

**ALESSANDRO SERRA, M.D., Ph. D.**

*Curriculum Vitae and Bibliography*

March 7, 2008

**ALESSANDRO SERRA, M.D., Ph.D.**

Professional Address: The Daroff-Dell'Osso Ocular Motility Laboratory.  
Louis Stokes Cleveland Department of Veterans Affairs  
Medical Center, Case Western Reserve University, Cleveland,  
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Birth Date: August 8, 1972; Sassari, Italy

Marital Status: Single

Academic degrees: M.D., Ph. D.

***Academic Education:***

M.D. Studies School of Medicine, University of Sassari, Sassari, Italy (Graduated magna cum laude)	1991-1997
Specialization in Neurology Institute of Clinical Neurology, University of Sassari, Sassari, Italy° (Graduated magna cum laude)	1998-2003
Ocular Motility Fellowship The Daroff-Dell'Osso Ocular Motility Laboratory, VA Medical Center, CWRU, Cleveland, Ohio, USA	Sept 2001-May 2002
Doctorate of Research (PhD) in Neuroscience The Neuro-Ophthalmology Laboratory c/o Institute of Clinical Neurology, University of Sassari, Sassari, Italy*	Jan 2005-Dec 2007
Ocular Motility Fellowship The Daroff-Dell'Osso Ocular Motility Laboratory, VA Medical Center, CWRU, Cleveland, Ohio, USA	Dec 2006-present
USMLE step 1 pass	October 2005
USMLE step 2ck pass	April 2007

° Title of specialization thesis: “Study of Eye Movements and Subjective Visual Vertical (SVV) in clinical assessment of patients with Multiple Sclerosis”

\* Title of graduation thesis: “Physiological and Pathological Aspects of Saccades. New Approaches to Diagnosis and Treatment of Saccadic Abnormalities.”

***Professional:***

Physician at first-aid station of Cannigione, Olbia, Italy	July-Aug 1998
Training for Specialization in Neurology, Institute of Clinical Neurology, University of Sassari, Sassari, Italy	1998-2003
Training in the study of Eye Movements, The Neuro-ophthalmology Laboratory c/o Institute of Clinical Neurology, University of Sassari, Sassari, Italy	2000-2003
Physician at first-aid station of Ghilarza, Oristano, Italy	May-July 2003
Physician at first-aid station of Ittiri, Sassari, Italy	Jan-March 2004
Physician at first-aid station of Pozzomaggiore, Sassari, Italy	June-Aug 2004
Contract of temporary collaboration for the study of Eye Movements in patients with Multiple Sclerosis, The Neuro-ophthalmology Laboratory c/o Institute of Clinical Neurology, University of Sassari, Sassari, Italy	May-Dec 2004
Neurology Consultant at the A.I.A.S. Physiotherapy Centers of Orosei, Oliena, and Siniscola, Nuoro, Italy	Nov 2004-Nov 2006
Tutor of Neurology at “Centro Italiano Femminile” (CIF) courses for Social-Health Operator (OS), Sassari, Italy	June-July 2006

***Academic Teaching Experience:***

Neurology Seminar: "Diagnostic approach to the patient with vertigo. Benign Paroxysmal Positional Vertigo" Institute of Clinical Neurology, University of Sassari, Sassari, Italy	October 2003
Tutor for Medical School graduation thesis of Dr. Alessandra Giua: "Bilateral isolated abducens nerve palsy due to monolateral carotid-cavernous fistula" Institute of Clinical Neurology, University of Sassari, Sassari, Italy	September 2004
Neurology Seminar: "Clinical approach to the patient with vertigo." Institute of Clinical Neurology, University of Sassari, Sassari, Italy	October 2005
Tutor for Neurology Specialization thesis of Dr. Manuela Matta: "An atypical case of Congenital Nystagmus. The value of Eye Movement recording." Institute of Clinical Neurology, University of Sassari, Sassari, Italy	December 2005
Neuroscience Seminar: "The study of Congenital Nystagmus: a window to the Oculomotor System." Faculty of Medicine, University of Sassari, Sassari, Italy	05 October 2006
Medical Students teaching class: "Disturbances of vision, hearing and balance". Faculty of Medicine, Case Western Reserve University, Cleveland, Oh, USA	15 February 2007
Neurology Grand Rounds presentation: "Disconjugacy of horizontal saccades: application of binocular phase planes". University Hospitals, Case Western Reserve University, Cleveland, Oh, USA	07 September 2007
Laboratory Technicians teaching classes: "Anatomy, physiology and pathology of the ocular motor system". Institute of Clinical Neurology, University of Sassari, Sassari, Italy	December 2007-January 2008

Invited Lecture: “Eye Movements as a Diagnostic and Research Tool”. Department of Neurology, University of Siena, Siena, Italy

30 January 2008

***Editorial Responsibilities:***

Referee, European Journal of Neurology

October 2005

Referee, Neurology

Feb 2007-present

Referee, Clin Ophthalmology

April 2007

***Membership in Scientific Societies:***

Association for Research in Vision and Ophthalmology (ARVO)

2002-2003

Società Italiana di Neurologia (SIN)

2002-2003

American Academy of Neurology (AAN)

2002-present

**Bibliography*****Abstracts:***

1. Sechi GP, Deiana GA, Pitzolu MG, **Serra A**, Zucca G, Agnetti V. Delayed onset cerebellar tremors (DOCT): natural history and treatment. *European Journal of Neurology* 1998;5(Suppl 3):S98.
2. Sechi GP, Deledda MG, Agnetti V, Deiana GA, **Serra A**, Rosati G. Reduced intravenous glutathione in Parkinson's Disease. *Movement Disorders* 1998;13(Suppl 2):239.
3. **Serra A**, Derwenskus J, Downey DL, Leigh RJ, Pugliatti M, Rosati G. Value of examining eye movements and subjective visual vertical in patients with Multiple Sclerosis. *Neurological Sciences* 2002;23(Suppl):S8.
4. Derwenskus JA, **Serra A**, Downey DL, Rucker JC, Leigh RJ. Abnormal eye movements predict disability in Multiple Sclerosis (MS): two-year follow-up. *A23 Neurology* 60; March 2003 (Suppl 1).
5. **Serra A**, Matta M, Ortu R, Murrighile MR, Cocco GA, Lai MC, Agnetti V, and Dell'Osso LF. A case of pseudo-Bruns' congenital nystagmus (CN). The value of eye movement recording. P2384, 2005 EFNS *European Journal of Neurology* 12 (Suppl. 2), 37-300.

***Original articles, Reviews, short reports, and correspondence:***

1. Sechi GP, **Serra A**, Pirastru MI, Sotgiu S, Rosati G. Wernicke's encephalopathy in a woman on slimming diet. *Neurology* 2002;58:1697.
2. **Serra A**, Leigh RJ. The diagnostic value of nystagmus, spontaneous and induced ocular oscillations. *J Neurol Neurosurg Psychiatry* 2002;73:615-618.
3. **Serra A**, Derwenskus J, Downey DL, Leigh RJ. Role of eye movement examination and subjective visual vertical in clinical evaluation of multiple sclerosis. *J Neurol.* 2003 May;250(5):569-575.
4. Derwenskus J, Rucker JC, **Serra A**, Stahl JS, Downey DL, Adams NL, Leigh RJ. Abnormal Eye Movements Predict Disability in MS: Two-year follow-up. *Ann N Y Acad Sci.* 2005 Apr;1039:521-523.
5. **Serra A**, Dell'Osso LF, Jacobs JB, Burnstine RA. Combined gaze-angle and vergence variation in infantile nystagmus: two therapies that improve the high-visual-acuity field and methods to measure it. *Invest Ophthalmol Vis Sci.* 2006;47(6):2451-2460.

6. Dell'Osso LF, Jacobs JB, **Serra A**. The Sub-Clinical See-Saw Nystagmus Embedded in Infantile Nystagmus. *Vision Res.* 2007;47(3):393-401.
7. Sechi GP, **Serra A**. Wernicke's Encephalopathy: New Clinical Settings and Recent Advances in Diagnosis and Management. *The Lancet Neurology* 2007, Volume 6, Issue 5:442-455.
8. **Serra A**, Sechi GP, Singh S, Kumar A. Wernicke encephalopathy after obesity surgery: A systematic review. *Neurology* 2007;69(6):615.
9. **Serra A**, Liao K, Martinez-Conde S, Optican LM, Leigh RJ. Suppression of Saccadic Intrusions in Hereditary Ataxia by Memantine. *Neurology* 2008;70(10):810-812.
10. **Serra A**, Matta M, Dell'Osso LF. Pseudo-Bruns' Infantile Nystagmus Syndrome: Mechanisms of Jerk Waveforms. *Eur J Neurol* 2008; Feb 16 [Epub ahead of print].
11. **Serra A**, Liao K, Leigh RJ. Conjugacy of Horizontal Saccades: Application of Binocular Phase Planes. *Prog Brain Res* 2008; In press.

#### ***Editorials:***

1. Leigh RJ, **Serra A**. Taking the Temperature of MS with INO. *Neurology* 2008; Feb 20 [Epub ahead of print].

#### ***Book Chapters:***

1. Sechi GP, **Serra A**, Pirastru MI, et al. Relationship between diet and Wernicke's encephalopathy (pp. 47-80). In: *Nutrition Research Advances*; Sarah V. Watkins (ed), Nova Publishers, New York 2007.
2. **Serra A**, Dell'Osso LF, Zwang ZI. Vergence Hysteresis in Infantile Nystagmus. In: *Advances in Understanding Mechanisms and Treatment of Congenital Forms of Nystagmus*; RJ Leigh, M Devereaux (eds), Oxford University Press. In Press.

#### ***Posters and oral presentations:***

1. Traccis S, Piras MR, Bua G, **Serra A**, Contu S, Sanna A, Zanda B, Rosati G. Studio dei movimenti saccadici nella malattia di Alzheimer. Effetti a breve termine del trattamento con Donepezil. Oral presentation at IX GIMO (Gruppo Italiano per lo studio dei Movimenti Oculari) National Meeting, Pavia, Italy, October 11-13, 2002.

2. Dell'Osso LF, **Serra A**, Jacobs JB. Effects on Congenital Nystagmus (CN) of Combined Gaze-Angle and Vergence Variation: Therapeutic Implications. Poster at North American Neuro-Ophthalmology Society, Copper Mt, Colorado, February 9- -14, 2002. (Presented by L.F. Dell'Osso)
3. Dell'Osso LF, **Serra A**, Jacobs JB. Oscillating Scotomas of Migraine Auras or "Induced" See-Saw Nystagmus (SSN) with Loss of Vertical Fusion in Congenital Nystagmus (CN). Poster at North American Neuro-Ophthalmology Society, Copper Mt, Colorado, February 9-14, 2002. (Presented by L.F. Dell'Osso)
4. Dell'Osso LF, **Serra A**, Jacobs JB. Effects on Congenital Nystagmus (CN) of Combined Gaze-Angle and Vergence Variation: Therapeutic Implications. Oral presentation at XIV International Neuro-Ophthalmology Society, Buenos Aires, Argentina, May 5-8, 2002. (Presented by L.F. Dell'Osso)
5. Dell'Osso LF, **Serra A**, Jacobs JB. Oscillating Scotomas of Migraine Auras or "Induced" See-Saw Nystagmus (SSN) with Loss of Vertical Fusion in Congenital Nystagmus (CN). Oral presentation at XIV International Neuro-Ophthalmology Society, Buenos Aires, Argentina, May 5-8, 2002. (Presented by L.F. Dell'Osso)
6. **Serra A**, Dell'Osso LF, Jacobs JB. Effects on Congenital Nystagmus (CN) of Combined Gaze-Angle and Vergence Variation: Therapeutic Implications. Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 5-10, 2002.
7. Jacobs JB, Dell'Osso LF, **Serra A**. Oscillating Scotomas of Migraine Auras or "Induced" See-Saw Nystagmus (SSN) with Loss of Vertical Fusion in Congenital Nystagmus (CN). Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 5-10, 2002. (Presented by J.B. Jacobs).
8. **Serra A**, Derwenskus J, Downey DL, Leigh RJ, Pugliatti M, Rosati G. Value of examining eye movements and subjective visual vertical in patients with Multiple Sclerosis. Oral presentation at XXXIII Congress of the Italian Neurological Society, Naples, Italy, September 14-18, 2002.
9. Derwenskus JA, **Serra A**, Downey DL, Rucker JC, Leigh RJ. Abnormal eye movements predict disability in Multiple Sclerosis (MS): two-year follow-up. Poster at 55th American Academy of Neurology Annual Meeting, March 29-April 5, 2003 (Presented by J.A. Derwenskus).
10. **Serra A**, Matta M, Ortu R, Murrighile MR, Cocco GA, Lai MC, Agnetti V, and Dell'Osso LF. A case of pseudo-Bruns' congenital nystagmus (CN). The value of eye movement recording. Poster at IX EFNS Congress, Athens, Greece, September 17-20, 2005.



11. **Serra A**, Dell’Osso LF, Zwang ZI. Vergence Hysterisis in Infantile Nystagmus. Oral presentation at Advances in Understanding Mechanisms and Treatment of Congenital Forms of Nystagmus meeting, Cleveland, May 3-4, 2007.
12. **Serra A**, Liao K, Leigh RJ. Conjugacy of Horizontal Saccades: Application of Binocular Phase Planes. Oral presentation at the Clinical Eye Movement Society Meeting ANA Meeting, Washington DC, October 7, 2007.
13. Optican L, Leigh RJ, **Serra A**, Martinez Conde S. Suppression of Saccadic Intrusions in Hereditary Ataxia by Memantine. Oral presentation at the Clinical Eye Movement Society Meeting ANA Meeting, Washington DC, October 7, 2007 (Presented by L. Optican and R.J. Leigh).
14. Otero-Millan J, Leigh RJ, **Serra A**, Troncoso XG, Macknik SL, Martinez-Conde S. Objective characterization of square-wave jerks in progressive supranuclear palsy patients and healthy volunteers. Poster presentation at the Society for Neuroscience 37th Annual Meeting, San Diego, California, November 3-7, 2007. (Presented by J. Otero-Millan).
15. **Serra A**, Liao K, Leigh RJ. Conjugacy of Horizontal Saccades: Application of Binocular Phase Planes. Poster presentation at the Symposium in Honour of Jean Buettnner-Ennever\_Using Eye Movements as an Experimental Probe of Brain Function, London, England, December 5-6, 2007.