

BIOGRAPHICAL SKETCH

NAME Aasef G. Shaikh		POSITION TITLE	
		Assistant Professor of Neurology	
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	MM/YY	FIELD OF STUDY
Cleveland Clinic, Cleveland, OH	Fellow	06/'15	Movement disorders (DBS emphasis)
Emory University, Atlanta, GA	Fellow	06/'14	Movement disorders
Case Western Reserve University, Cleveland, OH	Resident	06/'13	Neurology (board certified)
The Johns Hopkins University, Baltimore, MD	Fellow	06/'09	Neurotology/eye movements
Washington University, St.Louis, MO	Fellow	10/'05	Cerebellar neurophysiology
Wayne State University, Detroit, MI	Ph.D	12/'03	Neuroscience/Physiology
Maharaja Sayajirao University, Baroda, India	M.B.B.S.	03/'00	Medical school

A. Positions:

Current (Aug 2015)	Assistant Professor of Neurology, Case Western Reserve University, Cleveland, OH
2014-2015	Movement disorders fellow (Deep Brain Stimulation emphasis), Cleveland Clinic, Cleveland, OH
2013-2014	Movement disorders fellow, Emory University, Atlanta, GA
2010-2013	Neurology Residency, Case Western Reserve University, Cleveland, OH
2009-2010	Medicine Internship, Case Western Reserve University, Cleveland, OH
2005-2009	Neurotology and ocular motility fellowship, The Johns Hopkins University, Baltimore, MD
2002-2005	Basic neuroscience fellowship, Washington University, St. Louis, MO

B. Awards:

- American Academy of Neurology Alliance award: Founders – April 2015
- Cleveland Clinic Neurological Institute clinical fellow research award – May 2015
- Dystonia Medical Research Foundation clinical fellowship award – July 2013
- Best research presentation – Neurological Institute, Case Western Reserve University, March, 2013.
- Best scientific research presentation – Neurological Institute, Case Western Reserve University, April, 2012.
- International dystonia symposium award, October 2011.
- The Movement Disorders Society travel award, June 2009.
- Murrey Sachs Award –Center of Hearing and Balance, The Johns Hopkins University, November 2008.
- The Movement Disorders Society travel award, June 2007
- Ataxia-telangiectasia Society (United Kingdom) Research Grant, May 2007.
- International Human Frontiers Science Program Scholarship, August 2006.
- Boehringer Ingerheim Fonds Fellowship, August 2006.
- Gustavus and Louise Pfeiffer Research Foundation Grant, December, 2005.
- Ataxia-Telangiectasia Children's Project Research Grant, November, 2005.
- American Aging Society Fellowship, April, 2004.
- Ruth L. Kirschstein National Research Service Award (NIH F32 award), NIDCD, September, 2003.
- Neural Prosthesis Program Fellowship, NINDS/NIDCD. October, 2002.
- Barany Society/NIDCD Combined Fellowship, September 2002.
- Neural Prosthesis Program Fellowship, NINDS/NIDCD. October, 2001.
- American Society for Artificial Internal Organs Fellowship. June 2001

- Graduate Professional Scholarship, Wayne State University Graduate School, Detroit, MI. 2001-2002.

C. Grant Support

Completed:

- Dystonia Medical Research Foundation Clinical Fellowship Grant (July 2013 – June 2014), (PI: Shaikh)
- Ataxia-telangiectasia Society (United Kingdom) Research Grant, May 2007. (PI: Shaikh)
- International Human Frontiers Science Program Scholarship, August 2006. (PI: Shaikh)
- Boehringer Ingerheim Fonds Fellowship, August 2006. (PI: Shaikh)
- Ataxia-Telangiectasia Children's Project Research Grant, November, 2005. (Co-I: Shaikh, PI: Crawford)
- Gustavus and Louise Pfeiffer Research Foundation Grant, December, 2005. (Co-I: Shaikh, PI: Zee)
- Ruth L. Kirschstein National Research Service Award (NIH F32 award), NIDCD, September, 2003. (PI: Shaikh)

D. Peer-reviewed publications (from pubmed.gov; H-Index – September 2015: 15)

1. Ghasia FF, Wilmot G, Ahmed A, **Shaikh AG**. Strabismus and Micro-Opsoclonus in Machado-Joseph Disease. *Cerebellum*. 2015 Aug 26.
2. **Shaikh AG**. Translational neurophysiology of Parkinson's disease: can't blink on an eye blink. *J Neurophysiol*. 2015 Jul;114(1):761-2.
3. **Shaikh AG**, Ghasia FF. Neuro-ophthlamology of Chiari type I malformation. *Expert Rev in Ophthalmology* Jun 2015 [ahead of print].
4. **Shaikh AG**, Ghasia FF. Misdirected horizontal saccades in pan-cerebellar atrophy. *J Neurol Sci*. 2015 Aug 15;355(1-2):125-30.
5. Ghasia FF, **Shaikh AG**, Jacobs J, Walker MF. Cross-coupled eye movement supports neural origin of pattern strabismus. *Invest Ophthalmol Vis Sci*. 2015 May 1;56(5):2855-66.
6. **Shaikh AG**, Zee DS, Jinnah HA. Oscillatory head movements in cervical dystonia: Dystonia, Tremor, or both? *Mov Disord*. 2015 May;30(6):834-42.
7. **Shaikh AG**, Wong A, Zee DS, Jinnah HA. Why are voluntary head movements in cervical dystonia slow? *Parkinsonism Relat Disord*. 2015 Jun;21(6):561-6.
8. Ghasia FF, **Shaikh AG**. Head oscillations in infantile nystagmus syndrome. *J AAPOS*. 2015 Feb;19(1):38-41.
9. Ghasia FF, **Shaikh AG**. Uncorrected Myopic Refractive Error Increases Microsaccade Amplitude. *Invest Ophthalmol Vis Sci*. 2015 Feb 12.
10. Ghasia FF, **Shaikh AG**. Experimental tests of hypotheses for microsaccade generation. *Exp Brain Res*. 2015, Apr;233(4):1089-95.
11. **Shaikh AG**, Sundararajan S. Angioinvasive Aspergillosis of the Central Nervous System. *Can J Neurol Sci*. 2015 Jan;42(1):64-5.
12. **Shaikh AG**, Mewes K, DeLong MR, Gross RE, Triche SD, Jinnah HA, Boulis N, Willie JT, Freeman A, Alexander GE, Aia P, Butefisch CM, Esper CD, Factor SA. Temporal profile of improvement of tardive dystonia after globus pallidus deep brain stimulation. *Parkinsonism Relat Disord*. 2014 Nov 20, [Epub ahead of print].

13. **Shaikh AG**, Mewes K, Jinnah HA, DeLong MR, Gross RE, Triche S, Freeman A, Factor SA. Globus pallidus deep brain stimulation for adult-onset axial dystonia. *Parkinsonism Relat Disord*. 2014 Nov;20(11):1279-82.
14. **Shaikh AG**, Ghasia FF. Gaze holding after anterior-inferior temporal lobectomy. *Neurol Sci*. 2014 Nov;35(11):1749-56.
15. Ghasia FF, **Shaikh AG**. Source of high-frequency oscillations in oblique saccade trajectory. *Exp Eye Res*. 2014 Apr;121:5-10.
16. Ghasia FF, Gulati D, Westbrook EL, **Shaikh AG**. Viewing condition dependence of the gaze-evoked nystagmus in Arnold Chiari type 1 malformation. *J Neurol Sci*. 2014 Apr 15;339(1-2):134-9.
17. **Shaikh AG**. Motion Perception without Nystagmus-A Novel Manifestation of Cerebellar Stroke. *J Stroke Cerebrovasc Dis*. 2013 Nov 19.
18. **Shaikh AG**. Torsional nystagmus in hypothalamic hamartoma. *Epileptic Disord*. 2013 Dec;15(4):437-9.
19. **Shaikh AG**, Mehndiratta P, Gonzalez C, Koo BB. Analog restless legs syndrome rating scale. *Eur Neurol*. 2013;70(3-4):195-200.
20. **Shaikh AG**, Marti S, Tarnutzer AA, Palla A, Crawford TO, Zee DS, Straumann D. Effects of 4-aminopyridine on nystagmus and vestibulo-ocular reflex in ataxia-telangiectasia. *J Neurol*. 2013 Nov;260(11):2728-35.
21. Ghasia FF, **Shaikh AG**. Pattern Strabismus: Where Does the Brain's Role End and the Muscle's Begin? *J Ophthalmol*. 2013;2013:301256.
22. **Shaikh AG**. Does 4-aminopyridine "beat" downbeat nystagmus? *J Neurol Neurosurg Psychiatry*. 2013 Dec;84(12):1298-9.
23. **Shaikh AG**, Ghasia FF, Rasouli G, DeGeorgia M, Sundararajan S. Acute onset of upbeat nystagmus, exotropia, and internuclear ophthalmoplegia--a tell-tale of ponto-mesencephalic infarct. *J Neurol Sci*. 2013 Sep 15;332(1-2):56-8.
24. **Shaikh AG**, Zee DS, Mandir AS, Lederman HM, Crawford TO. Disorders of Upper Limb Movements in Ataxia-Telangiectasia. *PLoS One*. 2013 Jun 27;8(6):e67042.
25. **Shaikh AG**, Wong AL, Zee DS, Jinnah HA. Keeping your head on target. *J Neurosci*. 2013 Jul 3;33(27):11281-95.
26. **Shaikh AG**, Miller BR, Sundararajan S, Katirji B. Gravity-Dependent Nystagmus and Inner-Ear Dysfunction Suggest Anterior and Posterior Inferior Cerebellar Artery Infarct. *J Stroke Cerebrovasc Dis*. 2013 Jun 22.
27. **Shaikh AG**, Bates JH, Yeates SW, Katirji B, Devereaux MW. Fulminant idiopathic intracranial hypertension. *JAMA Neurol*. 2013 Jul;70(7):937-8.
28. Azzam R, **Shaikh AG**, Serra A, Katirji B. Exacerbation of myasthenia gravis with voriconazole. *Muscle Nerve*. 2013 Jun;47(6):928-30.
29. **Shaikh AG**, Ghasia FF. Physiology and pathology of saccades and gaze holding. *NeuroRehabilitation*. 2013;32(3):493-505.
30. **Shaikh AG**. Fosphenytoin induced transient pendular nystagmus. *J Neurol Sci*. 2013 Jul 15;330(1-2):121-2.

31. **Shaikh AG**, Termsarasab P, Riley DE, Katirji B. The floccular syndrome in herpes simplex type 1 encephalitis. *J Neurol Sci.* 2013 Feb 15;325(1-2):154-5.
32. **Shaikh AG**, Finlayson PG. Forskolin induced increase in spontaneous activity of auditory brainstem neurons is comparable to acoustic stimulus evoked responses. *Neurosci Lett.* 2012 Dec 7;531(2):69-73
33. **Shaikh AG**, Riley DE, Gunzler SA. Teaching video neuroimages: essential palatal tremor: is it a peripherally triggered central movement disorder? *Neurology.* 2012 Oct 16;79(16):e142.
34. **Shaikh AG**, Gulati D, Wu S, Koubeissi MZ. Independent and symmetric seizures from parasagittal cortex: is this a feature of profound hypoglycemia? *Epilepsy Behav.* 2012 Oct;25(2):263-5.
35. **Shaikh AG**. Saccadic oscillations - membrane, model, and medicine. *Expert Rev Ophthalmol.* 2012 Oct;7(5):481-486.
36. **Shaikh AG**, Palla A, Marti S, Olasagasti I, Optican LM, Zee DS, Straumann D. Role of cerebellum in motion perception and vestibulo-ocular reflex-similarities and disparities. *Cerebellum.* 2013 Feb;12(1):97-107.
37. **Shaikh AG**. A journey of tinnitus: myths, models, membranes and medicines. *J Neurol Neurosurg Psychiatry.* 2012 Aug;83(8):765-7.
38. Schubert MC, Migliaccio AA, Ng TW, **Shaikh AG**, Zee DS. The under-compensatory roll aVOR does not affect dynamic visual acuity. *J Assoc Res Otolaryngol.* 2012 Aug;13(4):517-25.
39. **Shaikh AG**. A trail of artificial vestibular stimulation: electricity, heat, and magnet. *J Neurophysiol.* 2012 Jul;108(1):1-4.
40. **Shaikh AG**, Termsarasab P, Nwankwo C, Rao-Frisch A, Katirji B. Atypical forms of Guillain-Barré syndrome and H1N1-influenza vaccination. *Vaccine.* 2012 May 9;30(22):3251-4.
41. **Shaikh AG**, Thurtell MJ, Optican LM, Leigh RJ. Pharmacological tests of hypotheses for acquired pendular nystagmus. *Ann N Y Acad Sci.* 2011 Sep;1233:320-6.
42. **Shaikh AG**, Zee DS, Optican LM, Miura K, Ramat S, Leigh RJ. The effects of ion channel blockers validate the conductance-based model of saccadic oscillations. *Ann N Y Acad Sci.* 2011 Sep;1233:58-63.
43. Hong S, Optican LM, Fitzgibbon EJ, Zee DS, **Shaikh AG**. OrbitView: Eye movement visualization software. *J Neurosci Methods.* 2011 Sep 15;200(2):181-4.
44. **Shaikh AG**, Marti S, Tarnutzer AA, Palla A, Crawford TO, Straumann D, Carey JP, Nguyen KD, Zee DS. Ataxia telangiectasia: a "disease model" to understand the cerebellar control of vestibular reflexes. *J Neurophysiol.* 2011 Jun;105(6):3034-41.
45. Strupp M, Thurtell MJ, **Shaikh AG**, Brandt T, Zee DS, Leigh RJ. Pharmacotherapy of vestibular and ocular motor disorders, including nystagmus. *J Neurol.* 2011 Jul;258(7):1207-22.
46. Tarnutzer AA, **Shaikh AG**, Palla A, Straumann D, Marti S. Vestibulo-cerebellar disease impairs the central representation of self-orientation. *Front Neurol.* 2011 Feb 28;2:11.
47. **Shaikh AG**, Xu-Wilson M, Grill S, Zee DS. 'Staircase' square-wave jerks in early Parkinson's disease. *Br J Ophthalmol.* 2011 May;95(5):705-9. Epub 2010 Aug 7.

48. **Shaikh AG**, Reich S, Zee DS. Pseudonystagmus--clinical features and quantitative characteristics. *Nature Rev Neurol*. 2010 Sep;6(9):519-23.
49. **Shaikh AG**, Wong AL, Optican LM, Miura K, Solomon D, Zee DS. Sustained eye closure slows saccades. *Vision Res*. 2010 Aug 6;50(17):1665-75.
50. **Shaikh AG**, Hong S, Liao K, Tian J, Solomon D, Zee DS, Leigh RJ, Optican LM. Oculopalatal tremor explained by a model of inferior olivary hypertrophy and cerebellar plasticity. *Brain*. 2010 Mar;133(Pt 3):923-40.
51. **Shaikh AG**, Hain TC, Zee DS. Oculomotor disorders in adult-onset Still's disease. *J Neurol*. 2010 Jan;257(1):136-8.
52. **Shaikh AG**, Marti S, Tarnutzer AA, Palla A, Crawford TO, Straumann D, Taylor AM, Zee DS. Gaze fixation deficits and their implication in ataxia-telangiectasia. *J Neurol Neurosurg Psychiatry*. 2009 Aug;80(8):858-64.
53. **Shaikh AG**, Ramat S, Optican LM, Miura K, Leigh RJ, Zee DS. Saccadic burst cell membrane dysfunction is responsible for saccadic oscillations. *J Neuroophthalmol*. 2008 Dec;28(4):329-36.
54. **Shaikh AG**, Miura K, Optican LM, Ramat S, Tripp RM, Zee DS. Hypothetical membrane mechanisms in essential tremor. *J Transl Med*. 2008 Nov 6;6:68.
55. Sinha N, Zaher N, **Shaikh AG**, Lasker AG, Zee DS, Tarnutzer AA. Perception of self motion during and after passive rotation of the body around an earth-vertical axis. *Prog Brain Res*. 2008;171:277-81.
56. Ramat S, Leigh RJ, Zee DS, **Shaikh AG**, Optican LM. Applying saccade models to account for oscillations. *Prog Brain Res*. 2008;171:123-30.
57. Zee DS, **Shaikh AG**. Think membranes and ion channels. *Curr Opin Neurol*. 2008 Feb;21(1):1-2.
58. **Shaikh AG**, Miura K, Optican LM, Ramat S, Leigh RJ, Zee DS. A new familial disease of saccadic oscillations and limb tremor provides clues to mechanisms of common tremor disorders. *Brain*. 2007 Nov;130(Pt 11):3020-31.
59. **Shaikh AG**, Jinnah HA, Tripp RM, Optican LM, Ramat S, Lenz FA, Zee DS. Irregularity distinguishes limb tremor in cervical dystonia from essential tremor. *J Neurol Neurosurg Psychiatry*. 2008 Feb;79(2):187-9.
60. Yakusheva TA, **Shaikh AG**, Green AM, Blazquez PM, Dickman JD, Angelaki DE. Purkinje cells in posterior cerebellar vermis encode motion in an inertial reference frame. *Neuron*. 2007 Jun 21;54(6):973-85.
61. **Shaikh AG**, Green AM, Ghasia FF, Newlands SD, Dickman JD, Angelaki DE. Sensory convergence solves a motion ambiguity problem. *Curr Biol*. 2005 Sep 20;15(18):1657-62.
62. Green AM, **Shaikh AG**, Angelaki DE. Sensory vestibular contributions to constructing internal models of self-motion. *J Neural Eng*. 2005 Sep;2(3):S164-79.
63. **Shaikh AG**, Finlayson PG. Excitability of auditory brainstem neurons, in vivo, is increased by cyclic-AMP. *Hear Res*. 2005 Mar;201(1-2):70-80.
64. **Shaikh AG**, Ghasia FF, Dickman JD, Angelaki DE. Properties of cerebellar fastigial neurons during translation, rotation, and eye movements. *J Neurophysiol*. 2005 Feb;93(2):853-63.

65. Angelaki DE, **Shaikh AG**, Green AM, Dickman JD. Neurons compute internal models of the physical laws of motion. *Nature*. 2004 Jul 29;430(6999):560-4.
66. **Shaikh AG**, Meng H, Angelaki DE. Multiple reference frames for motion in the primate cerebellum. *J Neurosci*. 2004 May 12;24(19):4491-7.
67. **Shaikh AG**, Finlayson PG. Hyperpolarization-activated (I(h)) conductances affect brainstem auditory neuron excitability. *Hear Res*. 2003 Sep;183(1-2):126-36.

E. Book chapters

1. **Shaikh AG**, Fernandez HH. Basics of neurostimulation. *Deep Brain Stimulation*. 1st edition, Editor: Raja Mehanna, 2015.
2. Hatcher-Martin J; **Shaikh AG**, Factor SA. Stereotypes. *The Parkinson's Disease and Movement Disorders*. 6th edition, Editors: Joseph Jankovic and Eduardo Tolosa, 2014
3. **Shaikh AG**; Walter BL. Midbrain. *Encyclopedia of the Neurological Sciences 2E*. Editors: Robert B. Daroff and Michael J. Aminoff, 2013.
4. Zee DS; **Shaikh AG**. The neurology of eye movements: from control systems to genetics to ion-channels to targeted pharmacotherapy. *Visual Neurosciences*. Editors: Leo Chalupa and John Werner, 2012
5. **Shaikh AG**, Optican LM, Zee DS. Membrane mechanisms of tremor. G. Grimaldi and M. Manto (eds.), *Mechanisms and Emerging Therapies in Tremor Disorders, Contemporary Clinical Neuroscience*, 2012.

F. Presentations and Proceedings

Invited presentations:

Eye movements – clinical tool to study movement disorders. *Movement disorders grand round speaker*. University of Cincinnati, Cincinnati, OH, May 2015.

Impaired motor learning in a disorder of the inferior olive: Is the cerebellum confused? *Alliance award: Founders lecture*. The 67th American Academy of Neurology annual meeting, Washington DC, April 2015.

Tale of neural integrator: from gaze-evoked nystagmus to cervical dystonia. *Neurology grand round speaker*. Case Western Reserve University, Cleveland, OH, March, 2015.

Motion perception – a new twist in clinical and basic neurotology. *Neurology grand round*, State University of New York at Stonybrook, Stonybrook, NY, October, 2014.

Cognitive neurology of the vestibular system: “dementia” for the neuro-otologist. *Center for Hearing and Balance Seminar Series*. Baltimore, MD, September, 2014.

Pharmacological tests of models of acquired pendular nystagmus. *Symposium a Tribute to John Leigh*, Buenos Aires, Argentina. March 2011.

4-aminopyridine improves eye movements in ataxia-telangiectasia. *Ataxia-telangiectasia workshop*, Kyoto, Japan. April 2008.

Oscillatory head movements in cervical dystonia – dystonic tremor, essential tremor, or ‘head nystagmus’? *Regional movement disorders conference*, Baltimore, MD. March 2008.

Eye movements in ataxia-telangiectasia. *Ataxia-telangiectasia workshop*, Banff, Canada. September 2006.
Multidisciplinary approach in management of ataxia-telangiectasia, *Ataxia Telangiectasia Children’s Project and NIH consensus meeting*, Bethesda, MD, March, 2006.

Increased intracellular cAMP- a neurochemical correlate of tinnitus, *American Aging Society Annual Meeting*, St. Petersburg, FL, June, 2004.

Potpourri of vestibular and auditory neuro-physiology. *Biomedical engineering Seminar Series*, Johns Hopkins University, Baltimore, MD, May, 2004.

Vestibular prosthesis and postural control, *Special Session on New Prosthetic Applications*, NINDS/NIDCD, October 2002.

Pharmacological modulation of superior olive complex neural excitability, *Otolaryngology Scientific Forum*, Detroit Medical Center, Detroit, MI, May 2002.

The vestibular prosthesis, Washington University in St.Louis, MO. January, 2002.

Semicircular canal implants, *Annual National Conference of Neurotological and Equilibriometric Society of India*, All India Institute of Medical Sciences, New Delhi, India, September 2001.

Design of the semicircular canal implants, *Otolaryngology Scientific Forum*, Detroit Medical Center, Detroit, MI, April 2001.

Abstracts and Proceedings:

Oscillatory head movements in cervical dystonia: dystonic tremor, essential tremor, or both? 18th International Congress of Parkinson’s Disease and Movement Disorders Society, Stockholm, Sweden, June 2014.

Voluntary rapid head movements in cervical dystonia. 18th International Congress of Parkinson’s Disease and Movement Disorders Society, Stockholm, Sweden, June 2014.

Two types of head oscillations in infantile nystagmus syndrome. 18th International Congress of Parkinson’s Disease and Movement Disorders Society, Stockholm, Sweden, June 2014.

Distribution specific improvement of tardive dystonia after globus pallidus DBS implant. 18th International Congress of Parkinson’s Disease and Movement Disorders Society, Stockholm, Sweden, June 2014.

Analog Restless Legs Syndrome Rating Scale (ARLS) – A Novel Bedside and Clinic Tool. Annual meeting of the American Academy of Neurology. San Diego, CA, March 2013.

Atypical forms of Guillain-Barré syndrome and H1N1-influenza vaccination. American Association of Neuromuscular and Electrodiagnostic Conference, San Francisco, CA, November 2011.

Interventional MRI and anatomical 3D model guided DBS placement in globus pallidus internus for Parkinson’s disease and dystonia. 18th International Congress of Parkinson’s Disease and Movement Disorders Society, Stockholm, Sweden, June 2014.

A centroid-based targeting approach to facilitate DBS electrode placement in the GPI using interventional MRI guided surgery. Bi-annual meeting of American Society of Stereotactic and Functional Neurosurgery, Washington DC, June 2014.

Can neural integrator hypothesis explain abnormal head movement in cervical dystonia. International Dystonia Symposium, Barcelona, Spain, October 2011.

Unstable neural integrator causes sinusoidal head oscillations in cervical dystonia. International Dystonia Symposium, Barcelona, Spain, October 2011.

Dystonia in ataxia-telangiectasia. International Dystonia Symposium, Barcelona, Spain, October 2011.

Pharmacological tests of models of microsaccadic oscillations. Symposium a Tribute to John Leigh, Buenos Aires, Argentina. March 2011.

Ataxia-telangiectasia - A model for understanding the control of vestibular reflexes by the cerebellum in humans. Annual meeting of the European Federation of Neurological Societies, Geneva, Switzerland, Summer, 2010.

Postural sway in ataxia-telangiectasia. 13th International congress of the Movement Disorders Society, Paris, France, June 2009.

Effects of botulinum toxin on the oscillatory head movements in cervical dystonia. 13th International congress of the Movement Disorders Society, Paris, France, June 2009.

Oscillatory head movements in cervical dystonia: Essential tremor, dystonic tremor, or head nystagmus? 13th International congress of the Movement Disorders Society, Paris, France, June 2009.

Membrane mechanisms for essential tremor. 13th International congress of the Movement Disorders Society, Paris, France, June 2009.

Feedback influences the function of head neural integrator. 13th International congress of the Movement Disorders Society, Paris, France, June 2009.

Sinusoidal head oscillations in idiopathic cervical dystonia. 13th International congress of the Movement Disorders Society, Paris, France, June 2009.

Pseudo-nystagmus – clinical presentation and quantitative features. 13th International congress of the Movement Disorders Society, Paris, France, June 2009.

“Staircase” saccadic intrusions in early Parkinson’s disease. 13th International congress of the Movement Disorders Society, Paris, France, June 2009.

Movement disorders in ataxia-telangiectasia. 13th International congress of the Movement Disorders Society, Paris, France, June 2009.

Synchronous inferior olive discharge and superimposed cerebellar learning explain irregular eye oscillations in oculopalatal tremor. 13th International congress of the Movement Disorders Society, Paris, France, June 2009.

Head movements in cervical dystonia – essential tremor, dystonic tremor, or head nystagmus? Dystonia Europe, Hamburg, Germany, October 2008.

Postural sways in ataxia-telangiectasia. Ataxia-telangiectasia international workshop, Kyoto, Japan, April 2008.

Dynamic visual acuity during passive roll and yaw head impulses in normals Annual meeting of the Society for Neuroscience, San Diego, CA, November, 2007.

Involuntary movements in ataxia-telangiectasia: natural history and quantitative characteristics. 11th International congress of the Movement Disorders Society, Istanbul, Turkey, June 2007.

Quantitative characteristics of limb tremor in cervical dystonia. 11th International congress of the Movement Disorders Society, Istanbul, Turkey, June 2007.

A new familial disorder: saccadic oscillations of the eyes. 11th International congress of the Movement Disorders Society, Istanbul, Turkey, June 2007.

Novel molecular mechanism of essential tremor – a computational approach. 11th International congress of the Movement Disorders Society, Istanbul, Turkey, June 2007.

Connexin gap junctions – neurophysiological correlate and therapeutic target for oculopalatal tremor. 11th International congress of the Movement Disorders Society, Istanbul, Turkey, June 2007.

Unique software algorithms for tremor analysis – comparing the novel approach and standard techniques. 11th International congress of the Movement Disorders Society, Istanbul, Turkey, June 2007.

Novel molecular mechanisms of saccadic oscillations. 36th annual meeting of the society for neuroscience, Atlanta, GA, October, 2006.

Unique software algorithms of tremor analysis -- novel approach vs. standard techniques. 36th annual meeting of the society for neuroscience, Atlanta, GA. October, 2006.

Purkinje cells in posterior cerebellar vermis detects motion in inertial reference frame. 36th annual meeting of the society for neuroscience, Atlanta, GA, October, 2006.

Novel molecular mechanisms of essential tremors -- a computational and experimental study. 36th annual meeting of the society for neuroscience, Atlanta, GA, October, 2006.

Ion channel profile of human brainstem saccadic burst neurons. 36th annual meeting of the society for neuroscience, Atlanta, GA, October, 2006.

Involuntary movement in ataxia-telangiectasia -- natural history and clinical characteristics. International workshop on ataxia-telangiectasia and ATM, Banff, AB, Canada, September, 2006.

Cross coupling of the vestibulo-ocular reflex -- a novel eye movement sign of ataxia-telangiectasia. International workshop on ataxia-telangiectasia and ATM, Banff, AB, Canada, September, 2006.

A novel software algorithms for tremor analysis -- comparing new approach with standard techniques. International workshop on ataxia-telangiectasia and ATM, Banff, AB, Canada, September, 2006.

Novel eye movement signs of Ataxia-Telangiectasia. International workshop on ataxia-telangiectasia, Banff, Canada, September, 2006.

Modeling per- and post-rotatory nystagmus -- a reliable passive disease marker of cerebellar function in ataxiatelangiectasia. International workshop on ataxia-telangiectasia and ATM, Banff, AB, Canada, September, 2006.

Vestibular response properties of nodulus neurons. Annual meeting of the Society for Neuroscience, Washington DC, October, 2005.

Spatiotemporal vestibular contributions to constructing internal models of self-motion. Annual meeting of the Society for Neuroscience, Washington DC, October, 2005.

Testing a hypothesis of sensory convergence to solve a motion ambiguity problem. Annual Midwinter Meeting of Association for Research in Otolaryngology, New Orleans, LA, February, 2005.

Inactivation of semicircular canals abolishes tilt-translation discrimination properties of central vestibular neurons. Annual meeting of the Society for Neuroscience, San Diego, CA, October, 2004.

Response properties of cerebellar fastigial neurons during translations, rotations, and eye-movements. Annual meeting of the Society for Neuroscience, San Diego, CA, October, 2004.

Multiple Reference Frames for Motion in Primate Cerebellum, 23rd Annual Congress of the Barany Society, July 2004, Paris, France.

Elevated intracellular cAMP – A Neurochemical Correlate of Tinnitus, 23rd Annual Congress of the Barany Society, July 2004, Paris, France.

The vestibular prosthesis in postural control and balance, American Aging Association – 33rd Annual Meeting, June 2004, St. Petersburg, FL.

Blockade of ion conductance in auditory neurons mimic disorder of central auditory processing in aged humans, American Aging Association – 33rd Annual Meeting, June 2004, St. Petersburg, FL.

Chronic chemical irritation of post-cricoid mucosa in development of Plummer-Vinson Syndrome: A new mechanism for development of post-cricoid web, Annual Meeting of American Broncho-esophageal Association, May 2004, Phoenix, AZ.

Vestibular responses of rostral fastigial neurons, Midwinter Meeting of Association for Research in Otolaryngology, February 2004, Daytona Beach, FL

Pharmacological modulation of superior olivary complex neuronal excitability, Midwinter Meeting of Association for Research in Otolaryngology, February 2002, St. Petersburg, FL.

The design of the semicircular canal implants. Annual Meeting of American Society for Artificial Internal Organs. June 2001, New York, New York.

Role of labyrinthine fluid in sound energy attenuation and early endolymphatic hydrops. Annual Meeting of Biomedical Engineering Society, October 2001, Durham NC.

Free Radicals in Labyrinthine Fluid as a Cause of Noise-Induced Hearing Loss, Annual Meeting of Biomedical Engineering Society, October 2001, Durham NC.

Design of The Semicircular Canal Implant. Association for Research in Otolaryngology, February, 2001, St. Petersburg, FL.

The Semicircular Canal Implants. The 22nd Annual Conference of Neurotology and Equilibriometric Society of India, Bangalore, India. January, 2000.

Role of Free Radicals in Labyrinthine Fluid and Mechanical Irritation of Vessels in Temporary Threshold Shift. The 22nd Annual Conference of Neurotology and Equilibriometric Society of India, Bangalore, India. January, 2000.

Oropharyngeal Receptor Dysfunction in Plummer-Vinson Syndrome. The 21st Annual Conference of Association of Physicians of Gujarat. Baroda, India. January, 2000.