for IA patient selection”. AANS/SNIS Joint Cerebrovascular International Endovascular Stroke Conference, San Diego CA, February 10th, 2014. (International)
19. “Curative embolizations for Brain AVMs and AVFs; Ready for Prime Time?”. Cleveland Clinic Cerebrovascular center lecture, Cleveland, OH. October 30, 2014. (Regional)

20. "Acute Stroke Treatment: Time for a Revolution". Neurology Grand Rounds. Brown University/Rhode Island Hospital. February 19th, 2015 (Regional)
21. "Multimodality treatment of Brain AVMs". SNIS 12th annual meeting. San Francisco, CA July 29th, 2015. (International)
22. "Endovascular stroke thrombolysis and devices". Eastern Neuroradiology Society meeting. September 4th, 2015. Newport RI (Regional)
23. "Large Vessel Occlusion Therapy: Where is the evidence?". 54th Annual meeting, American Society of Neuroradiology, Washington, DC, May 25th, 2016. (International).
24. "EMS Protocols". SNIS 13th annual meeting. Boston, MA. July 25th, 2016. (International)
25. "Impact of multi-society training standards on US practice". ESMINT 8th Congress, Nice, France. Sep 9, 2016. (International)
26. "Acute Stroke Imaging: 2016 Update". Neurology Grand Rounds. Brown University/Rhode Island Hospital. October 14, 2016 (Regional)
27. "Acute Stroke Imaging". Northeast Cerebrovascular Coalition 11th annual meeting. October 22, 2016 (Regional).
28. "EMS Protocols save time". SVIN 3rd annual Stroke workshop. New York, NY. November 16th, 2016 (International)
29. "ELVO Revolution: Thrombectomy for all". Spectrum Health Neuroscience Grand Rounds. January 4th, 2017 (Regional).
30. "Diverting ELVO patients to a CSC: Will US need legislation?". 5T Stroke conference. Banff, Alberta, Canada. March 11th, 2017 (International)
31. "Distal occlusion of eloquent branch after proximal thrombectomy: My approach". 5T Stroke conference. Banff, Alberta, Canada. March 12th, 2017 (International)
32. "Mechanical Thrombectomy for low ASPECTS". SNIS 14th annual meeting. Colorado Springs, CO. July 24th, 2017. (International)
33. "Stroke thrombectomy workshop". SNIS 14th annual meeting. Colorado Springs, CO. July 25th, 2017. (International)
34. "ELVO patients need to get to thrombectomy centers: Roadmap for success with EMS". SNIS 14th annual meeting. Colorado Springs, CO. July 26th, 2017. (International)
35. "EMS Stroke Care". New England Council for Emergency Medical Services. Newport, RI November 20th, 2017. (Regional)
36. "Thrombectomy: How I do it". 5T Stroke conference. Banff, Alberta, Canada. May 5th, 2017 (International)
37. "Stroke Thrombectomy: Show me the evidence". 56th Annual meeting, American Society of Neuroradiology, Vancouver, BC, Canada, June 4th, 2016. (International).

GRANTS

July 2010- July 2013

Department of Diagnostic Imaging Seed Grant

"Analysis of jugular venous flow patterns in patients with multiple sclerosis"

UNIVERSITY TEACHING ROLES

Brown University

Rad-629 - Diagnostic Radiology

August 2006 – Present

Responsible for teaching Brown Medical students rotating through department of Diagnostic Imaging.

Rad-636 – Neuroradiology
August 2006 – Present

Responsible for teaching Brown Medical students rotating through Neuroradiology elective.

Rad-627 – Longitudinal Ambulatory Clerkship in Vascular & Interventional Radiology
August 2006 – Present

Involved in introducing Brown Medical students to clinical aspects of patient evaluation and workup for patients with cerebrovascular disease who may be candidates for endovascular treatment.

Rad-632 – Vascular & Interventional Radiology
August 2006 – Present

Involved with teaching Brown Medical students who rotate through the VIR section during the elective, especially with aspects pertaining to Interventional Neuroradiology – patient selection, approach to minimally invasive therapy selection and post-treatment management.

HOSPITAL TEACHING ROLES

Stanford University	Department of Radiology Responsible for teaching Radiology residents, and Neuroradiology fellows July 2003-June 2006
Rhode Island Hospital	Department of Diagnostic Imaging Responsible for teaching Radiology residents and fellows August 2006-Present
	Department of Neurosurgery Responsible for education of residents, including during the mandatory Interventional Neuroradiology rotation August 2006 – Present
	Department of Neurology

Responsible for the education of residents, including monthly morning report and during conferences.