CURRICULUM VITAE

**Date of Revision:** June, 2020

**Name:** Ajay Malhotra, MD

**Contact Information:** Home address- 17 Hanford Lane, New Canaan, CT 06840

 Cell- (734) 255 4799, (203) 843 8513

 Email- ajay.malhotra@yale.edu, ajayradiology@gmail.com

**Current Position:** Associate Professor, Department of Radiology and Biomedical Imaging, Division of Neuroradiology, Yale University School of Medicine

## Term: Primary Appointment: beginning July, 2016

**Previous Appointments:** Assistant Professor, Yale University School of Medicine

July 2009- June 2016

**Education:**

M.B.B.S V.S.S. Medical College and Hospital (Medicine and Surgery) - *Sept 1995*

Masters Simon Graduate School of Business (Medical Management) – *June 2009*

Yale Medicine Emerging Yale School of Management - *June 2019*

Leaders Program

Yale Medicine Advanced Yale School of Management - *June 2020*

Emerging Leaders Program

**Career/Academic Appointments:**

Sept 1995-Sept 1996 Intern, Medicine and Surgery, V.S.S. Medical College and Hospital, Burla, Orissa, India

July 1997-June 2000 MD-Resident, Government College, Amritsar, Punjab, India

Oct 2000-July 2003 Registrar, Department of Radiology and Imaging Sciences, Indraprastha Apollo Hospitals, New Delhi, India

July2004- June2005 Intern, Preliminary Medicine, St. Joseph Mercy Hospital, Ann Arbor, MI

July2005-June2006 Fellow, Diagnostic Radiology, University of Rochester, Rochester, NY

July2006-June2007 Chief Fellow in Interventional Neuroradiology, University of Rochester, Rochester, NY

July2007- June2008 Senior Resident, Dept. of Radiology, University of Rochester, Rochester, NY

July2008-June2009 Fellow, Musculoskeletal Radiology, University of Rochester, NY

July2009-June2016 Assistant Professor, Dept of Radiology and Biomedical Imaging, Division of Neuroradiology, Yale University School of Medicine, New Haven, CT

**Administrative Positions:**

2010- 2011 Director of CT Neuroimaging, Yale University School of Medicine, New Haven, CT.

**Board Certification**:

2009 American Board of Radiology

2011 ABR Certificate of Additional Qualification (CAQ) in Neuroradiology

**Certification/ Licensure-**

2011 CAQ Neuroradiology (ABR)

2009 American Board of Radiology

2009 Connecticut State License (current)

2007 New York State License (current)

2004 USMLE STEP 3

2004 Michigan state License

2000 Delhi Medical Council

1998 USMLE STEP 1

1998 USMLE STEP 2

1996 Medical Council of India

**Professional Honors or Recognition**:

2020 Nominated for Charles W. Bohmfalk Prize for teaching in clinical sciences at Yale medical school

2019 American College of Radiology Affiliate Research Fellow

2016 *RSNA/ASNR Comparative Effectiveness Research (CERT) Program*- one-year selective program sponsored jointly by RSNA and ASNR with mentorship from senior ASNR leadership (Dr. Pina Sanelli)

2013 *Best Teacher award- Radiology Residency Program*, Yale University

2011 *Certificate of Merit- Teaching Award*- Radiology Residency Program, Yale University

2007 *Magna cum Laude - Poster Presentation*, ASNR 2007. MR Perfusion Imaging in Neuro-oncology

2006 *Summa cum Laude - Poster Presentation*, ASHNR 2006. Interventional Sialography

2006 *Certificate of Excellence in Research*, Division of Neuroradiology, University of Rochester Medical Center

2000 *Best Postgraduate Student*, Government College, Amritsar, Punjab

1993 *Honors, Pathology*, V.S.S Government Medical College, 2nd Professional Examination

**Grant/Clinical Trials History:**

**Current:**

American College of Radiology Grant

*Cost-Effectiveness of CTA for large vessel occlusion detection in minor stroke patients*

Role - Principal Investigator

Total cost for project period - $25,000

Project Period- 2019-2020

Industry Sponsored

Agency- Philips

*Cost-effectiveness of qEASL in patients with unresectable hepatocellular carcinoma*

Role - Principal Investigator

Total cost for project period- $48,726

Project Period - 2019- 2020

**Past Clinical Trials:**

Industry sponsored trials

Agency: Pfizer

*Study of PF-06817024 in Healthy Subjects and in Patients with Chronic Rhinosonusitis with Nasal Polyps*

Role: Yale Site Imaging Principal Investigator

Percent effort: 1%

Total costs for project period: $189,150.00

Project period: 6/19/16-12//31/17

Agency: Guerbet REMIND Study- Site PI

*Intra-individual cross-over efficacy evaluation of DOTAREM®-enhanced MRI compared to GADOVIST®/ GADAVIST® enhanced MRI in the diagnosis of brain tumors*

Role: Yale Site Principal Investigator

Percent effort: 1%

Total costs for project period: $11,210.00

Project period: 12/19/14-5//13/16

RTOG 0825/ACRIN 6686 study

*Phase III Double-Blind Placebo-Controlled Trial of Conventional Concurrent*

*Chemoradiation and Adjuvant Temozolomide Plus Bevacizumab Versus Conventional Concurrent Chemoradiation and Adjuvant Temozolomide in Patients With Newly Diagnosed Glioblastoma*

Role: Investigator; Yale Site ACRIN Sub PI

Percent effort: 1%

Total costs for project period: $2,815.50

Project period: 4/7/2010-7/6/2012

**Research Mentorship**

2019-2020 Thesis advisor for Xiao Wu - Medical student thesis: *Systematic review of CEAs on Thrombectomy*

2019-2020 Thesis advisor for Bertie Geng - Medical student thesis: *Cost-Effectiveness of Culture vs NAAT Based Screening of Pregnant Women for Group B Streptococcus to Reduce Early-Onset Sepsis of the Newborn*

2019-2020 Institutional Mentor for Junior Faculty Dr.Sam Paybavasch: *RSNA/ASNR Comparative Effectiveness Research (CERT) Program*

2018-2019 Institutional Mentor for Junior Faculty Dr. Vahe Zoharabian: *RSNA/ASNR Comparative Effectiveness Research (CERT) Program*

2017-2018 Institutional Mentor for Junior Faculty Dr. Madhavi Raghu: *RSNA/ASNR Comparative Effectiveness Research (CERT) Program*

5/29/2017 to 8/7/2017 for Xiao Wu, Medical Student Summer Research: *Management Strategies for small unruptured intracranial aneurysms-comparative effectiveness*

5/29/2017 to 8/7/2017 for Bertie Geng, Medical Student Summer Research: *Criteria used to treat small unruptured intracranial aneurysms*

2016 Summer for Xiao Wu: *The Summer to Advance Research Training Program*, Yale School of Medicine

**Invited Speaking Engagements, Presentations, Symposia & Workshops not affiliated with Yale:**

**International/National**

2020 World Federation of Ukrainian Medical Associations- October 3, 2020- Imaging of blunt cervical trauma

2020 ASNR Anne G. Osborn International Outreach Professor to Ukraine

2020 American Institute for Radiologic Pathology. Intro to CER/ Policy. "What can a computer model tell us about the effectiveness of imaging?"

2020 Eastern Neuroradiological Society ENRS, Burlington, Vermont – Stroke Imaging: *CT/CTA Based Approach: Minimal Imaging*

2020 American Society of Neuroradiology (ASNR), Virtual- Las Vegas USA – *Surveillance imaging for unruptured intracranial aneurysms*

2020 RSNA Value of Imaging through Comparative Effectiveness (VOICE) Workshop, Chicago, IL, USA - *Application of Decision Science Methods in Radiology Research*

2020 RSNA Value of Imaging through Comparative Effectiveness (VOICE) Workshop, Chicago, IL, USA - *Applications of Cost-Effectiveness Research in Radiology*

2020 American Society of Spine Radiology (ASSR), Dana Point, CA, USA - *ACR Appropriateness Criteria- Blunt Spine trauma*

2019 American Society of Neuroradiology (ASNR), Boston, MA, USA - *Radiology Residency Curriculum Initiative*

2019 Somatom World Summit (14th), Toronto, Ontario, Canada - *Value and Cost-Effectiveness of Neuroimaging*

2018 American Society of Emergency Radiology (ASER), McLean, VA, USA - *Imaging of Thunderclap Headache*

2018 Eastern Neuroradiological Society ENRS, Hamilton, Bermuda - *Small intracranial aneurysms- growth and rupture risks*

2018 American Society of Neuroradiology (ASNR), Vancouver, BC, Canada - *Imaging Biomarkers for Unruptured Intracranial Aneurysms*

2017 Eastern Neuroradiological Society ENRS, Toronto, Ontario, Canada - *Angiogram-negative Subarachnoid Hemorrhage*

2017 American Society of Neuroradiology, Long Beach, CA, USA - Symposium: *Unruptured Intracranial Aneurysms*

2017 American Society of Neuroradiology, Long Beach, CA, USA- Journal Club: *Spine*

2016 American Society of Neuroradiology, Washington, DC, USA- EBM session: *Blunt Cerebrovascular Injury*

2015 Eastern Neuroradiological Society ENRS, Newport, RI, USA - *Carotid Stenosis and Plaque Imaging*

2015 American Institute of Ultrasound in Medicine - Carotid Stenosis: *When is ultrasound not adequate*

2014 Eastern Neuroradiological Society ENRS, Manchester, VT, USA - *Spine Intradural Tumors*

2014 American Society of Neuroradiology, Montreal, Quebec, Canada - SAM Session: *Spine*

2012 International Congress of Radiology, Sao Paulo, Brazil - *Stroke Imaging CT versus MRI*

2012 International Congress of Radiology, Sao Paulo, Brazil - Brain tumors: *Perfusion Imaging*

2012 International Congress of Radiology, Sao Paulo, Brazil - *Intraoperative MRI and Presurgical Mapping*

**Peer-Reviewed Presentations & Symposia Given at Meetings Not Affiliated with Yale:**

1. Wu X, Khunte M, Zhu C, Matouk C, Gandhi D, Sanelli P, **Malhotra A**. Cost-Effectiveness of Endovascular Thrombectomy for extended time-window (6 – 24 Hours) Stroke. Oral Presentation at ASNR 2020. Las Vegas, NV (Virtual).
2. Wu X, Khunte M, Matouk C, Sanelli P, Gandhi D, **Malhotra A**. Implications of Achieving TICI 2b vs TICI 3 Reperfusion in Patients with Ischemic Stroke: A Cost-Effectiveness Analysis. Oral Presentation at ASNR 2020. Las Vegas, NV (Virtual).
3. Wu X, Wang Y, Zhu C, Matouk C, Gandhi D, Sanelli P, **Malhotra A**. Outcomes after Thrombectomy for Minor Stroke: A Meta-Analysis. Oral Presentation at ASNR 2020. Las Vegas, NV (Virtual).
4. Wu X, Khunte M, Zhu C, Matouk C, Gandhi D, Sanelli P, **Malhotra A**. CT Angiography for Triage of Acute, Minor Stroke Patients: A Cost-Effectiveness Analysis. Oral Presentation at ASNR 2020. Las Vegas, NV (Virtual).
5. Wu X, Khunte M, Wang Y, Zhu C, Gandhi D, Sanelli P, Malhotra A. Cost-Effectiveness of Bridging Thrombolysis versus Direct Endovascular Thrombectomy in acute ischemic stroke patients with Large Vessel Occlusion. Oral Presentation at ASNR 2020. Las Vegas, NV (Virtual).
6. Wu X, Khunte M, Matouk C, Gandhi D, Sanelli P, **Malhotra A**. Cost-effectiveness of endovascular thrombectomy in patients with low ASPECTS (<6) at presentation. Oral Presentation at ASNR 2020. Las Vegas, NV (Virtual).
7. Wu X, **Malhotra A**, Seifert K, Kalra V, Gandhi D, Sanelli P. Pipeline Endovascular Device versus Stent- Assisted Coiling in Small Unruptured Aneurysms: A Cost-Effectiveness Analysis. Oral Presentation at ASNR 2019. Boston, MA.
8. Wu X, **Malhotra A**, Seifert K, Kalra V, Gandhi D, Sanelli P. Comparative-Effectiveness of Endovascular Thrombectomy in Elderly Stroke Patients. Oral Presentation at ASNR 2019. Boston, MA.
9. Wu X, **Malhotra A**, Seifert K, Kalra V, Gandhi D, Sanelli P. Cost-Effectiveness of CT Angiography in Management of Tiny UIAs. Oral Presentation at ASNR 2019. Boston, MA.
10. Wu X, **Malhotra A**, Seifert K, Kalra V, Gandhi D, Sanelli P. Risk of Radiation-Induced Cancer from CT Angiography Use in Imaging Surveillance for UIAs. Oral Presentation at ASNR 2019. Boston, MA.
11. Wu X, Matouk C, Sanelli P, **Malhotra A**. Screening for intracranial aneurysms in patients with Autosomal Dominant Polycystic Kidney Disease (ADPKD): A Cost Effectiveness Analysis. Oral presentation at ASNR 2018, Vancouver, BC, Canada
12. Geng B, Wu X, **Malhotra A**. Utility of Follow-up Imaging in Isolated Perimesencephalic Hemorrhage: an updated metaanalysis. Oral presentation at ASNR 2018, Vancouver, BC, Canada
13. Geng B, Wu X, **Malhotra A**. Criteria used to treat small unruptured intracranial aneurysms- A literature review. Oral presentation at ASNR 2018, Vancouver, BC, Canada
14. Geng B, Wu X, **Malhotra A**. Utility of CT Angiography in patients with acute subdural hematoma. Oral presentation at ASNR 2018, Vancouver, BC, Canada
15. Wu X, Matouk C, Sanelli P, **Malhotra A**. Management of unruptured intracranial aneurysms in the Elderly: A Cost Effectiveness Analysis. Oral presentation at ASNR 2018, Vancouver, BC, Canada
16. Wu X, Zhao Y, Malhotra A. Identification of patients with carotid stenosis using Natural language processing. Oral presentation at ASNR 2018, Vancouver, BC, Canada
17. Wu X, Matouk C, Sanelli P, **Malhotra A**. Comparative Effectiveness Analysis of Pipeline Device versus coiling in unruptured aneurysms <10mm. Oral presentation at ASNR 2018, Vancouver, BC, Canada
18. Wu X, Matouk C, Sanelli P, **Malhotra A**. Drip and Ship Vs Direct Transfer to comprehensive stroke center: A Modelling based analysis. Oral presentation at ASNR 2018, Vancouver, BC, Canada
19. Wu X, Sanelli P, **Malhotra A.** Management of small unruptured intracranial aneurysms- a survey of neuroradiologists. Oral presentation at ASNR 2018, Vancouver, BC, Canada
20. Tu LH, **Malhotra A**. Angiogram-negative Non-perimesencephalic Subarachnoid Hemorrhage: A Meta-Analysis of Follow up Strategies RSNA 2017- Abstract ID: 17014755
21. Mahalingam S, Wu X, **Malhotra A**. Blunt cerebrovascular injury in patients with cervical spine fractures. O-04 ASNR, Long Beach, 2017
22. Seifert K, Wu X, **Malhotra A**. Screening for intracranial aneurysms in patients with aortic aneurysms. O- 305 ASNR Long Beach, 2017
23. Seifert K, Wu X, **Malhotra A**. Utility of routine screening with neuroimaging in patients with Hereditary Hemorrhagic Telangiectasia.O-29 ASNR, Long Beach, 2017
24. **Malhotra A,** Wu X et al. Cost Effectiveness of MRI in cervical spine clearance of alert blunt trauma patients O- 06 ASNR, Long Beach, 2017
25. **Malhotra A**., Wu X et al. Cost Effectiveness of MRI in cervical spine clearance of obtunded blunt trauma patients O- 07 ASNR, Long Beach, 2017
26. **Malhotra A** , Wu X et al. Growth and rupture risk of small unruptured intracranial aneurysms. A systematic review and metaanalysis. O-357 ASNR, Long Beach 2017
27. **Malhotra A**, Wu X et al. Management of tiny intracranial aneurysms: A cost effectiveness analysis. O-358 ASNR, Long Beach 2017
28. **Malhotra A**, R Liu. Melanoma patients with isolated cerebral susceptibility foci: Are they metastasis. O-452 ASNR, Long Beach 2017
29. Wu X, **Malhotra A** Optimal imaging strategies and follow-up in patients with unruptured intracranial aneurysms. O-356 ASNR, Long Beach 2017
30. Foryoung,K, Nautsch, **Malhotra A** Patterns of head injury in the elderly RSNA 2016
31. Wu X, **Malhotra A** Progressive T1 shortening of the dentate nucleus in multiple sclerosis patients- result of multiple administrations of gadolinium contrast agents as opposed to intrinsic disease. RSNA 2016
32. Buchanan K, **Malhotra A.** Utility of imaging evaluation in patients with Dizziness. National Medical Association LA, California 2016 - Resident award
33. Xu X, **Malhotra A**. Cervical Spine clearance after blunt traumatic injury: A Metaanalysis. O-130. ASNR Washington DC 2016
34. Durand D, **Malhotra A**. Evaluation of CT Vs MRI with management/outcomes in cervical spine trauma based on age and injury appearance pattern. O-133. ASNR Washington DC. 2016
35. **Malhotra A**, Wu X. Comparison of 3D FLAIR and 3D TW Spin Echo sequences for detection of infratentorial Multiple Sclerosis lesions. O-233 ASNR Washington DC 2016
36. Wu X, **Malhotra A.** Use of high risk criteria in screening patients for BCVI: A Survey. O-255. ASNR Washington DC 2016
37. Wu X, **Malhotra A**. Cost Effectiveness Analysis of MRI in cervical spine clearance after blunt trauma. O-256 ASNR Washington DC 2016
38. Narin O, **Malhotra A**. Detailed analysis of the Persistent Trigeminal artery. O-493. ASNR Washington DC 2016
39. Wu X,Kalra VB, **Malhotra A**. Cost-Effectiveness Analysis of CTA and LP for Evaluation of Suspected SAH after Negative Non-Contrast CT. #1291. Scientific Presentation. *American Roentgen Ray Society Annual Meeting,* April 2015
40. Wu X, **Malhotra A**. Cost­effectiveness of Angiographic Imaging in Isolated Perimesencephalic Subarachnoid Hemorrhage. #O-115. Oral Presentation. *American Society of Neuroradiology Annual Meeting,* April 2015
41. Wu X, **Malhotra A**. Cost­Effectiveness Analysis of Follow­up Strategies for Thunderclap Headache Patients with Negative Non­Contrast CT. #O-116. Oral Presentation. *American Society of Neuroradiology Annual Meeting,* April 2015
42. Wu X, Kalra VB,**Malhotra A**. Screening for Pediatric Blunt Cerebrovascular Injury: Review of Literature and a Cost-effectiveness Analysis. #O-283. Oral Presentation. *American Society of Neuroradiology Annual Meeting,* April 2015
43. Wu X, **Malhotra A**. Screening for Blunt Cerebrovascular Injury: Review of Literature and a Cost-Effectiveness Analysis. #O-117. Oral Presentation. *American Society of Neuroradiology Annual Meeting,* April 2015
44. Jeun B, **Malhotra A**. Utility of follow-up imaging in Isolated Perimesencephalic Subarachnoid Hemorrhage. #EP-90 (2738). Oral Presentation. *American Society of Neuroradiology Annual Meeting,* May 2014
45. Shankar S, Kalra VB, Hunter A, **Malhotra A**. Ectopic Intracranial Germinoma: A case report and review of literature. #EE-42 (2723). Oral Presentation.*American Society of Neuroradiology Annual Meeting,* May 2014
46. Durand D, Kalra VB, **Malhotra A**. Predictors of Vertebral Artery Injury in Isolated C2 Fractures Based on Fracture Morphology Using CT Angiography. #O-904 (1441). Oral Presentation. *American Society of Neuroradiology Annual Meeting,* May 2014.
47. Jeun B, **Malhotra A**. Utility of follow-up imaging in Isolated Perimesencephalic Subarachnoid Hemorrhage. #EP-90 (2738). Oral Presentation. *American Society of Neuroradiology Annual Meeting,* May 2014
48. Kalra VB, Jeun B, Durand D, Matouk C, **Malhotra A**. Cost-Effectiveness of Follow-Up Imaging in Isolated Perimesencephalic Subarachnoid Hemorrhage. #O-35 (2545). Oral Presentation. *American Society of Neuroradiology Annual Meeting,* May 2014
49. Kalra VB, Pfeifer KE, **Malhotra A**. Imaging of Sinus Disease(s). Educational Exhibit with Oral Presentation. #LL-NRE-SU8B (13013720).*Radiological Society of North America Annual Meeting,* December 2013
50. **Malhotra A,** Kalra VB, Hunter A. Minimally Enhancing Capillary Hemangioma of the Cauda Equina. Oral Presentation. #EE 105.*American Society of Neuroradiology Annual Meeting,* April 2012
51. Kalra VB, **Malhotra A**. CT and MR Perfusion Imaging in Cerebral Hyperperfusion Syndrome After Carotid Revascularization. Oral Presentation. Abstract #3. *International Congress of Interventional Neurology Annual Meeting,* September 2012
52. Kalra VB, **Malhotra A.** Role of Noninvasive Imaging in Intracranial Dural Arteriovenous Fistulas. Oral Presentation. Abstract #11. *International Congress of Interventional Neurology Annual Meeting,* September 2012
53. Friedman T, **Malhotra A.** Epithelioid Malignant Peripheral Nerve Sheath Tumor. Oral Presentation. *American Society of Head and Neck Radiology Annual Meeting.* October 2012
54. Kalra V, **Malhotra A**. Infantile Hemangiopericytoma: A Distinct and Benign Clinical Entity. Oral Presentation. Paper #372**.** American Society of Neuroradiology Annual Meeting,June 2011.
55. **Malhotra A**, Germin B: Malignant glioneuronal tumor in the spinal cord. Scientific paper. American Society of Neuroradiology, Chicago, IL, June 2007
56. **Malhotra A**, Mangla R: Perfusion MR imaging in Neurooncology- Oral Presentation- Powerhour - American Roentgen Ray Society, Orlando, Florida, May 2007
57. **Malhotra A,** Germin B, Ekholm, Westesson PL: Neurilemmoma of the Tongue - Unusual Imaging Appearance in a Rare Entity. Oral Presentation. American Society of Head and Neck Radiology, Phoenix, AZ, September 2006.

**Over 250 Abstracts/ Posters/ Educational Exhibits presented at following national meetings in last 15 years-**

American Society of Neuroradiology

American Society of Head and Neck Radiology

American Society of Spine Radiology

Radiologic Society of North America

American Roentgen Ray Society

**Professional Service:**

**Journal Service**

Reviewer for –

*American Journal of Neuroradiology*

*Stroke Journal – Official Journal of AHA/ASA*

*Circulation- Outcomes*

*Journal of American College of Radiology*

*JAMA Neurology*

*World Neurosurgery*

*Journal of Neurointerventional Surgery*

*Head and Neck*

*Clinical Imaging*

*Emergency Medicine Journal*

*Neurosurgical Review*

**Professional Society Memberships:**

*American Society of Neuroradiology* –Senior Member

*International Society of Magnetic Resonance in Medicine (ISMRM)*

*American Society of Spine Radiology*

*Eastern Neuroradiology Society*

*American Society of Functional Neuroradiology*

*Association of University Radiologists*

*American Roentgen Ray Society*

*Radiological Society of North America*

*Medical Council of India*

**Professional Organizations:**

2017 - *Current* Programs Committee, ASNR

2017- *Current* Research Committee ASNR

2017- *Current* Evidence Based Medicine Committee, ASNR

2016 – *2019*  Educational Exhibits Committee, ASNR

2015 - 2017 Head, Task Force ASNR Resident Radiology Curriculum

2013 - *2019* Member, Education Committee, American Society of Neuroradiology

2016 - 2017 Member, RADAR-2, American College of Radiology

2012- *Current* Member, Education Committee, Radiological Society of North America

2012 - *Current* Educational Exhibits committee, ARRS

2011- 2014 Membership Committee, American Society of Spine Radiology

2010- *Current* Member, CME Review Committee, American Roentgen Ray Society

**Meeting Planning/Participation**

2013 -2016 Moderator, ASNR Sessions

2012 Member, Awards Committee, Scientific Papers/ Educational Exhibits, ASSR

2012-*Current* Member, Educational Exhibit Review Committee, ARRS

2012-*Current* Member, Abstract Review Committee, ARRS

**Yale University Service**

Medical School Admissions Committee

**Departmental Committee**

Member, Resident Curriculum Committee

Member, Teaching File Committee

**Bibliography:**

 **Peer-Reviewed Original Research**

1. Matouk CC,Mandell DM, Gunel M, Bulsara KR, **Malhotra A** et al. Vessel wall MRI identifies the site of rupture in patients with multiple intracranial aneurysms: proof of principle. *Neurosurgery* 2013 Mar; 72(3):492-6. PMID:23151622
2. Kalra VB, Wu X, Forman H, **Malhotra A**. Cost-Effectiveness of Angiographic Imaging in Isolated Perimesencephalic Subarachnoid. *Stroke*. 2014;45:3576-3582
***\*Senior author for trainee***
3. Vilarinho,S, Choi M, Jain D, **Malhotra A** et al. Individual Exome Analysis in Diagnosis and Management of Pediatric Liver Failure of Indeterminate Etiology. *J Hepatol* 2014 doi: 10.1016/j.jhep.2014.06.038
4. Durand D,Wu X, Kalra V, Abbed KM, **Malhotra A**. Predictors of vertebral artery injury in isolated C2 fractures based on fracture morphology using CT Angiography. *Spine* (Phila Pa 1976) 2015. Jun 15;40(12):E713-8. PMID: 25803220 doi:10.1097
***\*Senior author for trainee***
5. Kalra VB, Wu X, Matouk CC, **Malhotra A**. Use of Follow-Up Imaging in Isolated Perimesencephalic Subarachnoid Hemorrhage. *Stroke*. 2015 Feb;46(2):401-6. doi: 10.1161 ***\*Senior author for trainee***
6. Blumberg J, **Malhotra A**, Wu X et al. Langerhans cell histiocytosis of the temporal bone with otic capsule involvement. *Clinical Neuroradiology*. 2015 Sep 4
***\*Senior author for trainee***
7. **Malhotra A**, Wu,X, Kalra V et al. Screening for Pediatric Blunt Cerebrovascular Injury: Review of Literature and a Cost-Effectiveness analysis. *Journal of Pediatric Surgery*. 2015 Oct; 50 (10):1751-7.
8. Wu X, Kalra V, Durand D, **Malhotra A**. Utility Analysis of Management Strategies for Suspected Subarachnoid Hemorrhage in Thunderclap Headache Patients with Negative CT Result. *Emerg Med J*. 2016 Jan;33(1):30-6. doi: 10.1136/emermed-2015-204634
***\*Senior author for undergraduate student***
9. **Malhotra A**, Wu, X, Forman H, et al. Cost-Effectiveness Analysis of Follow-up Strategies for Thunderclap Headache Patients with Negative Non-Contrast CT. *Acad Emerg Med.* 2016 Mar; 23(3):243-50. doi: 10.1111/acem.12891
10. **Malhotra A**, Wu,X, Forman H.et al. Evaluation for Blunt Cerebrovascular Injury: Review of Literature and Cost Effectiveness Analysis. *American Journal of Neuroradiology* 2016 Feb;37(2):330-5. DOI:10.3174/ajnr.A4515
11. Wu X, Kalra V, Forman H, **Malhotra A.** Cost-Effectiveness Analysis of CTA and LP for Evaluation of Suspected SAH after Negative Non-Contrast CT. *Clinical Neurology and Neurosurgery*. 2016;142:104-111
***\*Senior author for undergraduate student***
12. **Malhotra A**, Wu X et al. Utility of MRI for Cervical Spine Clearance after blunt traumatic injury: A Meta-analysis. *European Radiology*. (2016) .doi: 10.1007/s00330-016-4426-z
13. Wu X, **Malhotra A,** Forman HThe use of high-risk criteria in screening patients for BCVI: A Survey *Academic Radiology*2017;24(4):456‐461. doi:10.1016/j.acra.2016.11.010 ***\*Senior author for medical student***
14. **Malhotra A,** Schindler J, Schrag M et al. Cerebral microhemorrhages and meningeal siderosis in infective endocarditis. *Cerebrovascular Diseases*. 2017;43(1-2):59‐67. doi:10.1159/000452718
15. Naveed MA, Goyal P, **Malhotra A** et al. Grading of oligodendrial tumors of the brain with apparent diffusion coefficient, magnetic resonance spectroscopy, and dynamic susceptibility contrast imaging. Neuroradiol J. 2018 Jan 1:1971400918757217. doi: 10.1177/1971400918757217
16. Goyal P, Kumar Y, Gupta N, **Malhotra A** et al. Usefulness of enhancement-perfusion mismatch in differentiation of CNS Lymphoma from other enhancing malignant tumors of the brain. Quant Imaging Med Surg. 2017 Oct;7(5):511-519. doi: 10.21037/qims.2017.09.03.
17. Kuo P, Bagwell K, Mongelluzo G, Schutt CA, **Malhotra A**, Kveton JF. Semicircular canal dehiscence among idiopathic intracranial hypertension patients. Laryngoscope. 2018 May;128(5):1196-1199. doi: 10.1002/lary.26795.
18. **Malhotra A**, Wu X, Forman HP et al. Growth and Rupture risk of small unruptured intracranial aneurysms: A Systematic Review. Ann Intern Med. 2017 Jul 4;167(1):26-33. doi: 10.7326/M17-0246
19. **Malhotra A,** Wu X, Forman HP et al. Management of tiny unruptured intracranial aneurysms: A comparative effectiveness analysis. JAMA Neurol. 2018 Jan 1;75(1):27-34. doi: 10.1001/jamaneurol.2017.3232
20. **Malhotra A,** Wu X, Geng B et al. Cost Effectiveness of MRI in cervical spine clearance of neurologically intact patients with blunt trauma.Ann Emerg Med. 2018 Jan;71(1):64-73. doi: 10.1016/j.annemergmed.2017.07.006
21. **Malhotra A,** Durand D, Wu X et al. Utility of MRI for cervical spine clearance in blunt trauma patients after a negative CT. Eur Radiol. 2018 Feb 15. doi: 10.1007/s00330-017-5285-y
22. Wu X, **Malhotra A**, Geng B et al. Cost-effectiveness of Magnetic Resonance Imaging in Cervical Clearance of Obtunded Blunt Trauma after a Normal Computed Tomographic Finding. JAMA Surg. 2018 Mar 14. doi: 10.1001/jamasurg

***\*Senior author for medical student***

1. **Malhotra A**, Wu X, Geng B et al. Management of Unruptured Intracranial Aneurysms: A survey of Neuroradiologists. *AJNR Am J Neuroradiol.* 2018;39(5):875‐880. doi:10.3174/ajnr.A5631
2. Bagwell K, Wu X, Baum ED, **Malhotra A.** Cost-Effectiveness Analysis of Intracapsular Tonsillectomy and Total Tonsillectomy for Pediatric Obstructive Sleep Apnea. Appl Health Econ Health Policy. 2018 Aug;16(4):527-535. doi: 10.1007/s40258-018-0396-4. ***\*Senior author for resident***
3. **Malhotra A**, LeSar et al. “Progressive T1 Shortening of the Dentate Nucleus in Patients with Multiple Sclerosis: Result of Multiple Administrations of Linear Gadolinium Contrast Agents versus Intrinsic Disease.” AJR Am J Roentgenol. 2018 Aug 30:1-7.
4. Kann BH, Aneja S, Loganadane GV, Kelly JR, Smith SM, Decker RH, Yu JB, Park HS, Yarbrough WG, **Malhotra A**, Burtness BA, Husain ZA Pretreatment Identification of Head and Neck Cancer Nodal Metastasis and Extranodal Extension Using Deep Learning Neural Networks. Sci Rep. 2018 Sep 19;8(1):14036. doi: 10.1038/s41598-018-32441-y
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 **Web Publications**

1. Case-in-Point Web Cases, American College of Radiology: Over 25 cases published in the Neuroradiology Section
2. Case of the Week - Web Cases, University of Rochester: Several interesting cases submitted.

**Scholarship in Press (Accepted for Publication)**

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**Review Paper**

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