

CURRICULUM VITAE

ZHONG I. WANG, Ph.D.

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Professional Address: Daroff-Dell'Osso Ocular Motility Laboratory (W151),
Louis Stokes Cleveland DVA Medical Center, 10701 East Blvd., Cleveland, OH 44106

EDUCATION

Case Western Reserve University, Cleveland, OH

Ph.D., Biomedical Engineering; GPA: 4.0

Dissertation: “A Unifying Hypothesis for the Multiple Waveforms of Infantile Nystagmus and their Idiosyncratic Variation with Gaze Angle and Therapy”

Master of Science, Biomedical Engineering, Dec. 2005; GPA: 4.0

Thesis: “Tenotomy Does Not Affect Saccadic Velocities: Support for the Small-Signal Gain Hypothesis”

Zhejiang University, Hangzhou, China

Bachelor of Engineering, Biomedical Engineering, June 2003; GPA: 3.97

Thesis: “Implementation of a double enzyme system to detect blood β -Hydroxybutyric acid”

EXPERIENCE

Case Western Reserve University, Cleveland, OH

Graduate Research Assistant, Daroff-Dell'Osso Ocular Motility Lab, 2003 to present

Data Acquisition and Analysis

- Assembled and refined infrared and high-speed video systems for real-time data acquisition
- Designed and carried out eye-movement recording protocols to test hypotheses of visual control system on normal subjects, patients and animals
- Analyzed patients' eye-movement data to assist treatment planning and evaluate newly invented surgeries

Patient Consultation

- Consulted more than 100 patients with eye-movement disorders for treatment decision making

System Modeling

- Modeled the visual control system to explore anatomical substrates of pathological behaviors, possible surgical sites, and post-surgical changes
- Extensively programmed in Matlab, Simulink, Labview, Fortran and HTML

Scientific Presentations and Publications

- Published 8 Journal Articles (including **6 first-author papers and 1 invited review**), 7 international conference proceedings, 2 letters to the editor and 17 abstracts; presented 23 talks and posters at international conferences (including **2 invited talks**)

Scientific Journal Peer reviews

- Reviewed 15 scientific manuscripts for the following journals: Investigative Ophthalmology & Visual Science, Experimental Brain Research, Journal of Vision, Archives of Ophthalmology, Ophthalmic and Physiological Optics, Journal of Pediatric Ophthalmology and strabismus, American Journal of Ophthalmology,

BioMed Central Ophthalmology, Orphanet Journal of Rare Diseases

Book Editing

- Listed as contributor for “Navigating Nystagmus with your Doctor” by Edie Glaser

Undergraduate Lab Co-instructor, Graduate Teaching Assistant and Mentor

Teaching Assistant, Case Western Reserve University, Cleveland, OH, 2004 - present

- Lectured in classes of 20 undergraduate students; demonstrated experimental techniques; monitored progress of students via assignments and consultation sessions
- Supervised biomedical transducers and cardiac physiology courses for 60 graduate students
- Mentored 150 graduate teaching assistants on teaching basics, diversity issues, communication techniques and teamwork skills

Internship and Project Leader, MicroSense™ Inc., Shanghai, China, 2003

- Implemented a novel double-enzyme system to detect blood ketone body with good linearity and repeatability; optimized the reaction conditions to improve reaction speed by 30%
- Immobilized the ketone-detection system to test strips; expedited the government approval of this device

HONORS & AWARDS

- Third Annual NIH National Graduate Student Research Festival Grant, 2008
- CWRU School of Graduate Studies Endowment Sponsored Mentorship Program Scholarship, 2007
- American Nystagmus Network Conference Grant, 2007
- Society for Neuroscience Student Travel Award Cleveland Chapter Candidate, 2007
- ARVO Retina Research Foundation / Lawrence Travel Scholarship (top 10% of 1500), 2007
- World Multi-Conference on Systemics, Cybernetics and Informatics, Best Paper in Session (top 10%), 2006
- CWRU Biomedical Engineering Department Prime Scholarship, 2003 to present
- Zhejiang University Chukeyen Scholarship (top 12 out of 6500), 2002

LEADERSHIP & ACTIVITIES

- CWRU Chinese Scholars and Students Association, President, 2006 to 2007; Vice President for Activities, 2005 - 2006
- Erico Company, Townsend Center and Science Partners LLC, Part-time Chinese/English Translator, 2006 to 2007
- CWRU School of Engineering, John S. Diekhoff Teaching Award Committee, 2006
- CWRU Biomedical Engineering Graduate Student Association, Graduate Student Senator and Executive Member, 2005
- CWRU Biomedical Engineering Department, Website Master, CWRU, 2004

BIBLIOGRAPHY

Journal Articles

1. **Wang, Z.**, Dell'Osso, L.F., Zhang, Z., Leigh, R.J., and Jacobs, J.B.: Tenotomy Does Not Affect Saccadic Velocities: Support for the “Small-Signal” Gain Hypothesis. *Vision Res.* 46:2259-2267, 2006.
2. **Wang, Z.**, Dell'Osso, L.F., Jacobs, J.B., Burnstine, R.A., and Tomsak, R.L.: Effects of tenotomy on patients with infantile nystagmus syndrome: foveation improvement over a broadened visual field. *JAAPOS* 10:552-560, 2006.
3. **Wang, Z.I.**, Dell'Osso, L.F., Tomsak, R.L., and Jacobs, J.B.: Combining Recessions (Nystagmus and Strabismus) with Tenotomy Improved Visual Function and Decreased Oscillopsia and Diplopia in Acquired Downbeat Nystagmus and in Horizontal Infantile Nystagmus Syndrome. *JAAPOS* 11:135-141, 2007.
4. **Wang, Z.I.**, Dell'Osso, L.F.: Being “Slow to See” is a Dynamic Visual Function Consequence of Infantile Nystagmus Syndrome: Model Predictions and Patient Data Identify Stimulus Timing as its Cause. *Vision Res.* 47:1550-1560, 2007.
5. **Wang, Z.I.**, Dell'Osso, L.F.: Review of the Tenotomy Nystagmus Surgery: Origin, Mechanism, and General Efficacy. *Neuro-Ophthalmol.* 31:1-9, 2007.
6. Taibbi, G., **Wang, Z.I.**, and Dell'Osso, L.F.: Infantile Nystagmus Syndrome: Broadening the High-Foveation-Quality Field with Contact Lenses. *Clin. Ophthalmol.* 00:000-000, 2008 (In Press).
7. **Wang, Z.I.**, and Dell'Osso, L.F.: Tenotomy Procedure Alleviates the “Slow to See” Phenomenon in Infantile Nystagmus Syndrome: Model Prediction and Patient Data. *Vision Res.* 00:000-000, 2008 (In Press).
8. Abel, L.A., **Wang, Z.I.** and Dell'Osso, L.F.: Wavelet Analysis in Infantile Nystagmus Syndrome: Limitations and Abilities. *Invest. Ophthalmol. Vis. Sci.* 00:000-000, 2008 (In Press).

Letters

1. Dell'Osso, L.F., Tomsak, R.L., **Wang, Z.I.**, Jacobs, J.B., Burnstine, R.A.: Effects of Tenotomy on Patients with Infantile Nystagmus Syndrome: Foveation Improvement Over a Broadened Visual Field. *JAAPOS* 10:552-560, 2006.
2. **Wang, Z.I.**, Dell'Osso, L.F.: Outcome Study of Two Standard and Graduated Augmented Modified Kestenbaum Surgery Protocols for Abnormal Head Postures in Infantile Nystagmus. Letter to the Editor. *Binoc. Vis. Strab. Q.* 23:18-19, 2008.

Book Chapters

1. Dell'Osso, L.F., Tomsak, R.L., **Wang, Z.**, Leigh, R.J., Rucker, J.C., Jacobs, J.B.: Combining Peripheral-Surgical (Tenotomy) with either Central-Pharmacological (Memantine) or other Peripheral-Surgical (Anderson) Therapies to Damp Acquired

Pendular or Downbeat Nystagmus and Oscillopsia. In “Proc. of the 10th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2006), Vol. II,” edited by N. Callaos, W. Lesso, C. Ham, L.F. Dell’Osso, and Z. Li, International Institute of Informatics and Systemics, Orlando, FL, pp. 34-38, 2006.

2. Dell’Osso, L.F., **Wang, Z.**, Leigh, R.J., Jacobs, J.B.: Hypothetical Explanation for the Role of Proprioception in the Damping of Infantile Nystagmus by Tenotomy Surgery: The Small-Signal Gain Hypothesis. In “Proc. of the 10th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2006), Vol. II,” edited by N. Callaos, W. Lesso, C. Ham, L.F. Dell’Osso, and Z. Li, International Institute of Informatics and Systemics, Orlando, FL, pp. 39-44, 2006.

3. **Wang, Z.**, Dell’Osso, L.F., Jacobs, J.B.: A Unifying Hypothesis for both Pendular and Jerk Waveforms in Infantile Nystagmus Embodied in a Behavioral Ocular Motor System Model. In “Proc. of the 10th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2006), Vol. II,” edited by N. Callaos, W. Lesso, C. Ham, L.F. Dell’Osso, and Z. Li, International Institute of Informatics and Systemics, Orlando, FL, pp. 51-56, 2006.

4. **Wang, Z.I.**, Dell’Osso, L.F., and Jacobs, J.B.: Expanding the Original Behavioral Infantile Nystagmus Syndrome Model to Jerk Waveforms and Gaze-angle Variations. In “Advances in Understanding Mechanisms and Treatment of Infantile Forms of Nystagmus,” edited by R.J. Leigh. (In Press)

5. Serra, A., **Dell’Osso, L.F.**, and Wang, Z.I.: Vergence Hysteresis in Infantile Nystagmus. In “Advances in Understanding Mechanisms and Treatment of Infantile Forms of Nystagmus,” edited by R.J. Leigh. (In Press)

6. Dell’Osso, L.F., **Wang, Z.I.**: Extraocular Proprioception and New Treatments for Infantile Nystagmus Syndrome. In “Using Eye Movements as an Experimental Probe of Brain Function. A Symposium in Honour of Jean Büttner-Ennever,” edited by C. Kennard and R.J. Leigh, Publisher, City, pp. 000-000, 2007 (In Press).

7. Liao, K., Walker, M.F., Joshi, A., Reschke, M., **Wang, Z.**, Leigh, R.J.: A Reinterpretation of the Purpose of the Translational Vestibulo-ocular Reflexes in Normal Human Subjects. In “Using Eye Movements as an Experimental Probe of Brain Function. A Symposium in Honour of Jean Büttner-Ennever,” edited by C. Kennard and R.J. Leigh, Publisher, City, pp. 000-000, 2007 (In Press).

Abstracts

1. **Wang, Z.**, Dell’Osso, L.F., Leigh, R.J., Jacobs, J.B.: Tenotomy Does Not Affect Saccadic Velocities: Support for the “Small-Signal” Gain Hypothesis. ARVO Annual Meeting Abstract and Program Planner [on CD-ROM or accessed at www.iovs.org]. Invest. Ophthalmol. Vis. Sci. 43: E-Abstract 2402, 2005.

2. Jacobs, J.B., Dell’Osso, L.F., **Wang, Z.**, Bennett, J., Acland, G.: Using the NAFX to

Measure the Effectiveness Over Time of Gene Therapy in Canine LCA. ARVO Annual Meeting Abstract and Program Planner [on CD-ROM or accessed at www.iovs.org]. Invest. Ophthalmol. Vis. Sci. 43: E-Abstract 2401, 2005.

3. Tomsak, R.L., **Wang, Z.**, Dell'Osso, L.F., Jacobs, J.B.: Combined Anderson + Tenotomy Procedure for Treatment of Acquired Nystagmus and Oscillopsia. [NANOS members access at www.nanosweb.org/meetings/nanos2006/syllabus.asp]. Abstr. 2512.

4. **Wang, Z.**, Dell'Osso, L.F., Jacobs, J.B., Burnstine, R.A., Tomsak, R.L.: Effects of Tenotomy on Patients with Infantile Nystagmus Syndrome: Acuity Improvement Over a Broadened Visual Field. ARVO Annual Meeting Abstract and Program Planner [on CD-ROM or accessed at www.iovs.org]. Invest. Ophthalmol. Vis. Sci. 47: E-Abstract 2511, 2006.

5. Dell'Osso, L.F., **Wang, Z.**, Jacobs, J.B.: A Unifying Hypothesis for Infantile Nystagmus Syndrome Embodied in a Behavioral Model: Pendular and Jerk Waveforms from the Same Pursuit-System Deficit. ARVO Annual Meeting Abstract and Program Planner [on CD-ROM or accessed at www.iovs.org]. Invest. Ophthalmol. Vis. Sci. 47: E-Abstract 2657, 2006.

6. Jacobs, J.B., Dell'Osso, L.F., **Wang, Z.**, Acland, G., Bennett, J.: Effects of RPE65 gene therapy on nystagmus in two canine littermates: Evidence of a critical period for ocular motor system (OMS) calibration. ARVO Annual Meeting Abstract and Program Planner [on CD-ROM or accessed at www.iovs.org]. Invest. Ophthalmol. Vis. Sci. 47: E-Abstract 2513, 2006.

7. Tomsak, R.L., **Wang, Z.**, Dell'Osso, L.F., Jacobs, J.B.: Combined Tenotomy + Anderson Procedure for Treatment of Acquired Vertical Nystagmus and Infantile Horizontal Nystagmus Associated with Diplopia and Oscillopsia. ARVO Annual Meeting Abstract and Program Planner [on CD-ROM or accessed at www.iovs.org]. Invest. Ophthalmol. Vis. Sci. 47: E-Abstract 2512, 2006.

8. **Wang, Z.**, Dell'Osso, L.F., Jacobs, J.B.: Pendular and jerk infantile nystagmus syndrome waveforms and transitions from the same pursuit-system deficit: a unifying hypothesis embodied in a behavioral model." Society for Neuroscience Annual Meeting Program Planner, E-Abstract # 211.12.

9. Dell'Osso, L.F., **Wang, Z.**, Leigh, R.J., Jacobs, J.B.: Hypothetical explanation for the role of proprioception in the damping of infantile nystagmus by tenotomy surgery: The small-signal hypothesis. Neuro-Ophthalmol. 30: 14, 2006.

10. Dell'Osso, L.F., **Wang, Z.**, Leigh, R.J., Jacobs, J.B.: Hypothetical explanation for the role of proprioception in the damping of infantile nystagmus by tenotomy surgery: The small-signal hypothesis. Neuro-Ophthalmol. 30: 14, 2006.

11. Dell'Osso, L.F., Tomsak, R.L., **Wang, Z.**, Leigh, R.J., Jacobs, J.B.: The power of

proprioception in damping of infantile or acquired (plus oscillopsia) nystagmus: Tenotomy in conjunction with central-pharmacological (memantine) or peripheral-surgical (Anderson) therapies. *Neuro-Ophthalmol.* 30: 15, 2006.

12. Dell'Osso, L.F., **Wang, Z.I.**, Jacobs, J.B.: Undamped smooth pursuit causes both pendular and jerk infantile nystagmus waveforms: A unifying hypothesis in a behavioral ocular motor model. *Neuro-Ophthalmol.* 30: 85, 2006.

13. Dell'Osso, L.F., **Wang, Z.I.**: Infantile Nystagmus Syndrome Patients are “Slow to See”: Model Predictions and Measures of New Aspects of Visual Function. [NANOS members access at www.nanosweb.org/meetings/nanos2007/syllabus.asp]. NANOS Poster #00 Abstr. 0000 (In Press).

14. Dell'Osso, L.F., **Wang, Z.I.**, Jacobs, J.B.: Idiosyncratic Gaze-angle Variation of Infantile Nystagmus Syndrome Waveform Amplitude Guided by Alexander's Law Embodied in a Behavioral Ocular Motor System Model. ARVO Annual Meeting Abstract and Program Planner [on CD-ROM or accessed at www.iovs.org]. *Invest. Ophthalmol. Vis. Sci.* 48: E-Abstract 876, 2007.

15. **Wang, Z.I.**, Dell'Osso, L.F.: Being “Slow to See” is a Dynamic Visual Function Consequence of Infantile Nystagmus Syndrome: Model Predictions and Patient Data Identify Stimulus Timing as its Cause. ARVO Annual Meeting Abstract and Program Planner [on CD-ROM or accessed at www.iovs.org]. *Invest. Ophthalmol. Vis. Sci.* 48: E-Abstract 878, 2007.

16. Dell'Osso, L.F. and **Wang, Z.I.**: A Dynamic Visual Function Consequence of Infantile Nystagmus Syndrome is Being “Slow to See”: Model Predictions and Patient Data Identify Stimulus Timing as its Cause. *Neuro-Ophthalmol.* 31: I.5.1 (o1), 2007.

17. **Wang, Z.I.** and Dell'Osso, L.F.: A Behavioral Model Simulating Pendular and Jerk Infantile Nystagmus Syndrome Waveforms from the Same Pursuit-System Deficit with Idiosyncratic Gaze-Angle Variations and Waveform Transitions. *Soc. Neurosci. Abstr. Prog.* # 555.11, 2007-A-106191-SfN (online at <http://sfn.scholarone.com>).

18. Dell'Osso, L.F. and **Wang, Z.I.**: Factors Influencing Pursuit Ability in Infantile Nystagmus Syndrome: Target Timing and Foveation Capability—“Why I Missed the Bird.” ARVO Annual Meeting Abstract and Program Planner [on CD-ROM or accessed at www.iovs.org]. *Invest. Ophthalmol. Vis. Sci.* 49: E-Abstract 000, 2008.

19. **Wang, Z.I.** and Dell'Osso, L.F.: Tenotomy Alleviates the “Slow to See” Phenomenon in Infantile Nystagmus Syndrome: Model Prediction and Patient Data. ARVO Annual Meeting Abstract and Program Planner [on CD-ROM or accessed at www.iovs.org]. *Invest. Ophthalmol. Vis. Sci.* 49: E-Abstract 000, 2008.

20. Taibbi, G., **Wang, Z.I.** and Dell'Osso, L.F.: Infantile Nystagmus Syndrome: Broadening the High-Foveation-Quality Field with Contact Lenses. ARVO Annual

Meeting Abstract and Program Planner [on CD-ROM or accessed at www.iovs.org]. Invest. Ophthalmol. Vis. Sci. 49: E-Abstract 000, 2008.

21. Abel, L.A., **Wang, Z.I.** and Dell'Osso, L.F.: Wavelet Analysis in Infantile Nystagmus Syndrome: Limitations and Abilities. ARVO Annual Meeting Abstract and Program Planner [on CD-ROM or accessed at www.iovs.org]. Invest. Ophthalmol. Vis. Sci. 49: E-Abstract 000, 2008.

SCIENTIFIC PRESENTATIONS

1. "Tenotomy Does Not Affect Saccadic Velocities: Support for the "Small-Signal" Gain Hypothesis." Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 30 – May 5, 2005.

2. "Using the NAFX to Measure the Effectiveness Over Time of Gene Therapy in Canine LCA." Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 30 – May 5, 2005 (Presented by Dr. J.B. Jacobs).

3. "Combined Anderson + Tenotomy Procedure for Treatment of Acquired Nystagmus and Oscillopsia." Poster at North American Neuro-Ophthalmology Society, Tucson, Arizona, February 25 – March 2, 2006 (Presented by Dr. R.L. Tomsak).

4. "Combined Tenotomy + Anderson Procedure for Treatment of Acquired Vertical Nystagmus and Infantile Horizontal Nystagmus Associated with Diplopia and Oscillopsia." Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 29 – May 4, 2006 (Presented by Dr. R.L. Tomsak).

5. "A Unifying Hypothesis for Infantile Nystagmus Syndrome Embodied in a Behavioral Model: Pendular and Jerk Waveforms from the Same Pursuit-System Deficit." Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 29 – May 4, 2006 (Presented by Dr. L.F. Dell'Osso).

6. "Effects of Tenotomy on Patients with Infantile Nystagmus Syndrome: Acuity Improvement Over a Broadened Visual Field." Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 29 – May 4, 2006.

7. "Effects of RPE65 gene therapy on nystagmus in two canine littermates: Evidence of a critical period for ocular motor system (OMS) calibration." Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 29 – May 4, 2006 (Presented by Dr. J.B. Jacobs).

8. "A Unifying Hypothesis for both Pendular and Jerk Waveforms in Infantile Nystagmus Embodied in a Behavioral Ocular Motor System Model." World Multi-Conference on Systemics, Cybernetics and Informatics Annual Meeting. Invited Session: "Control Systems Models and their Role in Understanding Ocular Motor Mechanisms of Function and Dysfunction." Orlando, FL, July 16 – 19, 2006.

9. "Combining Peripheral-Surgical (Tenotomy) with either Central-Pharmacological (Memantine) or other Peripheral-Surgical (Anderson) Therapies to Damp Acquired Pendular or Downbeat Nystagmus and Oscillopsia." World Multi-Conference on Systemics, Cybernetics and Informatics Annual Meeting. Invited Session: "Control Systems Models and their Role in Understanding Ocular Motor Mechanisms of Function and Dysfunction." Orlando, FL, July 16 – 19, 2006 (Presented by Dr. L.F. Dell'Osso).
10. "Hypothetical Explanation for the Role of Proprioception in the Damping of Infantile Nystagmus by Tenotomy Surgery: The Small-Signal Gain Hypothesis." World Multi-Conference on Systemics, Cybernetics and Informatics Annual Meeting. Invited Session: "Control Systems Models and their Role in Understanding Ocular Motor Mechanisms of Function and Dysfunction." Orlando, FL, July 16 – 19, 2006 (Presented by Dr. L.F. Dell'Osso).
11. "Pendular and jerk infantile nystagmus syndrome waveforms and transitions from the same pursuit-system deficit: a unifying hypothesis embodied in a behavioral model." Society for Neuroscience Annual Meeting, Atlanta, GA, Oct. 14 – 18, 2006.
12. "Infantile Nystagmus: Mechanisms and New Therapies". Visiting Scholars, Tianjin Medical University and Tianjin Eye Hospital, Tianjin, China, Nov. 24, 2006 (Presented by Dr. L.F. Dell'Osso and simultaneously translated by Z.I. Wang).
13. "Undamped Smooth Pursuit Causes Both Pendular and Jerk Infantile Nystagmus Waveforms: A Unifying Hypothesis in a Behavioral Ocular Motor System Model." XVI International Neuro-Ophthalmology Society. Invited Symposium Participant: "Normal and Abnormal Control of Eye Movements." Tokyo, Japan, November 28 – December 2, 2006 (Presented by Dr. L.F. Dell'Osso).
14. "Hypothetical Explanation for the Role of Proprioception in the Damping of Infantile Nystagmus by Tenotomy Surgery: The Small-Signal Gain Hypothesis" XVI International Neuro-Ophthalmology Society. Free Papers1 – "Eye Movements." Tokyo, Japan, November 28 – December 2, 2006 (Presented by Dr. L.F. Dell'Osso).
15. "The Power of Proprioception in Damping Infantile or Acquired (plus Oscillopsia) Nystagmus: Tenotomy in Conjunction with Central-Pharmacological (Memantine) or Peripheral-Surgical (Anderson) Therapies" XVI International Neuro-Ophthalmology Society. Free Papers1 – "Eye Movements." Tokyo, Japan, November 28 – December 2, 2006 (Presented by Dr. L.F. Dell'Osso).
16. "Infantile Nystagmus Syndrome Patients are "Slow to See": Model Predictions and Measures of New Aspects of Visual Function." North American Neuro-Ophthalmology Society, Snowbird, Utah, February 10–15, 2007 (Presented by Dr. L.F. Dell'Osso).
17. "Expanding the Original Behavioral Infantile Nystagmus Syndrome Model to Jerk Waveforms and Gaze-angle Variations. " Advances in Understanding Mechanisms and Treatment of Infantile Forms of Nystagmus. Daroff-Dell'Osso Ocular Motility

Laboratory, Cleveland. Ohio, May 3-4, 2007.

18. “Vergence Hysteresis in Infantile Nystagmus” Advances in Understanding Mechanisms and Treatment of Infantile Forms of Nystagmus. Daroff-Dell’Osso Ocular Motility Laboratory, Cleveland. Ohio, May 3-4, 2007 (Presented by Dr. A. Serra).

19. “Idiosyncratic Gaze-angle Variation of Infantile Nystagmus Syndrome Waveform Amplitude Guided by Alexander’s Law Embodied in a Behavioral Ocular Motor System Model.” Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 6–10, 2007 (Presented by Dr. L.F. Dell’Osso).

20. “Being “Slow to See” is a Dynamic Visual Function Consequence of Infantile Nystagmus Syndrome: Model Predictions and Patient Data Identify Stimulus Timing as its Cause.” Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 6 –10, 2007.

21. “A Dynamic Visual Function Consequence of Infantile Nystagmus Syndrome is Being “Slow to See”: Model Predictions and Patient Data Identify Stimulus Timing as its Cause.” 8th European Neuro-ophthalmology Society Meeting (EUNOS), Istanbul, Turkey, May 26-29, 2007 (Presented by Dr. L.F. Dell’Osso).

22. “A Behavioral Model Simulating Pendular and Jerk Infantile Nystagmus Syndrome Waveforms from the Same Pursuit-System Deficit with Idiosyncratic Gaze-Angle Variations and Waveform Transitions.” Society for Neuroscience Annual Meeting, San Diego, CA., November 3–6, 2007.

23. “Extraocular Proprioception and New Treatments for Infantile Nystagmus Syndrome.” Using Eye Movements as an Experimental Probe of Brain Function. A Symposium in Honor of Jean Büttner-Ennever, London, UK., December 5-6, 2007 (Presented by Dr. L.F. Dell’Osso).

24. “Factors Influencing Pursuit Ability in Infantile Nystagmus Syndrome: Target Timing and Foveation Capability — ‘Why I Missed the Bird.’” Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 30 – May 1, 2008. (To be presented by Dr. L.F. Dell’Osso).

25. “Tenotomy Alleviates the ‘Slow to See’ Phenomenon in Infantile Nystagmus Syndrome: Model Prediction and Patient Data.” Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 30 – May 1, 2008.

26. “Infantile Nystagmus Syndrome: Broadening the High-Foveation-Quality Field with Contact Lenses.” Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 30 – May 1, 2008. (To be presented by Dr. G. Taibbi).

27. "Wavelet Analysis in Infantile Nystagmus Syndrome: Limitations and Abilities."
Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft.
Lauderdale, Florida, April 30 – May 1, 2008. (To be presented by Dr. L.A. Abel).