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## Curriculum Vitae- Nauman Tariq, MBBS

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NAME: Nauman Tariq, M.B.B.S.	POSITION TITLE:  Asst. Professor of Neurology Johns Hopkins Hospital  Director, Johns Hopkins Headache Center 4940 Eastern Ave 301 Building, Suite 2100 Baltimore, MD 21224		
INSTITUTION AND LOCATION ( Medical School)	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
National University of Sciences and Technology. Pakistan	MBBS	2003	Medicine

### A. Positions and Honors.

#### Positions and Employment

2015- 2017	Staff physician. Michigan Headache & Neurological Institute, St. Joseph Mercy Hospital, Chelsea, MI
2015-2017	Clinical Asst. Professor, Dept of Neurology, College of Ostopathic Medicine, Mich State Univ.
2014-2015	Clinical Fellow, Headache Medicine, The Cleveland Clinic. Ohio, USA
2013-2014	Co-Chief Resident, Department of Neurology, University of Minnesota Medical Center, MN, USA
2011-2014	Resident, Department of Neurology, University of Minnesota Medical Center, MN, USA
2010-2011	Intern, Department of Internal Medicine, University of Minnesota Medical Center, MN, USA
2008-2010	Managing Editor, Journal of Vascular and Interventional Neurology, <a href="http://www.jvin.org">www.jvin.org</a>
2008-2010	Junior scientist, Department of Neurology, University of Minnesota medical center, MN, USA

#### Professional memberships /Awards/Certifications

2016-2017	Board Certified. Headache Medicine . UCNS
2014-2015	Professional Development Grant Recipient from The Cleveland Clinic
2014-present	Board certified. American Board of Psychiatry and Neurology
2014-present	Member, American Headache Society
2009-present	Member, American Academy of Neurology
2008-present	Member, Society of Vascular and Intervental Neurology, USA
2008-present	Excellence award, planning committee, 4 <sup>th</sup> Annual Vascular Neurology Conference, 2009, MN, USA
2007-present	Certified by the Educational Commission for Foreign Medical Graduates (ECFMG). USA

#### Professional Courses

2014-	Residency elective in headache medicine. Thomas Jefferson University Hospital, PA
2013-	ACGME Leadership Skills Training Program for Chief Residents, Philadelphia, PA
2010-	CITI- Collaborative Institutional Training Initiative Course, University of Minnesota, MN
2009-	Analyze 9.0; Biomedical Imaging software, Mayo Clinic, Rochester, MN
2009-	JMP8 statistical software: Introductory workshop, University of Minnesota, MN
2008-	Laboratory animal surgery techniques training course University of Minnesota, MN
2008-	Lab equipment safety and handling techniques, University of Minnesota
2008-	Introduction to SAS 9.3 statistical software training course. University of Minnesota, MN USA
2008-	Adobe Indesign CS4. (Medical Journal publishing)
2008-	Adobe Dreamweaver CS3, (online Journal publishing and maintaining the website)
2007-	"Teaching skills and methods" Mercer County College, NJ, USA

### A. Journal Publications:

1. **Tariq N.**, Khatri R. et al Leptomeningeal Collaterals in Acute Ischemic Stroke. *J Vasc Interv Neurol* 2008; 1(4):91-95.
2. Hussein HM, Georgiadis AI, **Tariq N**, Qureshi AI, MD. Et al Occurrence and Predictors of Futile Recanalization Following Endovascular Treatment among Patients with Acute Ischemic Stroke: A Multicenter Study. *AJNR. Am J Neuroradiol.* 2010 Mar; 31(3):454-8. Epub 2010 Jan 14.
3. Qureshi AI, **Tariq N** and ATACH investigators. Antihypertensive treatment of acute cerebral hemorrhage. *Crit Care Medicine.* 2010 Feb;38(2):637-48
4. Qureshi AI, **Tariq N**, Georgiadis AL, Kirmani JF et al. Predictors and Timing of Complications Following Intracranial Angioplasty and/or Stent Placement. Implications for Post-procedural Monitoring. *Neurosurgery* 2011 Jan;68(1):53-60
5. Qureshi AI, Vazquez G, **Tariq N**, Lanzino G et al. Impact of International Subarachnoid Aneurysm Trial Results on Treatment Of Ruptured Intracranial Aneurysms In United States. *J Neurosurg.* 2011 Mar; 114(3):834-4.
6. Qureshi AI, **Tariq N**, Haines SJ et al. Patient Recruitment Patterns in Multicenter Randomized Clinical Trials of Cerebrovascular Diseases. *J Stroke Cerebrovasc Dis.* 2010 Aug 17
7. **Suri MFK, Tariq N**, Vazquez G et al. Intracranial angioplasty and/or stent placement in octogenarians is associated with a threefold greater risk of periprocedural stroke or death. *J Endovasc Ther.* 2010 Jun; 17(3):314-9
8. Qureshi AI, Palesch YY, **Tariq N** et al. Effect of systolic blood pressure reduction on hematoma expansion, perihematomal edema, and 3-month outcome among patients with intracerebral hemorrhage: results from the antihypertensive treatment of acute cerebral hemorrhage study. *Arch Neurol.* 2010 May;67(5):570-6
9. Farrag A, Irfan M, **Tariq N**, Qureshi AI et al. Occurrence Of Subacute Recanalization And Collateral Formation In Patients With Cerebral Venous Thrombosis. A Serial Venographic Study. *Neurocritical care.* 2010 Jul 23.
10. Thanh N Nguyen, Osama O Zaidat, **Tariq N**, Qureshi AI et al. Balloon Angioplasty for Intracranial Atherosclerotic Disease: Periprocedural Risks and Short Term Outcomes in a Multicenter Study. *Stroke.* 2010 Nov 11.
11. Khatri R, **Tariq N**, Vazquez G, Qureshi AI et al Outcomes after nontraumatic subarachnoid hemorrhage at hospitals offering angioplasty for cerebral vasospasm: A National level analysis in the United States *Neurocritical care.* 2010 Sep 14.
12. Kozak O, **Tariq N**, Qureshi AI et al. High Risk of Recurrent Ischemic Events among Patients with Deferred Intracranial Angioplasty and Stent Placement for Symptomatic Intracranial Atherosclerosis. *Neurosurgery.* 2011 Aug;69(2):334-42
13. Abdihalim, M. Kim S, **Tariq N**, Qureshi, AI. et al. Short and intermediate term angiographic and clinical outcomes of patients with coils protrusions following embolization of intracranial aneurysms. *AJNR Am J Neuroradiol.* 2011 Sep;32(8):1392-8.
15. Siddiqui FM, Hassan AE, **Tariq N** et al. Endovascular Management of Symptomatic Extracranial Stenosis Associated with Secondary Intracranial Tandem Stenosis. A Multicenter Review. *J Neuroimaging.* 2011 Jun 20.
16. Miley JT, **Tariq N**, Tummala RP et al. Comparison Between Angioplasty Using Compliant and Non-compliant Balloons for Treatment of Cerebral Vasospasm Associated With Subarachnoid Hemorrhage. *Neurosurgery.* 2011 Dec;69
17. Qureshi AI, Palesch YY, **Tariq N** et al , ATACH Investigators. Effect of systolic blood pressure reduction on risk of acute renal injury among intracerebral hemorrhage patients with acute hypertensive response. *Am J Med.* 2012 Jul;125(7):718
18. Georgiadis AL, Memon MZ, **Tariq N** et al. Intra-Arterial Tenecteplase for Treatment of Acute Ischemic Stroke: Feasibility and Comparative Outcomes. *J Neuroimaging* Aug 2011.
19. Suri MFK, Georgiadis AL, **Tariq N** et al. Estimated prevalence of acoustic cranial windows and intracranial stenosis in the US elderly population: ultrasound screening in adults for intracranial disease study. *Neuroepidemiology.* 2011;37(1):64-71.
20. Hassan AE, Zacharatos H, **Tariq N** et al. Long-term Clinical and Angiographic Outcomes in Patients with Spontaneous Cervico-Cranial Arterial Dissections Treated with Stent Placement. *J Neuroimaging.* 2012 May 21
21. **Tariq N**, Maud A, Shah QA, Clinical outcome of patients with acute posterior circulation stroke and bilateral vertebral artery occlusion. *J Vasc Interv Neurol.* 2011 Jul;4
22. Hassan AE, Jadhav V, **Tariq N** et al. Determinants of Neurologic Deterioration and Stroke-Free Survival After Spontaneous Cervicocranial Dissections: A Multicenter Study. *J Stroke Cerebrovasc Dis.* 2011 Nov 12.
23. Georgiadis AL, Cordina SM, **Tariq N** et al. Aspirin Treatment Failure and the Risk of Recurrent Stroke and Death Among Patients with Ischemic Stroke. *J Stroke Cerebrovasc Dis.* 2011 Aug 9
24. Hassan AE, **Tariq N**, Qureshi AI et al. Comparison of Single versus Multiple Spontaneous Extra- and/or Intracranial Arterial Dissection. *J Stroke Cerebrovasc Dis.* 2011 Jul 22

25. Hussain HM, **Tariq N**, Palesch YY et al. Reliability of hematoma volume measurement at local sites in the setting of a multicenter acute intracerebral hemorrhage clinical trial. *Stroke*. 2013 Jan;44(1):237-9
26. Chaudhry SA, **Tariq N**, Majidi S et al. Rates and factors associated with admission in patients presenting to the ED with TIA in the United States-2006 to 2008. *Am J Emerg Med*. 2013 Mar;31(3):516-9
27. Abdihalim MM, **Tariq N**, Qureshi AI et al. The natural history of "contrast stasis" within aneurysm after embolization. *J Vasc Interv Neurol*. 2013 Feb;5(2):14-21
28. **Tariq N**, Saeed M, Qureshi AI et al. Outcomes of Thrombolytic Treatment for Acute Ischemic Stroke in Dialysis-Dependent Patients in the United States. *J Stroke Cerebrovasc Dis* 2013 *J Stroke Cerebrovasc Dis*. 2013 Nov;22(8):e354-9.
29. Qureshi AI, Majidi S, **Tariq N** et al. Increased Brain Volume Among Good Grade Patients with Intracerebral Hemorrhage. Results from the Antihypertensive Treatment of Acute Cerebral Hemorrhage (ATACH) Study. *Neurocrit Care*. 2013 Apr 23
30. Maiser S, Roohani P, **Tariq N** et al. Patients with transverse myelitis who developed venous thromboembolism while hospitalized have increased rate for inpatient mortality. *Journal of Neuroimmunology*. 2013 Aug 15;261(1-2):120-2
31. **Tariq N** et al. Patent foramen Ovale and Migraine: Closing the debate. A Systematic Review. *Headache*. 2016 Mar;56(3):462-78.
32. **Tariq N** et al. Long term outcomes and clinical characteristics of hypnic headache syndrome: 40 patient series from a tertiary referral center. *Headache*. 2016 Apr;56(4):717-24

## **B. Abstract Publications:**

1. **Tariq N**, Suri MFK, Maud A et al. Clinical Outcome of Patients with Posterior Circulation Stroke Secondary to Bilateral Vertebral Artery Occlusion. Accepted at the American Academy of Neurology, 61<sup>st</sup> Annual meeting, April 2009 . Seattle WA.
2. **Tariq N**, Miley JT, Suri MFK et al. Compliant vs Non-compliant Balloons for Endovascular Treatment of Vasospasm after Subarachnoid Hemorrhage. Accepted at the American Academy of Neurology, 61<sup>st</sup> Annual meeting 2009. Seattle WA.
3. **Tariq N**, Vazquez G, Heinz SJ et al. Imbalance in Distribution of Subjects Recruited per Center and Risk of Negative Outcomes in Acute Stroke Trials. Accepted at the American Academy of Neurology, 61<sup>st</sup> Annual meeting 2009. Seattle, WA.
4. **Tariq N**, Ezzeddine MA, Vazquez G et al. Hyperglycemia may be Associated with Edema Progression in Acute Intracerebral Hemorrhage. Accepted at the International Stroke Conference, American Heart Association 2009, Sandiego, CA. & American Academy of Neurology, 61<sup>st</sup> Annual meeting 2009. Seattle, WA. Published online in Stroke PMID:19221235
5. Kozak OS, **Tariq N**, Taylor RA et al. High Risk Of Recurrent Ischemic Events Among Patients With Deferred Endovascular Treatment For Symptomatic Intracranial Disease. Accepted at the International Stroke Conference, American Heart Association 2009, Sandiego, CA. & American Academy of Neurology, 61<sup>st</sup> Annual meeting 2009. Seattle, WA. Published online in Stroke PMID:19221235
6. Georgiadis AL, **Tariq N**, Qureshi AI et al. Timing of Complications Following Intracranial Angioplasty and/or Stent Placement. Implications for Post-procedural Monitoring. Accepted at the International Stroke Conference, American Heart Association 2009, Sandiego, CA. & American Academy of Neurology, 61<sup>st</sup> Annual meeting 2009. Seattle WA. Published online in Stroke PMID:19221235
7. Divani AA, **Tariq N**, Zick JL et al. Assessment of Degree of Stenosis of Carotid Artery Measurement Techniques Used in Clinical Trials. Accepted at the American Academy of Neurology, 61<sup>st</sup> Annual meeting 2009. Seattle WA.
8. Farrag A, **Tariq N**, Qureshi AI. et al. Incidence of Cerebral Venous Thrombosis in United States: 2002-2006 A National Analysis. Accepted at the International Stroke Conference, American Heart Association 2010, San Antonio TX. PMID: 20176983.
9. Taylor RA, **Tariq N**, Wojak JC et al. Intracranial Angioplasty and/or Stent Placement in Octogenarians is Associated with A Threefold Greater Risk of Peri-procedural Stroke or Death. Accepted at the International Stroke Conference, American Heart Association 2010, San Antonio TX. PMID: 20176983
10. Hassan AE, Rodriguez GJ, **Tariq N** et al. Long-term Clinical And Angiographic Outcomes In Patients With Spontaneous Cervico-cranial Dissections Treated With Stent Placement. Submitted at the American Academy of Neurology, 62<sup>nd</sup> annual meeting, Toronto, Canada 2010 PMID: 20176983

11. Suri MFK, **Tariq N**, Georgiadis AL et al. Transcranial Doppler Ultrasound for Detecting Intracranial Stenosis in Elderly Population. Results from the Ultrasound Screening in Adults for Intracranial Disease (USAID) Study. Accepted at the International Stroke Conference, American Heart Association 2010, San Antonio TX. PMID: 20176983
12. Qureshi AI, Palesch YY, **Tariq N** and the ATACH investigators. Does National Institutes of Health Stroke Scale Score Provide Additional Predictive Value in Good Grade Patients with Intracerebral Hemorrhage? Results from the Antihypertensive Treatment of Acute Cerebral Hemorrhage (ATACH) Study. Accepted at the International Stroke Conference, American Heart Association 2010, San Antonio TX. PMID: 20176983
13. Qureshi AI, **Tariq N**, Hassan AE et al. Factors Associated with Neurological Complications following Intracranial Angioplasty and/or Stent Placement. A Multicentric Study. Accepted at the International Stroke Conference, American Heart Association 2010, San Antonio TX. PMID: 20176983
14. Hassan AE, **Tariq N**, Qureshi AI et al. Clinical and Radiological Predictors of Neurological Deterioration in Spontaneous Cervico-Carotid Dissections. Accepted at the American Academy of Neurology, 62nd annual meeting, Toronto, Canada 2010
15. **Tariq N**, Vazquez G, Ezzeddine M et al. and the ATACH Investigators. Predictors and Impact of Hematoma Resorption in Medically Treated Patients with Intracerebral Hemorrhage. Accepted at the International Stroke Conference, American Heart Association 2010, San Antonio TX. PMID: 20176983
16. Qureshi AI, Palesch YY, **Tariq N** and the ATACH Investigators. Effect of Serum Glucose Concentrations during Acute Hospitalization on Hematoma Expansion, Perihematomal Edema, and Three Month Outcome Among Patients with Intracerebral Hemorrhage. Results from the Antihypertensive Treatment of Acute Cerebral Hemorrhage (ATACH) Study. Accepted at the International Stroke Conference, American Heart Association 2010, San Antonio TX. PMID: 20176983
17. Wong R, **Tariq N**, Qureshi AI et al. Is Thrombolysis a Safe Option in Patients with Unruptured Aneurysms ? Accepted at the American Academy of Neurology, 62nd annual meeting, Toronto, Canada 2010
18. Hussein HM, **Tariq N**, Kim SH et al. Natural History of Asymptomatic Restenosis following Endovascular Treatment of Symptomatic Intracranial Stenosis. A Multicenter Study. Accepted at the American Academy of Neurology, 62nd annual meeting, Toronto, Canada 2010
19. Suri MFK, **Tariq N**, Georgiadis AL et al. Transcranial doppler ultrasound for detecting intracranial stenosis in elderly population. Results from the ultrasound screening in adults for intracranial disease (USAID) study. Accepted at the International Stroke Conference, February 23-26, 2010. San Antonio, Texas, USA. PMID: 20176983
20. Khatri R, Vazquez G, **Tariq N** et al. Endovascular and Neurosurgical Treatment of Cerebral Aneurysms among Octogenarians: Nationwide Inpatient Sample 2002-2006. Accepted at the International Stroke Conference, American Heart Association 2010, San Antonio TX. PMID: 20176983
21. Nguyen T, Zaidat O, **Tariq N** et al. Balloon Angioplasty for Intracranial Atherosclerotic Disease: Periprocedural Risks and Short term outcomes. Accepted at the International Stroke Conference, American Heart Association 2010, San Antonio TX. PMID: 20176983
22. Hassan AE, Rodriguez JG, **Tariq N** et al. Long-term clinical and angiographic outcomes in patients with spontaneous cervico-cranial dissections treated with stent placement. Presented at the 62nd Annual meeting of the American Academy of Neurology, April 10-17, 2010 Toronto, Canada
23. Hassan AE, **Tariq N**, Qureshi AI. et al. Clinical and radiological predictors of neurological deterioration in spontaneous cervico-carotid dissections. Presented at the 62nd Annual meeting of the American Academy of Neurology, April 10-17, 2010 Toronto, Canada.
24. Suri MFK, Tariq N, Qureshi AI. et al. Prevalence of asymptomatic intracranial stenosis in us elderly population: results from the ultrasound screening in adults for intracranial disease (USAID) study. Presented at the 62nd Annual meeting of the American Academy of Neurology, April 10-17, 2010 Toronto, Canada.
25. Hassan AE, Rodriguez GJ, **Tariq N** et al. Long-term clinical and angiographic outcomes in patients with spontaneous cervico-cranial dissections treated with stent placement. Presented at the 62nd Annual meeting of the American Academy of Neurology, April 10-17, 2010 Toronto, Canada.
26. Emiru T, **Tariq N**, Taylor RA et al. Predictors of endotracheal intubation in patients presenting with seizure. Presented at the 62nd Annual meeting of the American Academy of Neurology, April 10-17, 2010 Toronto, Canada.
27. Siddiqui FM , Hassan AE, **Tariq N**, Yacoub H , Vazquez G, Suri MFK, Taylor RA, Qureshi AI. Endovascular management of symptomatic extracranial stenosis associated with secondary intracranial tandem stenosis. a multicenter review. Presented at the 62nd Annual meeting of the American Academy of Neurology, April 10-17, 2010 Toronto, Canada.

28. Abdihalim, **Tariq, N.** Qureshi, AI. et al. Short- and Intermediate- term Angiographic and Clinical Outcomes of Patients with Various Grades of Coil Protrusions Following Embolization of Intracranial Aneurysms. Presented at the 63rd Annual meeting of the American Academy of Neurology. April,2011 Hawaii. USA
29. Hussein MH,**Tariq N,** Miley J et al. Short Clinical relevance of residual stenosis following intracranial angioplasty and/or stent placement for atherosclerotic lesions Presented at the 63rd Annual meeting of the American Academy of Neurology. April,2011 Hawaii. USA
30. Chaudhry S, **Tariq N** Suri MFK, Qureshi AI. Validation of a Novel Intracerebral Hemorrhage Specific Intensity of Care Quality Metrics. Presented at the 63rd Annual meeting of the American Academy of Neurology. April,2011 Hawaii. USA
31. Hassan AE, **Tariq N,** Qureshi AI et al. Presence of underlying metastatic malignancy increases the risk of ICH after endovascular treatment of acute ischemic stroke. Presented at the 64<sup>th</sup> Annual meeting of the AAN. April 2012. Louisiana. USA
- 32 J. Sein, **Tariq N,** M. F. Suri,. Van de Moortele et al. High resolution imaging of brain vessels at 7 Tesla. Presented at the 64<sup>th</sup> Annual meeting of the AAN. April 2012. Louisiana. USA
33. Hussein HM, **Tariq N,** Qureshi AI et al. Reliability of hematoma volume calculation at local sites in the setting of a multicenter ICH clinical trial. Presented at the 64<sup>th</sup> Annual meeting of the AAN. April 2012. Louisiana. USA
34. **Tariq N,** Rizvi A, Qureshi AI et al. Predictors of admissions in patients presenting to the ED with transient ischemic attacks in USA. A national survey. Presented at the 64<sup>th</sup> Annual meeting of the AAN. April 2012. Louisiana. USA
35. Irfan M, **Tariq N,** Hassan AE et al. Effect of statins on ICH and symptomatic dissection recurrence in patients with spontaneous and traumatic dissections. Presented at the 64<sup>th</sup> Annual meeting of the AAN. April 2012. Louisiana. USA
36. **Tariq N,** Adil MM, Qureshi AI et al. Occurrence of femoral nerve injury among patients undergoing transfemoral percutaneous catheterization procedures in United States. Presented at the 65<sup>th</sup> Annual meeting of the AAN March, 2013 San Diego, CA, USA and International Stroke Conference 2013, Honolulu, Hawaii.
37. **Tariq N,** Sit N, Qureshi AI et al. Effect of ultra-early endovascular intracranial aneurysm treatment on rebleeding and outcomes in patients with subarachnoid hemorrhage. Presented at the 65<sup>th</sup> Annual meeting of the AAN March, 2013 San Diego, CA, USA and International Stroke Conference 2013, Honolulu, Hawaii.
38. **Tariq N,** Saeed F, Qureshi AI et al. Outcomes of thrombolytic treatment for acute ischemic stroke in dialysis dependant patients in the United States. Presented at the 65th Annual meeting of the AAN March, 2013 San Diego, CA, USA and International Stroke Conference 2013, Honolulu, Hawaii.
39. Maiser S, Adil MM, **Tariq N** et al. Outcomes of transverse myelitis patients with venous thromboembolism complications in the United States. Presented at the 65th Annual meeting of the AAN March, 2013 San Diego, CA, USA
40. **Tariq N,** Willging J, Tiryaki E et al. Simulation boot camp for neurology residents: A unique experience from a training perspective. Presented at the 66<sup>th</sup> Annual meeting of the AAN April 2014, Philadelphia, USA.
41. **Tariq N,** Tepper SJ, Kriegler JK et al. Long term outcomes in hypnic headache syndrome: 32 patient series from a tertiary referral center. Accepted at the 17<sup>th</sup> International Headache Society Congress. May 2015, Valencia, Spain.
42. **Tariq N,** Tepper SJ, Kriegler JK et al. Geographic Distribution and Demographic Characteristics of United Council of Neurologic Subspecialties (UCNS) Certified Headache Specialists Across the United States. Accepted at the 57<sup>th</sup> American Headache Society Meeting. June 2015. Washington D.C.
43. **Tariq N,** Tepper SJ, Kriegler JK et al. Safety and Efficacy of OnabotulinumtoxinA for chronic migraines in the elderly. A comparison with PREEMPT-II clinical trial. Accepted at the 57<sup>th</sup> American Headache Society Meeting. June 2015. Washington D.C.

#### **Book Chapters:**

- 2009-2011 Georgiadis AL,**Tariq N,** Ford MD. Editor: Adnan I. Qureshi. "Endovascular treatment of Intracranial Aneurysms". Chapter 20. Textbook of Interventional Neurology. Cambridge University Press. UK .2011. ISBN : 0521876397
- 2009-2011 Qureshi AI, **Tariq N,** Miley JT, Lanzino G. "Endovascular Treatment of Cerebral Vasospasm". Chapter 18. Textbook of Interventional Neurology. Cambridge University Press. UK.2011 ISBN : 0521876397

2009-2011 Adnan I. Qureshi MD; **Tariq N** MD; Rabia Qaiser MD; Herbert B. Newton MD; Stephen J. Haines MD  
Intracranial and head and neck tumors: embolization and chemotherapy. Textbook of Interventional  
Neurology. Cambridge University Press. , UK .2011. ISBN : 0521876397

### **C. Research Support**

#### **1. Implications and challenges of long term structured follow up in the management of acute stroke patients: A single center prospective study.**

**Role: Principal Investigator. July 2010-June 2014**

**Grant Award \$9125 Fairview Physician Associates Grant**

A Fairview network hospitals and clinics funded study comparing long term follow-up visit intervention of ischemic stroke patients with historical controls.

**Status: Completed.**

**2. LBR-101 for the Prevention of Chronic and Episodic Migraine.** This is a phase II-B randomized double blind placebo controlled multi-center study LBR-101 is a monoclonal antibody that binds to calcitonin gene-related peptide (CGRP), a well validated target in migraine.

**Role: Site Co-PI**

Funding: Labrys Biologics

#### **3. Professional Development Grant: \$1600**

Awarded by The Cleveland Clinic Foundation for the year 2014-2015. A total of 5 awardees were selected among approximately 1100 interns, residents and fellows in training at multiple training facilities.