LOUIS FRANK DELL'OSSO, Ph.D.

Curriculum Vitae and Bibliography

December 13, 2022

CURRICULUM VITAE

Biographical

LOUIS FRANK DELL'OSSO, Ph.D.

Professional Address: Daroff-Dell'Osso Ocular Motility Laboratory, Louis Stokes

Cleveland DVA Medical Center and CASE School of Medicine,

Cleveland, Ohio 44106 (216) 421-3224

Birth Date: March 16, 1941; Brooklyn, New York

Marital Status: Single

Academic Education:

Brooklyn Polytechnic Institute 1957-1961 B.E.E. (June, 1961)
Brooklyn Polytechnic Institute 1961-1963 Graduate Studies in E.E. University of Wyoming 1963-1966 Ph.D. (January, 1968)

Honors and Awards:

Graduate Teaching Assistantship
Elected Senior Member of IEEE
1976-Present
Personalities of the South
Who's Who in the South and S.W.
1976-1978
Who's Who in America (Listing)
Elected Chairman, ARVO Eye. Mov. Section
Who's Who in Frontier Science and Technology 1984-1986

Who's Who in the Midwest 1984-1989; 1994-1995; 2000-2016

Who's Who in America
American Men & Women in Science
Who's Who in Science and Engineering
Who's Who in Medicine and Healthcare
Who's Who in American Education
Elected Corresponding and Scientific Member

1984-Present
1986-1989
1992-Present
1997-2012
2004-2008
1992-Present

of Academia Rodinensis Pro Remediatione

Elected Fellow of NANOS 1993-2010 Bressler Prize in Vision Science Nominee 2007

Elected Fellow of ARVO
Elected Senior Fellow of NANOS
Member of WSPOS
Albert Nelson Marquis Lifetime Achievement
2009-Present
2010-Present
2012-Present
2018-Present

Award

Professional

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Industrial Research Experience:		
Republic Aviation, Inc.	June, 1961 -	Electronics Engineer
Farmingdale, L.I., N.Y.	Feb. 1963	-
Westinghouse Research Lab	April-August	Research Engineer
Pittsburgh, Pennsylvania	1963	
Naval Medical Research Institute	June-August	Electronics Engineer
Bethesda Naval Hospital	1964	
Westinghouse Research Lab	August 1966	Senior Bioengineer
Pittsburgh, Pennsylvania	August 1970	Medical & Biological Research
Academic Appointments:		
University of Wyoming	Sept. 1963-	Graduate Teaching
School of Engineering	June 1966	Assistant

University of Miami Sept. 1970- Assistant Professor Schools of Engineering May 1972 of Biomedical Engi

Schools of Engineering
May 1972 of Biomedical Engineering

and Medicine & Surgery

University of Miami School of Medicine	July 1972- May 1975	Assistant Professor of Neurology
University of Miami School of Medicine	June 1975- May 1979	Associate Professor of Neurology
University of Miami School of Medicine	June 1979- June 1980	Professor of Neurology
Case Western Reserve University School of Medicine	July 1980- June 2010 (Retired)	Professor of Neurology
Case Western Reserve University School of Engineering	July 1980- June 2010 (Retired)	Professor of Biomedical Engineering
Case Western Reserve University School of Medicine	July 2010- Present	Professor Emeritus of Neurology
Hospital Staff Appointments: Veterans Administration Hospital, Miami, Florida	May 1971- June 1972	Biomedical Engineer (W.O.C.)
Veterans Administration Hospital, Miami, Florida	July 1972- June 1980	Health Scientist, Co-Director, Ocular Motor Neurophysiology Laboratory
LS Cleveland DVA Medical Center, Cleveland, OH	July 1980- June 2004	Biomedical Engineer Director, Ocular Motor Neurophysiology Laboratory
LS Cleveland DVA Medical Center and CASE Medical School, Cleveland, OH	July 2004- June 2010	Biomedical Engineer Director, Daroff-Dell'Osso Ocular Motility Laboratory
LS Cleveland DVA Medical Center and CASE Medical School, Cleveland, OH	April 2010- Dec 2022	Research Scientist (WOC) Director Emeritus, Daroff-Dell'Osso Ocular Motility Laboratory

Major Teaching Responsibilities:

Graduate and Undergraduate Biomedical Engineering Courses

Undergraduate Biomedical Engineering Lab

Lectures and seminars for Ophthalmology and Neurology Residents

Lectures and seminars for Graduate Students and Post-Doctoral Fellows

Lectures and seminars for Medical Faculty

Research Activities:

1. "Investigation of Congenital Nystagmus and Horizontal Tracking," Principal Investigator, NSF GU 103302 SB29, FY 1972. (\$2,500)

2. "Modeling of Neuromuscular System Involved in Horizontal Eye Tracking and Nystagmus," Principal Investigator, NIH SB09 RR 07022 06 & NIH SB35 RR 07022 05, FY 1972. (\$500)

3. "Systematic Investigation of Congenital Nystagmus,"

Post-doctoral Fellowship, The Seeing Eye, 1972-73. (\$11,443)

4. "Neurophysiology and Pathophysiology of Eye Movements,"

Co-Investigator, VA MRIS No. 1733/1801, FY 1973-76. (\$255,423)

5. Preceptor, NIH Center Training Grant for Ophthalmic Research Bascom Palmer Eye Institute, Department of Ophthalmology, University of Miami School of Medicine, FY 1977-79.

6. "Ocular Motor Responses to Auditory Stimuli,"

Principal Investigator, NIH SB29, RR05363-15 BRSG, FY 1977. (\$3,505)

- 7. "A Wide Bandwidth Study of Fine Structure of Eye Movements," Principal Investigator, NIH SB29 RR05363-16 BRSG, FY 1978. (\$4,000)
- 8. "An Experimental Analysis of Human Looking Patterns," Co-Principal Investigator, VA research project, 1977.
- 9. "The Ocular Motor System: Normal and Pathological Neurophysiology," Co-Principal Investigator, VA MR, FY 1977-79. (\$192,979)
- 10. "Neurophysiology and Pathophysiology of Eye Movements," Co-Principal Investigator, VA MR, FY 1980-83. (\$241,800)
- 11. "Neurophysiology and Pathophysiology of Eye Movements," Co-Principal Investigator, VA MR, FY 1984-86. (\$265,200)
- 12. "Neurophysiology and Pathophysiology of Eye Movements," Co-Principal Investigator, VA MR, FY 1987-89. (\$256,300)
- 13. "Neurophysiology and Pathophysiology of Eye Movements," Principal Investigator, VA MR, FY 1991-94. (\$374,988)
- 14. "Neurophysiology and Pathophysiology of Eye Movements," Principal Investigator, VA MR, FY 1995-98. (\$701,654)
- 15. "Neurophysiology and Pathophysiology of Eye Movements," Principal Investigator, VA MR, FY 1999-03. (\$1,070,800)
- 16. "Neurophysiology and Pathophysiology of Eye Movements," Principal Investigator, VA MR, FY 2005-09. (\$1,436,500)
- 17. "Neurophysiology and Pathophysiology of Eye Movements," Principal Investigator, VA Protocol, FY 2010-2022. (WOC)

Post-Doctoral Fellows/PDF Graduate Students/GS & Visiting Scientists/VS: Stephen Zarzecki (MS) 1970-1971/GS Rathindra Nath Roy (MS) 1970-1971/GS Dr. B.T. Troost Michael T. Hyson (PhD)1973-1976/GS 1970-1972/PDF Dr. D. Boghen 1971-1973/PDF Dr. T. Carlow 1972-1974/PDF Dr. J.A. Sharpe 1972-1974/PDF Dr. L.A. Abel 1976-1978/PDF Dr. J.R. Zahn 1977-1978/PDF Dr. D. Schmidt 1977-1978/VS Dr. M.J. Doslak 1978-1979/PDF Dr. L. Parker 1978-1979/PDF Dr. L.B. Kline 1979-1980/PDF Dr. S. Traccis 1981-1982/PDF Dr. L. Whicker Jr. Dr. P.J.M. Lavin 1982-1983/PDF 1982-1983/PDF Dr. H. Grossniklaus 1982-1983/PDF Dr. S.E. Thurston 1983-1985/PDF Dr. A. Tabuchi 1985-1986/VS Dr. B.M. Weissman 1985-1986/PDF Dr. R.W. Hertle 1985-1986/PDF Dr. G.E. Grossman 1985-1986/PDF W.P. Huebner (PhD) S.H. Seidman (PhD) 1987-1993/GS 1986-1990/GS 1991-1994/GS 1992-1999/GS N.V. Sheth (MS) V.E. Das (MS,PhD) A.Z. Zivotofsky (PhD) Dr. L. Averbuch-Heller 1993-1996/PDF 1992-1996/GS D.M. Erchul (MS) 1994-1997/GS Dr. K. Rottach 1994-1995/PDF Dr. A.A. Kori 1994-1995/PDF J.B. Jacobs (PhD) 1995-2001/GS R. Manjeshwar (PhD) 1998-2001/GS J.T. Somers (MS) 1998-2000/GS Dr. J.I. Kim 1999-2000/VS S. Dun (MS) 1999-2001/GS H. Yanning (MS,PhD) A. Kumar (MS,PhD) 1999-2004/GS 1999-2004/GS Dr. J.B. Jacobs 2001-2005/PDF Dr. A. Serra 2001-2002/PDF Z.I. Wang (MS.PhD) 2003-2009/GS K. Liao (MS.PhD) 2003-2008/GS A. Joshi (MS,PhD) 2005-2009/GS 2008-2010/PDF Dr. Z.I. Wang

Merit Review Panels, Study Sections and Site Visits:

NIH (NINCDS) Site Visit, So. Illinois Sch. of Medicine, Oct. 4, 1984. VA Merit Review Board Ad Hoc Review Panel-B, Nov. 20, 1985.

Editorial Responsibilities:

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Referee, Vision Research,	1970 - 2022
Referee, Arch. Neurology,	1974 - 2022
Referee, Neurology,	1974 - 2022
Referee, Ann. Neurology,	1976 – 2022
Referee, IEEE Trans. BME,	1978 - 2022
Referee, Invest. Ophthalmol. Vis. Sci.,	1978 - 2022 [Guest Editor: 1999-2022]
Referee, Neuro-Ophthalmology,	1980 - 2022
Referee, Amer. J. Ophthalmol.,	1982 - 2022
Referee, Biol. Cybernetics,	1983 - 2022
Referee, Canad. J. Neurol. Sci.,	1985 - 2022
Referee, J. Neuro-Ophthalmol.,	1989 - 2022
Referee, Clin. Vision Sci.,	1989 - 2022
Referee, Brain,	1991 – 2022
Referee, Exp. Brain Res.,	1997 – 2022
Referee, Ophthal. Genetics,	1997 – 2022
Referee, J Gerentol.,	1999 – 2022
Referee, Ophthalmol.,	2000 - 2022
Referee, Doc. Ophthalmol.,	2000 - 2022
Referee, Behav. Res.,	2002 - 2022
Referee, Arch. Ophthalmol.,	2005 - 2022
Referee, Clin. Neurophysiol.,	2005 - 2022
Referee, J Pediatr. Ophthalmol. Strab.,	2005 - 2022
Referee, J Neurol. Neurosurg. Psychiat.,	2006 - 2022
Referee, J Neurosci. Meth.,	2007 - 2022
Referee, Ophthal. Physics Optics,	2007 - 2022
Referee, Optom. Vis. Sci.,	2007 - 2022
Referee, Orphanet J Rare Dis.,	2007 - 2022
Referee, Strabismus,	2007 - 2022
Editorial Board, Open Ophthalmol J,	2007 - 2022

Membership in Scientific Societies: (SM = senior member, F = fellow)
Institute of Electrical and Electronics Engineers, Inc. (IEEE), SM
Engineering in Medicine and Biology Society (IEEE), SM
Chairman of Miami Chapter 1977-78

Association for Research in Vision and Ophthalmology (ARVO)

Society for Neuroscience

North American Neuro-Ophthalmology Society (NANOS), F

Clinical Eye Movement Society (CEMS)

American Association for the Advancement of Science (AAAS)

Professional Consulting Practice:

Westinghouse Research Lab August 1966-Bioengineering Pittsburgh, Pennsylvania July 1967 Consultant Westinghouse Research Lab August 1970-Bioengineering Pittsburgh, Pennsylvania August 1971 Consultant Mt. Sinai Hospital March 1972-Special Consultant Miami Beach, Florida Dec. 1975 & Expert Witness

Major Local Committees: University of Miami

University of Miami, School of Engineering, Radar Awards Committee, Chairman, 1970-1971.

University of Miami, School of Engineering, Engineering Explorers Committee, 1970-1971.

University of Miami, Graduate School. Member, Thesis Committee for Stephen Zarzecki, Candidate for Masters Degree in Electrical Engineering (Biomedical), 1970-1971.

University of Miami, Graduate School. Chairman, Thesis Committee for Rathindra Nath Roy, Candidate for Masters Degree in Electrical Engineering (Biomedical), 1970-1971.

University of Miami, Graduate School. Member, Thesis Committee for Michael T. Hyson, Candidate for Doctor of Philosophy in Biology, 1973-1976.

University of Miami, Medical School. Member, Research & Development Executive Advisory Committee, 1976-1978.

Major Local Committees: Miami Veterans Administration Hospital

Subcommittee on Computers, 1973 - 1977. Chairman, 1976 - 1977.

Animal Studies Subcommittee, 1979.

Research and Development Committee, 1979 - 1980.

Equipment Subcommittee, 1980.

Major Local Committees: Case Western Reserve University

School of Medicine, Department of Neurology –

Chairman, Promotions and Tenure Committee, 1981 – 1995

Chairman, Committee on Equity and Professional Affairs, 1989 – 1994

Schools of Medicine and Engineering, Department of Biomedical Engineering –

Member, Thesis Committee for William P. Huebner, Candidate for Doctor of Philosophy in Biomedical Engineering, 1986-1990.

Member, Thesis Committee for Scott H. Seidman, Candidate for Doctor of Philosophy in Biomedical Engineering, 1987-1993.

Chairman, Thesis Committee for Nirav V. Sheth, Candidate for Master of Science in Biomedical Engineering, 1991-1994.

Member, Thesis Committee for Vallabh E. Das, Candidate for Master of Science in Biomedical Engineering, 1992-1994.

Member, Thesis Committee for Ari Z. Zivitofsky, Candidate for Doctor of Philosophy in Biomedical Engineering, 1992-1995.

Chairman, Thesis Committee for Daniel M. Erchul, Candidate for Master of Science in Biomedical Engineering, 1994-1997.

Chairman, Thesis Committee for Jonathan B. Jacobs, Candidate for Doctor of Philosophy in Biomedical Engineering, 1995-2001.

Member, Thesis Committee for Vallabh E. Das, Candidate for Doctor of Philosophy in Biomedical Engineering, 1996-1999.

Member, Thesis Committee for Ravi Manjeshwar, Candidate for Doctor of Philosophy in Biomedical Engineering, 1998-2001.

Member, Thesis Committee for Jeffrey T. Somers, Candidate for Master of Science in Biomedical Engineering, 1998-2000.

Chairman, Thesis Committee for Souchen Dun, Candidate for Master of Science in Biomedical Engineering, 1999-2001

Member, Thesis Committee for Arun Kumar, Candidate for Doctor of Science in Biomedical Engineering, 1999-2005.

Member, Thesis Committee for Yanning Han, Candidate for Doctor of Science in

Biomedical Engineering, 1999-2005.

Chairman, Thesis Committee for Zhong I. Wang, Candidate for Doctor of Philosophy in Biomedical Engineering, 2003-2008.

Member, Thesis Committee for Ken Liao, Candidate for Doctor of Science in Biomedical Engineering, 2003-2008.

Member, Thesis Committee for Anand Joshi, Candidate for Doctor of Science in Biomedical Engineering, 2005-2009.

Mentor, Postdoctoral Research for Jonathan B. Jacobs, PhD, 2001-2008. Mentor, Postdoctoral Research for Zhong I. Wang, PhD, 2008-2010.

School of Medicine -

Faculty Council, 1989 – 1991

Major Local Committees: University Hospitals Electrical Safety Committee, 1987 – 1990

Patents and Disclosures:

Artifact Detection Circuit - Pat. Discl. A QRS Area Monitoring Circuit - Pat. Discl. Logic for Positive Identification of QRS Complexes - Pat. Discl. Signal Conditioning for Positive Identification of QRS Complexes - Pat. Discl.

Instruments and Special Devices:

Stray Voltage Detector Constant Temperature Thermostatic Control Dual-Lumen Catheter Arrhythmia-Anomalous Beat Monitoring System Variable Stimulus Arc

- 1. "A Control System Study of Horizontal Eye Motion." School of Engineering, Carnegie-Mellon University, Pittsburgh, Pennsylvania, May 18, 1967.
- 2. "A Model for the Horizontal Tracking System of a Subject with Nystagmus." 20th Annual Conference on Engineering in Medicine and Biology, Boston, Massachusetts, November 13-16, 1967.
- 3. "Control Mechanisms in Normal and Nystagmic Visual Tracking." School of Engineering, University of Connecticut, Storrs, Connecticut, March 18, 1970.
- 4. "Cardiac Arrhythmia and Anomalous Beat Detector." Biomedical Engineering Seminar, School of Engineering, University of Miami, Coral Gables, Florida, December 2, 1970.
- 5. "Cardiac Arrhythmia and Anomalous Beat Detector." Mt. Sinai Hospital, Miami Beach, Florida, January 8, 1971.
- 6. "Application of Eye Movement Recordings to the Study of Congenital Nystagmus." Symposium on Oculomotive Physiology and Disorders, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 24-28, 1972.
- 7. Invited participant in panel discussion of the "Bio-instrumentation Hazards Symposium," Aerospace Medical Association, Bal Harbour, Florida, May 8-11, 1972.

 Presentation: "Patient Safety"
- 8. "On-Line Arrhythmia and Anomalous Beat Detection." 25th Annual Conference on Engineering in Medicine and Biology, Bal Harbour, Florida, October 1-5, 1972.
- 9. Faculty of "Tenth Annual Neuro-Ophthalmology Course," the Bascom Palmer Eye Institute and the Department of Ophthalmology of the University of Miami School of Medicine, Key Biscayne, Florida, January 3-6. 1973.

Presentation: "Mechanisms of Congenital Nystagmus" Discussant: "Periodic Alternating Windmill Nystagmus"

- 10. "Hereditary Congenital Nystagmus: Three Cases." Symposium on Eye Movements, Strabismus, and Amblyopia, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 3-7, 1973.
- 11. Faculty of "Neuro-Ophthalmology (Special Course Number 16)," the American Academy of Neurology, San Francisco, California, April 24, 1974.

Presentation: "Ocular Oscillations: Mechanisms"

- 12. "Saccadic Latencies to Multimodal Stimuli." Symposium on Eye Movements, Strabismus, and Amblyopia, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida April 25-29, 1974.
- 13. Faculty of "Neuro-Ophthalmology (Special Course Number 11)," the American Academy of Neurology, Miami, Florida, April 29, 1975.

Presentation: "Physiology of Eye Movements"

- 14. "Prism Exploitation of Gaze and Fusional Null Angles in Congenital Nystagmus," Third International Orthoptic Congress, Boston, Massachusetts, July 1-3, 1975.
- 15. Visiting Professor, Seminar on Congenital Nystagmus, The Laboratory of D. A. Robinson, Wilmer Institute, Johns Hopkins University, Baltimore, Maryland, July 8, 1975.
- 16. Visiting Professor, Seminar on Congenital Nystagmus Waveforms, The Laboratory of D. Cogan, National Institutes of Health, Bethesda, Maryland, July 9, 1975.
- 17. "Congenital Nystagmus: Observations and Treatment," American Association of Certified Orthoptists, Dallas, Texas, September 23, 1975.

18. Faculty of "Thirteenth Annual Neuro-Ophthalmology Course," the Bascom Palmer Eye Institute and the Department of Ophthalmology of the University of Miami School of Medicine, Miami Florida, January 6-9, 1976.

Presentations: "Organization of the Ocular Motor System" "Congenital Nystagmus"

19. Faculty of "Neurophysiology (Special Course Number 2)," the American Academy of Neurology, Toronto, Canada, April 26, 1976.

Presentation: "Principles of Feedback"

- 20. "Ocular Motor Pursuit Deficits and Human Vestibulo-Ocular Gain." Oculomotor Physiology and Disorders Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 26-30, 1976.
- 21. "Effects of Visual Pursuit Deficit on the Human Vestibulo-Ocular Reflex," American Academy of Neurology, Toronto, April 29, 1976, (presented by B. Todd Troost).
- 22. "Quantitative Analysis of the Ocular Motor Deficit in Progressive Supranuclear Palsy," American Neurological Association, San Francisco, June 14, 1976, (presented by B. Todd Troost).
- 23. "The Ocular Motor System: Normal and Clinical Studies," ARVO Symposium on Eye Movements, San Antonio, Texas, October 29-30, 1976.
- 24. Faculty of "A Neurological Update," Fourth Annual Course, the Department of Neurology, University of Miami School of Medicine, Miami Beach, Florida, January 24-28, 1977.

Presentation: "Physiology of Eye Movements"

25. Faculty of "Basic Neurology," Annual Course, the Department of Neurology, University of Miami School of Medicine, Miami Beach, Florida, February 27 - March 4, 1977.

Presentations: "Neurophysiology"
"Introduction to Control Systems"

26. Visiting Professor, Erasmus University, Departments of Neurology and Physiology, Rotterdam, The Netherlands, March 25, 1977.

Presentation: "Eye Movement Physiology"

- 27. Visiting Professor, Seminar on Congenital Nystagmus Waveforms and Surgery, The Laboratory of Reimer Taumer, Freie Universität, Berlin, West Germany, March 27, 1977.
- 28. Visiting Professor, Seminar on Nystagmus, The Laboratory of Rolf Eckmiller, Physiologisches Institut, Freie Universität, Berlin, West Germany, March 28, 1977.
- 29. Visiting Professor, Ophthalmology Department, Free University, Amsterdam, The Netherlands, April 2, 1977.

Presentation: "Congenital Nystagmus Surgery"

- 30. Visiting Professor, Seminar on Congenital Nystagmus, Laboratory of Michael Gresty and John Leech, Hearing and Balance Unit, The National Hospitals for Nervous Diseases, Queen Square, London, England, April 4, 1977.
- 31. "Congenital Nystagmus-Waveforms and Foveation Strategies." Disorders of Ocular Motility -Neurophysiological and Clinical Aspects, the Deutsche Ophthalmologische Gesselschaft, Freiburg i. Br. West Germany, April 15-17, 1977.
- 32. "A Quantitative Study of the Surgical Treatment of Congenital Nystagmus." Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 25-29, 1977.
- 33. "Analogue Computer Model of Gaze-Evoked Nystagmus." Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 25-29, 1977, (presented by L.A. Abel).

- 34. "The Audio-Ocular Response." Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 25-29, 1977, (presented by J.R. Zahn).
- 35. Faculty of "Problem Solving in Strabismus," the Department of Ophthalmology, University of Miami School of Medicine and Southern Region American Association of Certified Orthoptists, Key Biscayne, Florida, May 1-4, 1977.

Presentation: "Eye Movement Recordings in Nystagmus"

- 36. "Audio-Ocular Response." American Psychological Association, 85th Annual Convention, San Francisco, California, August 26-30, 1977, (presented by J.R. Zahn).
- 37. Consultant to the National Eye Institute of the National Institutes of Health, Purkinje Eyetracker Users' Meeting at the Eye Research Institute, Boston, Massachusetts, September 9-10, 1977.

Presentation: "Problems of Recording Eye Movements in a Clinical Setting" Discussant: "Clinical Uses of Eye Movement Measurements"

38. Faculty of "Workshop in Neuro-Ophthalmology," Fourth International Symposium, the Department of Ophthalmology, University of Iowa College of Medicine, Iowa City, Iowa, November 10-12, 1977.

Presentations: "Fast Eye Movements (Saccades): Basic Science and Clinical Correlations" "Nystagmus, A Contemporary Approach"

39. Visiting Professor, Department of Electrical Engineering, School of Engineering, University of Iowa, Iowa City, Iowa, November 10, 1977.

Presentation: "Ocular Motor Control Systems"

- 40. Faculty of "A Neurological Update," Fifth Annual Course, the Department of Neurology, University of Miami School of Medicine, Miami Beach, Florida, January 23-28, 1978.

 Presentation: "An Approach to Nystagmus"
- 41. Faculty of "Basic Neurology," Annual Course, the Department of Neurology, University of Miami School of Medicine, Miami Beach, Florida, February 27 March 3, 1978.

 Presentation: "Neurophysiology"
- 42. "Intersensory Delay in the Audio-Ocular Response." Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 30 May 5, 1978, (presented by J.R. Zahn).
- 43. "Saccadic Plasticity in Humans," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 30 May 5, 1978, (presented by L.A. Abel).
- 44. "Fast Eye Movements in Lateral Gaze," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 30 May 5, 1978, (presented by L.A. Abel).
- 45. "Latent and Manifest Latent Nystagmus," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 30 May 5, 1978, (jointly presented by Drs. D. Schmidt and L.F. Dell'Osso).
- 46. "Plastische und dynamische Veranderungen des sakkadischen Systems bei Augenmuskelparesen," Deutsche Ophthalmologische Gesellschaft, Dusseldorf, West Germany, September 20, 1978, (presented by D. Schmidt).
- 47. "Effects of Congenital Nystagmus Surgery," American Academy of Ophthalmology, Kansas City, Missouri, October 22-26, 1978, (presented by J. T. Flynn).
- 48. "Sakkadische Bewegungsformen bei der Myasthenie," Berliner Augenarztliche Gesellschaft, Berlin, West Germany, December 2 & 3, 1978, (presented by D. Schmidt).
- 49. "Ocular Motor Abnormalities and Retinal Disease," Winter Conference on Brain Research, Satellite Meeting, "The Moving Eye," Elkhorn, Idaho, January 17-19, 1979.

- 50. Faculty of "Fifth Annual Rocky Mountain Neuro-Ophthalmology Course," the University of New Mexico School of Medicine, Jackson Hole/Teton Village, Wyoming, February 21-23, 1979.

 Presentation: "The Value of Eye Movement Recordings"
- 51. Faculty of "Basic Neurology," Annual Course, the Department of Neurology, University of Miami School of Medicine, Miami Beach, Florida, February 26 March 2, 1979.

 Presentation: "Neurophysiology"
- 52. Faculty of "Neurophysiology (Special Course Number 5)," The American Academy of Neurology, Chicago, Illinois, April 23-28, 1979.

 Presentation: "Mechanisms of Nystagmus"
- 53. "Saccadic Waveforms and Dynamics in Ocular Myasthenia," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 29 May 4, 1979.
- 54. "Computer Simulation of Ocular Myasthenia," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 29 May 4, 1979, (presented by L.A. Abel).
- 55. "Model of Alexander's Law." Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 29 May 4, 1979, (presented by M.J. Doslak).
- 56. "Computer Simulation of Myasthenic Eye Movements." 32nd Annual Conference on Engineering in Medicine and Biology, Denver, Colorado, October 6-10, 1979.
- 57. "Model of Alexander's Law of Nystagmus Variation," 32nd Annual Conference on Engineering in Medicine and Biology, Denver, Colorado, October 6-10, 1979. (presented by M.J. Doslak).
- 58. Session Chairman at Oculomotor System 80 Symposium, Pasadena, California, January 22-25, 1980. Presentation: "Questions Generated by the Systems Approach to Nystagmus"
- 59. Faculty of "Basic Neurology," Annual Course, the Department of Neurology, University of Miami School of Medicine, Miami Beach, Florida, March 2-7, 1980.

 Presentation: "Neurophysiology"
- 60. "Alexander's Law: A Model and Resulting Study," American Neuro-otology Society, Palm Beach, Florida, April 12, 1980. (presented by M.J. Doslak).
- 61. Co-Chairman of Oculomotor Physiology and Disorders Section of Association for Research in Vision and Ophthalmology, Spring Meeting, Orlando, Florida, May 4-9, 1980.

 Session Moderator: "Eye Movements II"
- 62. "Unilateral INO: Recovery and Plasticity," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Orlando, Florida, May 4-9, 1980.
- 63. "Experimental Studies of Alexander's Law," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Orlando, Florida, May 4-9, 1980. (presented by M.J. Doslak).
- 64. "Saccadic Eye Movements in Myasthenia Gravis," Poster, Conference on Myasthenia Gravis, New York, New York, December 2-4, 1980. (presented by L.A. Abel).
- 65. Faculty of "Seventh Annual Rocky Mountain Neuro-Ophthalmology Course," Rocky Mountain Neuro-Ophthalmology Society, Park City, Utah, January 21-24, 1981.

 Presentation: "Myasthenia Gravis INO"
- 66. "Plasticity in the Human Saccadic System," Panel 17, "A Multi-Faceted Overview of the Saccadic Eye Movement System and the Cerebellum," Fourteenth Annual Winter Conference on Brain Research, Keystone, Colorado, January 24-31, 1981.
- 67. "The Effects of Age on Saccadic Eye Movement Characteristics," Eye Movements Poster Session, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 28 May 1, 1981. (presented by L.A. Abel).

- 68. "Absence of VOR Suppression in the Presence of Intact Pursuit," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 28 May 1, 1981.
- 69. "The Nystagmus Compensation (Blockage) Syndrome," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 28 May 1, 1981. (presented by C. Ellenberger).
- 70. Visiting Professor, Department of Otorhinolaryngology, University Hospital of Lund, Lund, Sweden, August 28, 1981.

Presentation: "Congenital Nystagmus: Basic and Clinical Aspects"

- 71. "Congenital Nystagmus: Basic Aspects," Symposium on Functional Basis of Ocular Motility Disorders, Wenner-Gren Center, Stockholm, Sweden, August 31, 1981.
- 72. Visiting Professor, Istituto di Clinica delle Malattie Nervose e Mentali, Universitá di Sassari, Sassari (Sardinia), Italy, September 10, 1981.

Presentation: "Congenital Nystagmus: Basic and Clinical Aspects"

- 73. "Eye Movement Abnormalities in the Eaton-Lambert Syndrome," Poster, Conference on Myasthenia Gravis, New York, New York, December 4, 1981.
- 74. Faculty of "Eighth Annual Rocky Mountain Neuro-Ophthalmology Course," Rocky Mountain Neuro-Ophthalmology Society, Dillon Lake, Colorado, February 23-27, 1982.

Session Moderator

Presentation: "Neural Integrator Malfunctions"

- 75. "Downbeat Nystagmus With Multiple Waveforms Evidence for a Variable Instability," Eye Movements Poster Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 2-7, 1982. (presented by L.A. Abel).
- 76. "Eye Movement Abnormalities in the Eaton-Lambert Syndrome," Eye Movements Poster Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 2-7, 1982.
- 77. Session Chairman at Oculomotor System 82 Symposium, Chicago, Illinois, November 8-10, 1982. Presentation: "Downbeat Nystagmus Do Different Waveforms Imply Specific Mechanisms?" (presented by L.A. Abel).
- 78. Faculty of "Ninth Annual Rocky Mountain Neuro-Ophthalmology Course," Rocky Mountain Neuro-Ophthalmology Society, Big Sky, Montana, February 15-19, 1983.

Presentations: "Physiology - Vestibulo-Ocular Reflex"

"Computer Models - Vestibulo-Ocular Reflex"

- 79. "Strabismo: condizione necessaria per il nistagmo latente e per il nistagmo latente manifesto," Poster, Riunione conguinta della Lega Italiana contro l'Epilessia, Societá Italiana di E.E.G. e Neurofisiologia Clinica, Societá Italiana di Neurologia, Roma, Italia, March 30-June 1, 1983. (presented by S. Traccis).
- 80. "Strategia dei saccadici evocati da stimoli acustici," Poster, Riunione conguinta della Lega Italiana contro l'Epilessia, Societá Italiana di E.E.G. e Neurofisiologia Clinica, Societá Italiana di Neurologia, Roma, Italia, March 30-June 1, 1983. (presented by S. Traccis).
- 81. "Strabismus A Necessary Condition for Latent and Manifest Latent Nystagmus," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 1-6, 1983.
- 82. "Saccadic Variability: Contributions from Fatigue, Inattention and Amplitude," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 1-6, 1983. (presented by L.A. Abel).
- 83. "Smooth Pursuit and Fixation in the Parents of Schizophrenics," Society for Neuroscience, 13th Annual Meeting, Boston, Massachusetts, November 6-11, 1983. (presented by L.A. Abel).

- 84. Panel Chairman of Panel 44, "Normal Ocular Motor Physiology Revealed Through the Study of Pathophysiology," Seventeenth Annual Winter Conference on Brain Research, Steamboat Springs, Colorado, January 21-28, 1984.
 - Presentation: "Congenital Nystagmus, Alexander's Law and Myasthenia Gravis"
- 85. "Slow Saccades and Hypometria in Anticonvulsant Toxicity," Eye Movements Poster Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 30 May 4, 1984. (presented by S.E. Thurston).
- 86. "The Effects of Distraction on Smooth Pursuit," Eye Movements Poster Session, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 30 May 4, 1984. (presented by S.R. Kaufman).
- 87. "Audio-Ocular Response (AOR): Saccadic Programming," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 30 May 4, 1984. (presented by L.A. Abel).
- 88. "Square Wave Oscillation and Saccadic Intrusions," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 30 May 4, 1984.
- 89. "Death of a Saccade: Development of the 'Slow-to-No' Saccade Syndrome," Ocular Motor Minisymposium, Johns Hopkins University, Baltimore, Maryland, October 7, 1984. (presented by L.A. Abel).
- 90. Faculty of "Eleventh Annual Rocky Mountain Neuro-Ophthalmology Course," Rocky Mountain Neuro-Ophthalmology Society, Banff, Alberta, Canada, March 6-10, 1985.

 Presentation: "Congenital Nystagmus, Latent Nystagmus and Strabismus"
- 91. "The Smooth Pursuit System in CN is Normal," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 6-10, 1985.
- 92. "Saccadic Deterioration in Spinocerebellar Degeneration," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 6-10, 1985. (presented by L.A. Abel).
- 93. Special Guest Lecture at the 41st Congress of the Japanese Association of Strabismus and Amblyopia (JASA), Tokyo, Japan, June 22-24, 1985.

Presentation: "Congenital, Latent and Manifest Latent Nystagmus: Similarities, Differences and their Relation to Strabismus"

94. Guest Lecture at the Joint Meeting of Jikei University and Kitasato University, Tokyo, Japan, June 26, 1985.

Presentation: "The Smooth Pursuit System in CN Patients is Normal"

- 95. Visiting Professor, Department of Ophthalmology, Kitasato University, Kanagawa, Japan, June 27, 1985. Presentation: "Congenital Nystagmus - Basic Aspects"
- 96. Visiting Professor, Department of Ophthalmology, Shiga University, Shiga, Japan, July 1, 1985.
- 97. Visiting Professor, Department of Ophthalmology, Hyogo College, Kobe, Japan, July 1, 1985.
- 98. Guest Lecture at the Joint Meeting of Shiga University and Hyogo College, Kobe, Japan, July 1, 1985. Presentation: "Congenital Nystagmus Basic Aspects"
- 99. Visiting Professor, Department of Ophthalmology, Kawasaki Medical School, Okayama, Japan, July 3, 1985.

Presentation: "Congenital Nystagmus - Basic Aspects"

100. Visiting Professor, Department of Ophthalmology, Okayama University Medical School, Okayama, Japan, July 3, 1985.

- 101. "Abnormal Head Position and Head Motion Associated with Nystagmus," Session VI: Oscillopsia and Congenital Nystagmus, Adaptive Processes in Visual and Oculomotor Systems Conference, Asilomar, California, September 16-20, 1985.
- 102. "Spasmus Nutans: A Quantitative, Prospective Study," Session VI: Oscillopsia and Congenital Nystagmus, Adaptive Processes in Visual and Oculomotor Systems Conference, Asilomar, California, September 16-20, 1985. (presented by B.M. Weissman)
- 103. "Through A Glass Darkly: Latent Nystagmus Reversal When Viewing With An Ocular Prosthesis," Oculomotor Minisymposium, Chicago, Illinois, October 2, 1985. (presented by L.A. Abel)
- 104. "Hyperactive Vestibulo-Ocular Reflex In Cerebellar Degeneration," Oculomotor Minisymposium, Chicago, Illinois, October 2, 1985. (presented by R.J. Leigh)
- 105. Faculty of "Twelfth Annual Rocky Mountain Neuro-Ophthalmology Course," Rocky Mountain Neuro-Ophthalmology Society, Whistler, British Columbia, Canada, February 23-27, 1986.

Presentations: "Smooth Pursuit and Congenital or Acquired Nystagmus" "Can You 'Look' Through a Blind Eye? If So, What Happens?"

- 106. "Through an Eye Darkly MLN Reversal by 'Looking' with a Blind Eye," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 28 May 2, 1986
- 107. "A Longitudinal Study of the Saccades in Patients with Alzheimer's and Huntington's Disease," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 28 May 2, 1986. (presented by L.A. Abel).
- 108. "To Say 'Bad' Isn't Enough Nonspecificity of the Ln(S/N) Ratio for Smooth Pursuit Analysis," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 28 May 2, 1986. (presented by A.S. Ziegler).
- 109. "Spasmus Nutans: A Longitudinal, Oculographic Evaluation," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 28 May 2, 1986.
- 110. "Oscillopsia, Retinal Image Stabilization and Congenital Nystagmus," Ocular Motor Symposium, Clinical Eye Movement Society, Boston, Massachusetts, October 5, 1986. (presented by R.J. Leigh).
- 111. "Persistent Pendular Oscillations: A Sequelae of Opsoclonus?" Ocular Motor Symposium, Clinical Eye Movement Society, Boston, Massachusetts, October 5, 1986. (presented by B.M. Weissman).
- 112. "Saccadic Intrusions and Oscillations in Infancy." Ocular Motor Symposium, Clinical Eye Movement Society, Boston, Massachusetts, October 5, 1986. (presented by R.W. Hertle).
- 113. "Frequency and Velocity Ranges of Natural Head Rotations," Society for Neuroscience, Washington, DC, November 9-14, 1986. (presented by G.E. Grossman).
- 114. "Oscillopsia and Retinal Image Stabilization in Congenital Nystagmus," North American Neuro-Ophthalmology Society, Northstar at Tahoe, California, February 1-5, 1987.
- 115. "Oscillopsia and Retinal Image Stabilization in Congenital Nystagmus," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 4-8, 1987.
- 116. "Torsional Nystagmus," Fourth Ocular Motor Symposium, American Neurological Association, San Francisco, California, October 17-21, 1987. (presented by R.J. Leigh).
- 117. Special Discussant: "Visual Consequences of Abnormal Eye Movements and their Treatment" (presented by R.J. Leigh). The Trygve Gundersen Eye Center, Boston, Massachusetts, December 19, 1987.
- 118. "Contact Lenses and Congenital Nystagmus," North American Neuro-Ophthalmology Society, Mt. Crested Butte, Colorado, February 21-25, 1988.

- 119. "Foveation Dynamics in Congenital Nystagmus," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 1-6, 1988.
- 120. "Correlation Between Latency and Velocity in Neurologic Patients and Elderly, but Not Young, Normal Subjects," Eye Movements Poster Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 1-6, 1988.
- 121. "Fixation Accuracy in Congenital Nystagmus," Clinical Eye Movements Section, 1988 Neuro-Ophthalmology Congress and 1988 International Perimetric Society Meeting, Vancouver, BC, Canada, May 6-12, 1988.
- 122. "Contact Lenses and Congenital Nystagmus," Clinical Eye Movements Section, 1988 Neuro-Ophthalmology Congress and 1988 International Perimetric Society Meeting, Vancouver, BC, Canada, May 6-12, 1988.
- 123. "Saccadic Velocity-Latency Correlation in Normals and Patients," Clinical Eye Movements Poster Section, 1988 Neuro-Ophthalmology Congress and 1988 International Perimetric Society Meeting, Vancouver, BC, Canada, May 6-12, 1988.
- 124. "Downbeat Nystagmus in an Infant: Spontaneous Resolution During Infancy," Clinical Eye Movements Poster Section, 1988 Neuro-Ophthalmology Congress and 1988 International Perimetric Society Meeting, Vancouver, BC, Canada, May 6-12, 1988.
- 125. "Pursuit and VOR Dynamics in Congenital Nystagmus," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 1-6, 1989.
- 126. Faculty of "Gruppo Italiano per lo Studio dei Movimenti Oculari," III Incontro Nazionale, I Corso di Aggiornamento Teorico-Pratico, Alghero (Sardinia), Italy, June 15-17, 1989.

 Presentation: "Nistagmo Infantile"
- 127. Faculty of "Sixteenth Annual North American Neuro-Opthalmology Course," North American Neuro-Opthalmology Society, Steamboat Springs, Colorado, February 3-10, 1990
 Presentations: "Gaze Evoked Nystagmus and its Differential Diagnosis"

 "Congenital Nystagmus Foveation Periods and Oscillopsia"
- 128. "Foveation Periods and Oscillopsia in Congenital Nystagmus," Eye Movements Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 29 May 4, 1990.
- 129. Faculty of "Advanced Course on Eye Movement Disorders," Joint Meeting of the Belgian Neurological and Ophthalmological Societies, Brugge, Belgium, June 22, 1990.

 Presentation: "Eye Movements, Visual Acuity and Spatial Constancy"
- 130. "Smooth Pursuit and VOR are Normal in Congenital Nystagmus," Clinical Eye Movements Section, VIIIth International Neuro-Ophthalmology Society, Winchester, England, June 23-29, 1990.
- 131. "Congenital Nystagmus Foveation Periods are Necessary to Suppress Oscillopsia," Clinical Eye Movements Section, VIIIth International Neuro-Ophthalmology Society, Winchester, England, June 23-29, 1990.
- 132. Visiting Professor, Department of Optometry and Visual Sciences, UMIST, Manchester, England, July 3, 1990.

Presentation: "Eye Movements, Visual Acuity and Spatial Constancy"

- 133. "Superior Oblique Myokymia: Measurements in Three Patients," Clinical Eye Movements Society Satellite Meeting of The American Neurological Academy, Atlanta, Georgia, October 10, 1990. (presented by R.J. Leigh).
- 134. "Required Conditions for Visual Constancy," North American Neuro-Ophthalmology Society, Park City, Utah, February 23 March 2, 1991.

- 135. "Required Ocular Motor Conditions for Visual Constancy," Eye Movements/Visual Direction Poster Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, April 28 May 3, 1991.
- 136. Faculty of "Neuro-Ophthalmology 1991," the Department of Neurology, Case Western Reserve University, School of Medicine, Beachwood, Ohio, June 7, 1991.

Presentation: "Nystagmus Update: Oscillopsia Suppression"

- 137. "Hereditary Congenital Nystagmus and Gaze-Holding Failure," Eye Movements/Visual Direction Poster Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 3 May 8, 1992.
- 138. Faculty of "Gruppo Italiano per lo Studio dei Movimenti Oculari," V Incontro Nazionale, Alghero (Sardinia), Italy, May 26-17, 1992.

Presentations: "The Ocular Motor Conditions for Oscillopsia" "Saccadic Pathology and Plasticity"

- 139. Visiting Professor, Istituto di Clinica Neurologica, Universitá di Sassari, Sassari (Sardinia), Italy, May 25 June 11, 1992.
- 140. "Required Conditions for the Suppression of Oscillopsia," IX International Neuro-Ophthalmology Society, Williamsburg, Virginia, June 28 July 3, 1992.
- 141. "Hereditary Congenital Nystagmus and Gaze-Holding Failure," IX International Neuro-Ophthalmology Society, Williamsburg, Virginia, June 28 July 3, 1992.
- 142. "Treatment of Acquired Nystagmus with Botulinum Toxin," IX International Neuro-Ophthalmology Society, Williamsburg, Virginia, June 28 July 3, 1992. (presented by B. Remler).
- 143. Visiting Professor, Department of Anatomy and Neurobiology, University of Tennessee, Memphis, Tennessee, September 14 17, 1992.
- 144. North American Neuro-Ophthalmology Society, Big Sky, Montana, February 7 11, 1993.

 Posters: "Foveation Dynamics and Oscillopsia in Latent/Manifest Latent Nystagmus"

 "Ocular Motor Abnormalities in Achiasmatic Belgian Sheepdogs"
- 145. "Foveation Dynamics and Oscillopsia in Latent/Manifest Latent Nystagmus," Eye Muscles and Neuro-Ophthalmology Poster Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 2 May 7, 1993.
- 146. "Ocular Motor Abnormalities in Achiasmatic Mutant Belgian Sheepdogs," Eye Muscles and Neuro-Ophthalmology Poster Section, Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 2 May 7, 1993.
- 147. Visiting Professor, Department of Neurology, University of Amsterdam, Amsterdam, The Netherlands, September 20, 1993.

Presentation: "Visual Acuity and Oscillopsia Suppression in Congenital and Latent/Manifest Latent Nystagmus"

148. Visiting Professor, Department of Physiology I, Erasmus University, Rotterdam, The Netherlands, September 21-24, 1993.

Presentation: "Foveation Dynamics and Oscillopsia in Congenital and Latent/Manifest Latent Nystagmus"

- 149. "Evidence Suggesting Individual Ocular Motor Control of Each Eye (Muscle)," Poster at Festschrift for David A. Robinson, Eibsee, Germany, September 26-29, 1993.
- 150. "Afferent Stimulation in Congenital Nystagmus," Poster at North American Neuro-Ophthalmology Society, Durango, Colorado, February 27 March 3, 1994.
- 151. Visiting Professor, Department of Ophthalmology, Kitasato University, Kanagawa, Japan, March 27-28, 1994.

Presentation: "Afferent Stimulation in Congenital Nystagmus"

- 152. Visiting Professor, Department of Ophthalmology, Hyogo Medical School, Kobe, Japan, March 29-30, 1994.
 - Presentation: "Ocular Motor System Organization"
- 153. Visiting Professor, Department of Ophthalmology, Kawasaki Medical School, Okayama, Japan, March 31 April 4, 1994.
- 154. "Congenital and Latent/Manifest Latent Nystagmus: Differential Diagnosis and Treatment; Foveation; Acuity; and Oscillopsia Suppression," Special Guest Lecture, 19th Congress of Japanese Pediatric Ophthalmology, Okayama, Japan, April 2, 1994.
- 155. Fourth Joint Workshop, "Eye Movement Monitoring in Ophthalmology Instrumentation and Signal Processing," NIH and the Polish Academy of Sciences, Warsaw, Poland, April 11-15, 1994.

 Session Chairman: "Eye Movement Disorders"
- 156. "Congenital and Latent/Manifest Latent Nystagmus: Visual Acuity and Oscillopsia," Fourth Joint Workshop, "Eye Movement Monitoring in Ophthalmology Instrumentation and Signal Processing," NIH and the Polish Academy of Sciences, Warsaw, Poland, April 11-15, 1994.
- 157. Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 1-6, 1994.

Session Moderator: "Nystagmus"

- 158. "Afferent Stimulation in Congenital Nystagmus," Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 1-6, 1994. (presented by N.V. Sheth).
- 159. "Ocular Motor Abnormalities in Human Achiasmatic Syndrome," Association for Research in Vision and Ophthalmology, Spring Meeting, Sarasota, Florida, May 1-6, 1994. (presented by P. Apkarian).
- 160. "Afferent Stimulation, Congenital Nystagmus and Visual Acuity," X International Neuro-Ophthalmology Society, Freiburg, Germany, June 5-9, 1994.
- 161. "Smooth Pursuit with Sampled Visual Input: Comparison to Congenital Nystagmus," Gruppo Italiano per lo Studio dei Movimenti Oculari, VI Incontro Nazionale, Pavia, Italy, June 13-15, 1994.
- 162. "Leaky Neural Integration of Torsional, Vestibular Signals in Humans," Society for Neuroscience, Miami Beach, FL, November 13-18, 1994. (presented by S.H. Seidman).
- 163. Visiting Professor, Division of Ophthalmology, Children's Hospital of Philadelphia and University of Pennsylvania Medical School, Philadelphia, Pennsylvania, April 14-15, 1995.

 Presentation: "Nystagmus in Childhood and Infancy"
- 164. "Oscillopsia Suppression: Efference Copy or Foveation Periods?," Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 14-19, 1995.
- 165. "Clinical and Oculographic Analysis of Congenital Nystagmus (CN) in Infancy," Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 14-19, 1995. (presented by R.W. Hertle).
- 166. "Achiasmatic Mutant Belgian Sheepdogs: A Congenital Nystagmus Model," Poster at North American Neuro-Ophthalmology Society, Snowbird, Utah, February 11 15, 1996.
- 167. "Latent Nystagmus Fast-Phase Generation," Poster at North American Neuro-Ophthalmology Society, Snowbird, Utah, February 11 15, 1996.
- 168. "Braking Saccade Generation in Congenital Nystagmus," North American Neuro-Ophthalmology Society, Snowbird, Utah, February 11 15, 1996.

169. Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 21-26, 1996.

Session Moderator: "Nystagmus 1"

Presentation: "Achiasmatic Mutant Belgian Sheepdogs:

An Animal Model for Congenital Nystagmus"

- 170. "Latent Nystagmus Fast-Phase Generation," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 21-26, 1996. (presented by D.M. Erchul).
- 171. "Braking Saccade Generation in Congenital Nystagmus," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 21-26, 1996. (presented by J.B. Jacobs).
- 172. Faculty of "Gruppo Italiano per lo Studio dei Movimenti Oculari," VII Incontro Nazionale, Sorrento, Italy, June 20-22, 1996.

Presentation: "Acquired Nystagmus Mechanisms and Treatments: A Review"

173. Joint Session, XIX Meeting of the Bárány Society and XI International Neuro-Ophthalmology Society, Sydney, Australia, August 14, 1996.

Session Moderator: "Eye Movement Disorders 1"

Presentation: "An Unusual Infantile Nystagmus with Oscillopsia,"

- 174. "Achiasmatic Mutant Belgian Sheepdogs: An Animal Model for Congenital Nystagmus," XI International Neuro-Ophthalmology Society, Sydney, Australia, August 14-16, 1996.
- 175. "Oscillopsia Suppression: Efference Copy or Foveation Periods?," XI International Neuro-Ophthalmology Society, Sydney, Australia, August 14-16, 1996.
- 176. Faculty of "International Symposium for Therapy of Ocular Motility and Related Visual Disturbances," Cleveland, Ohio, November 15-16, 1996.

Presentation: "Therapies for Congenital Nystagmus"

177. Visiting Professor, Department of Neurology, University of Arkansas, Little Rock, Arkansas, January 10, 1997.

Presentation: "Achiasmatic Belgian Sheepdogs: A Congenital Nystagmus Model"

178. Panel 16, "The Use of Internal Models and Prediction in the Generation of Motor Programs and Perception," Thirtieth Annual Winter Conference on Brain Research, Breckenridge, Colorado, January 25 - February 1, 1997.

Presentation: "Oscillopsia Suppression: Efference Copy or Foveation Periods?"

- 179. "Eye Movements in Canine Hemiachiasma," North American Neuro-Ophthalmology Society, Keystone, Colorado, February 9 13, 1997.
- 180. "Congenital Nystagmus Braking Saccade Characteristics," Poster at North American Neuro-Ophthalmology Society, Keystone, Colorado, February 9 13, 1997.
- 181. "Latent Nystagmus in Down's Syndrome," American Academy of Neurology, Boston, April 11-19, 1997. (presented by L. Averbuch-Heller).
- 182. Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 11-16, 1997.

Session Moderator: "Nystagmus"

Presentation: "Eye Movements in Canine Hemiachiasma"

- 183. "Congenital Nystagmus Braking Saccade Characteristics," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 11-16, 1997. (presented by J.B. Jacobs).
- 184. "Latent Nystagmus Fast-Phase Generation," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 11-16, 1997. (presented by D.M. Erchul).

185. Visiting Professor, Department of Ophthalmology, University of Tennessee, Memphis, Tennessee, November 20, 1997.

Presentation: "Achiasmatic Belgian Sheepdogs: A Congenital Nystagmus Model"

- 186. "Double-blind Controlled Study of Gabapentin and Baclofen as Treatment for Acquired Pendular Nystagmus," Ohio Vision Research Symposium, CWRU Visual Science Research Center and the National Eye Institute, Cleveland, Ohio, January 6, 1998. (presented by R.J. Leigh).
- 187. "Extraocular Muscle Tenotomy Alone (the Dell'Osso Procedure): Results on Congenital Nystagmus (CN) in Achiasmatic Belgian Sheepdogs (ABS)," 24th Annual Meeting, American Association for Pediatric Ophthalmology and Strabismus, Palm Springs, California, April 4-8, 1998. (presented by R.W. Hertle).
- 188. "An Expanded Nystagmus Acuity Function," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 10-15, 1998. (presented by J.B. Jacobs).
- 189. "A Preliminary Model of Congenital Nystagmus (CN) Incorporating Braking Saccades," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 10-15, 1998.
- 190. "Extraocular Muscle Tenotomy (*The Dell'Osso Procedure*): Damping of Congenital (CN) and See-Saw (SSN) Nystagmus in the Achiasmatic Belgian Sheepdog (ABS)," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 10-15, 1998. (presented by R.W. Hertle).
- 191. XII International Neuro-Ophthalmology Society, Dublin, Ireland, July 19-23, 1998.

Session Moderator: "Session 1, Nystagmus"

Presentations: "A Preliminary Model of Congenital Nystagmus (CN)

Incorporating Braking Saccades"

"An Expanded Nystagmus Acuity Function"

"Extraocular Muscle Tenotomy: Damping of Congenital (CN) and See-Saw (SSN)

Nystagmus in the Achiasmatic Belgian Sheepdog (ABS)"

- 192. Visiting Professor, Department of Optometry, University of Manchester Institute of Science and Technology, Dr. Richard Abadi, Manchester, England, December 10,11, 1998.
- 193. Visiting Professor, The National Hospital for Neurology and Neurosurgery, Institute of Neurology, Dr. Josephine Shallo-Hoffman, Queen Square, London, England, December 12-15, 1998.
- 194. "Ocular Motor Research: Clinical <--> Basic," Invited Guest Lecture, 10th British Ocular Motor Group Meeting, London, England, December 14, 1998.

 Session Chairman: "Open Contributions"
- 195. Visiting Professor, The National Hospital for Neurology and Neurosurgery, Institute of Neurology, Dr. Graham Barnes, Queen Square, London, England, December 15, 1998.
- 196. Visiting Professor, Great Ormond Street Hospital, Dr. Chris Harris, London, England, December 15, 1998.
- 197. "A Dual-Mode Model for Latent Nystagmus," Poster at North American Neuro-Ophthalmology Society, Snowmass, Colorado, March 14 18, 1999.
- 198. "A Dual-Mode Model for Latent Nystagmus," Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 9-14, 1999. (presented by J.B. Jacobs).
- 199. Visiting Professor, National Institutes of Health, Dr. Richard Hertle, Bethesda, Maryland, July 29, 1999. Presentation: "Of Dogs and Men: Help From 'Man's Best Friend"
- 200. "Types of Infantile Nystagmus: Congenital and Latent Forms," Keynote Speaker at The American Nystagmus Network Inc., Inaugural Meeting and Conference, Cleveland, Ohio, July 30-31, 1999.
- 201. Visiting Professor, SUNY, College of Optometry, Dr. Kenneth Ciuffreda, New York, New York, March 10, 2000.

Presentation: "Of Dogs and Men: Help From 'Man's Best Friend"

Schnurmacher Institute for Vision Research Colloquia

- 202. "A Model of Congenital Nystagmus (CN) Incorporating Braking and Foveating Saccades," Poster at North American Neuro-Ophthalmology Society, Mt. Tremblant, Quebec, Canada, March 26 30, 2000.
- 203, "A Model of Congenital Nystagmus (CN) Incorporating Braking and Foveating Saccades," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 30-May 5, 2000. (presented by J.B. Jacobs).
- 204. "Clinical, Radiographic and Electrophysiologic Findings in Patients with Achiasma or Hemichiasma," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 30-May 5, 2000. (presented by R.W. Hertle).
- 205. "Congenital Periodic Alternating Nystagmus with Unusual Slow-Phase Waveforms," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 30-May 5, 2000.
- 206. XIII International Neuro-Ophthalmology Society, Toronto, Canada, September 10-14, 2000.
 Presentations: "Preliminary Results of Performing the Tenotomy Procedure on Adults with Congenital Nystagmus (CN) A Gift From 'Man's Best Friend'"

 "A Robust, Normal Ocular Motor System Model with Latent/Manifest Latent Nystagmus (LMLN) and Dual-Mode Fast Phases," Poster

 "A Robust, Normal Ocular Motor System Model with Congenital Nystagmus (CN) Including Braking and Foveating Saccades," Poster
- 207. Guest Faculty of Pediatric Ophthalmology Update, Cole Eye Institute, Cleveland Clinic, Cleveland, Ohio, December 9, 2000.

Presentation: "Clinical Usefulness of Ocular Motility recordings of the Patient with Nystagmus"

- 208. "Horizontal Rectus Tenotomy in the Treatment of Congenital Nystagmus (CN): Results of a Study in Ten Adult Patients (Phase 1)," 27th Annual Meeting, American Association for Pediatric Ophthalmology and Strabismus, Orlando, Florida, March 22-25, 2001. (presented by R.W. Hertle).
- 209. "Two Time-Varying Components Can Produce Anomalous Slow-Phase Appearances in Congenital Nystagmus (CN)," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 29 May 4, 2001. (presented by S. Dun).
- 210. "A Hypothetical Fixation System Capable of Extending Foveation in Congenital Nystagmus," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 29 May 4, 2001. (presented by J.B. Jacobs).
- 211. "The Torsional Component of "Horizontal" Congenital Nystagmus (CN)," Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 29 May 4, 2001.
- 212. "Horizontal Rectus Tenotomy in the Treatment of Congenital Nystagmus (CN): Results of a Study in Ten Adult Patients (Phase 1)," Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 29 May 4, 2001. (presented by R.W. Hertle).
- 213. Faculty of "Neurobiology of Eye Movements: From Molecules to Behavior," Cleveland, Ohio. October 4-6, 2001.

Presentations: "Development of New Treatments for Congenital Nystagmus"

- "A Robust, Normal Ocular Motor System Model with Latent/Manifest Latent Nystagmus (LMLN) and Dual-Mode Fast Phases," Poster
- "A Hypothetical Fixation System Capable of Extending Foveation in Congenital Nystagmus," Poster (presented by J.B. Jacobs)
- 214. "A Hypothetical Fixation System Capable of Extending Foveation in Congenital Nystagmus," Poster at North American Neuro-Ophthalmology Society, Copper Mt., Colorado, February 10 14, 2002.
- 215. "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 10 14, 2002.

- 216. "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 10 14, 2002.
- 217. XIV International Neuro-Ophthalmology Society, Buenos Aires, Argentina, May 5-8, 2002. "A Hypothetical Fixation System Capable of Extending Foveation in Congenital Nystagmus" Poster "Effects on Congenital Nystagmus (CN) of Combined Gaze-Angle and Vergence Variation: Therapeutic Implications"

Session Co-Chairman: "Ocular Motility"

Presentations: "Four-Muscle Tenotomy: Evaluation of a New Treatment for Congenital Nystagmus"

"Oscillating Scotomas of Migraine Auras or "Induced" See-Saw Nystagmus (SSN) with Loss of Vertical Fusion in Congenital Nystagmus (CN)"

- 218. "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. (presented by A. Serra).
- 219. "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).
- 220. "Phase-1 Clinical Trial Results of the Tenotomy Procedure on Patients with Congenital Nystagmus." An Update on Pediatric Ophthalmology: Amblyopia and Mechanisms of Eye Movement Disorders in Congenital Esotropia, The Cleveland Clinic Foundation, Cole Eye Institute, Cleveland Ohio, August 24, 2002.
- 221. "Novel Surgery for Nystagmus: Initial Trial Results." Invited Lecture, Sixteenth National Research to Prevent Blindness Science Writers Seminar in Eye Research and Vision, Washington DC, September 21-25, 2002.
- 222. "Horizontal Rectus Tenotomy in Patients with Congenital Nystagmus." Annual Meeting of the American Academy of Ophthalmology, Orlando, Florida, October 21-25, 2002. (presented by R.W. Hertle).
- 223. "Horizontal Rectus Tenotomy in Patients with Congenital Nystagmus." Poster at North American Neuro-Ophthalmology Society, Snowbird, Utah, February 9-13, 2003.
- 224. "Staircase" Saccadic Intrusions and Transient Yoking and Neural Integrator Failures Associated with Cerebellar Hypoplasia." Poster at North American Neuro-Ophthalmology Society, Snowbird, Utah, February 9-13, 2003.
- 225. North American Neuro-Ophthalmology Society, Snowbird, Utah, February 9-13, 2003.
 Session Co-Chairman: "Platform Presentations Open Papers"
 Presentation: "Gene Therapy to Abolish Congenital Nystagmus in PRE65-Deficient Canines."
- 226. "'Staircase" Saccadic Intrusions and Transient Yoking and Neural Integrator Failures Associated with Cerebellar Hypoplasia," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 4 9, 2003. (presented by S.M. Garbutt).
- 227. "Horizontal Rectus Tenotomy in the Treatment of Congenital Nystagmus: Results of a Phase 1 Study of Ten Patients," Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 4-9, 2003. (presented by R.W. Hertle).
- 228. "Gene Therapy to Abolish Congenital Nystagmus in RPE65-Deficient Canines," Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 4 9, 2003. (presented by J.B. Jacobs).
- 229. "Diagnosing and Treating Infantile Nystagmus with Ocular Motility Recordings," Invited Lecture, American Academy of Optometry—Academy 2003, Dallas, Texas, December 4—7, 2003.
- 230. "Classification of Eye Movement Abnormalities and Strabismus (CEMAS): Nystagmus," Invited Lecture, First Ibero-American Congress of Neuro-Ophthalmology, Lima, Peru, December 6 8, 2003.

- 231. "Horizontal Rectus Tenotomy in the Treatment of Congenital Nystagmus: Phase-1, Clinical-Trial Results in Ten Patients," Invited Lecture, First Ibero-American Congress of Neuro-Ophthalmology, Lima, Peru, December 6 8, 2003.
- 232. "Gene Therapy to Abolish Congenital Nystagmus in RPE65-Deficient Canines," Invited Lecture, First Ibero-American Congress of Neuro-Ophthalmology, Lima, Peru, December 6 8, 2003.
- 233. "Staircase" Saccadic Intrusions and Transient Yoking and Neural Integrator Failure Associated with Cerebellar Hypoplasia," Invited Lecture, First Ibero-American Congress of Neuro-Ophthalmology, Lima, Peru, December 6-8,2003.
- 234. Faculty of "the Basic Science Course in Ophthalmology," the Edward Harkness Eye Institute, College of Physicians and Surgeons, Columbia University, New York, New York, January 9. 2004.

Presentation: "Nystagmus"
Discussant: "Nystagmus Surgery"

- 235. "Horizontal Rectus Tenotomy in the Treatment of Infantile Nystagmus Syndrome," American Association for Pediatric Ophthalmology and Strabismus, 30th Annual Meeting, Washington, DC, March 27 31, 2004. (presented by R.W. Hertle).
- 236. "The Damping of Acquired Pendular Nystagmus and Oscillopsia in MS after Four-Muscle Tenotomy," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 25 30, 2004.
- 237. "The Damping Effects of Full-field Optokinetic Backgrounds on Fusion Maldevelopment Nystagmus," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 25 30, 2004. (presented by J.B. Jacobs).
- 238. "Congenital Nystagmus in Dogs with Achiasma or Lebers Congenital Amaurosis. Help from 'Man's Best Friend'," Faculty of 6th Biannual William Magrane Basic Science Course in Veterinary and Comparative Ophthalmology and Histologic Basis of Ocular Disease Short Course, Raleigh, North Carolina, May 4, 2004.
- 239. "Combined Surgical and Drug Treatment of Acquired Pendular Nystagmus and Oscillopsia in MS." Poster at North American Neuro-Ophthalmology Society, Copper Mountain, Colorado, February 13-17, 2005.
- 240. "The Damping Effects of Full-field Optokinetic Backgrounds on Fusion Maldevelopment Nystagmus." Poster at North American Neuro-Ophthalmology Society, Copper Mountain, Colorado, February 13-17, 2005.
- 241. "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 J.B. Jacobs).
- 242. "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. (presented by Z.I. Wang).
- 243. "Dual-Mode (Surgical + Drug) Treatment of Acquired Pendular Nystagmus and Oscillopsia in MS," Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 30 May 5, 2005.
- 244. "Infantile Nystagmus: Mechanisms and New Therapies," Guest Speaker of the Ohio State University Department of Biomedical Engineering and the IEEE Columbus EMBS Chapter, Columbus, Ohio, May 19, 2005.
- 245. "Infantile Nystagmus: Research and Therapies," Keynote Speaker at The American Nystagmus Network, Inc., Fourth Biennial Conference, Los Angeles, California, July 8-10, 2005.
- 246. "A Behavioral Ocular Motor System Model: Simulating Infantile Nystagmus," Invited lecture at the First International Research Workshop: Finding a Solution for Congenital Nystagmus, sponsored by The Nystagmus Network, Abington, United Kingdom, September 1-3, 2005.

247. Visiting Professor, Institute of Neurological Sciences, Departments of Ophthalmology and Neuroscience, University of Glasgow, Glasgow, United Kingdom, September 7, 2005. Presentations: "Infantile Nystagmus: Mechanisms and New Therapies"

"Infantile Nystagmus: Research and Therapies"

- 248. "A case of pseudo-Bruns' congenital nystagmus (CN). The value of eye movement recording," P2384, EFNS Conference, Athens, Greece, September 19-23, 2005. (presented by A. Serra).
- 249. "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 R.L. Tomsak).
- 250. Faculty of Instructional Course "You Too Can Perform Successful Surgery For Nystagmus," American Association for Pediatric Ophthalmology and Strabismus, 32nd Annual Meeting Keystone, Colorado, March 18.2006.

Presentations: "New Infantile Nystagmus Knowledge and Response to Treatment"

"New Acquired Nystagmus Knowledge and Response to Treatment"

Discussant: "Questions"

- 251. "Effects of Tenotomy on Patients with Infantile Nystagmus Syndrome: Acuity Improvement Over a Broadened Visual Field," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 30 – May 4, 2006. (presented by Z.I. Wang).
- 252. "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 30 – May 4, 2006.
- 253. "Effects of RPE65 gene therapy on nystagmus in two canine littermates: Evidence of a critical period for ocular motor system (OMS) calibration," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 30 – May 4, 2006. (presented by J.B. Jacobs).
- 254. "Combined Tenotomy + Anderson Procedure for Treatment of Acquired Vertical Nystagmus and Infantile Horizontal Nystagmus Associated with Diplopia and Oscillopsia," Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 30 – May 4, 2006. (presented by R.L. Tomsak).
- 255. WMSCI 2006 Conference, Orlando, Florida, July 16-19, 2006.

Invited Session Organizer: "Control Systems Models and their Role in Understanding Ocular Motor Mechanisms of Function and Dysfunction"

Presentations: "Hypothetical Explanations for Fusion Maldevelopment Nystagmus Syndrome and Infantile Nystagmus Syndrome using a Behavioral Ocular Motor System Model." (presented by J.B. Jacobs).

"Hypothetical Explanation for the Role of Proprioception in the Damping of

Infantile Nystagmus by Tenotomy Surgery: The Small-Signal Gain Hypothesis."

"A Unifying Hypothesis for both Pendular and Jerk Waveforms in Infantile Nystagmus Embodied in a Behavioral Ocular Motor System Model." (presented by Z. Wang).

"Combining Peripheral-Surgical (Tenotomy) with either Central-Pharmacological (Memantine) or other Peripheral-Surgical (Anderson) Therapies to Damp Acquired Pendular or Downbeat Nystagmus and Oscillopsia."

- 256. "Pendular and jerk infantile nystagmus syndrome waveforms and transitions from the same pursuitsystem deficit: a unifying hypothesis embodied in a behavioral model." Society for Neuroscience Annual Meeting, Atlanta, GA., October 14–18, 2006 (presented by Z.I. Wang).
- 257. Visiting Professor, Tianjin Medical University, Tianjin, China, November, 24, 2006. Presentation: "Infantile Nystagmus: Mechanisms and New Therapies"
- 258. XVI International Neuro-Ophthalmology Society, Tokyo, Japan, November 28 December 2, 2006. Invited Symposium Participant: "Normal and Abnormal Control of Eye Movements"

Presentation: "Undamped Smooth Pursuit Causes Both Pendular and Jerk Infantile Nystagmus Waveforms: A Unifying Hypothesis in a Behavioral Ocular Motor System Model"

Co-Chairman, Free Papers 1 – Eye Movements

Additional Presentations: "Hypothetical Explanation for the Role of Proprioception in the Damping of Infantile Nystagmus by Tenotomy Surgery: The Small-Signal Gain Hypothesis"

"The Power of Proprioception in Damping Infantile or Acquired (plus Oscillopsia) Nystagmus: Tenotomy in Conjunction with Central-Pharmacological (Memantine) or Peripheral-Surgical (Anderson) Therapies"

259. "Infantile Nystagmus Syndrome Patients are "Slow to See": Model Predictions and Measures of New Aspects of Visual Function." Poster at North American Neuro-Ophthalmology Society, Snowbird, Utah, February 10–15, 2007.

260. Advances in Understanding Mechanisms and Treatment of Infantile Forms of Nystagmus.

Daroff-Dell'Osso Ocular Motility Laboratory, Cleveland. Ohio, May 3-4, 2007.

Session Chair: New Models and Techniques for Studying Gaze Stability

Presentations: "New Treatments for Infantile and other forms of Nystagmus"

"Eye Muscle Surgery for Acquired Forms of Nystagmus" (presented by R.L. Tomsak)

"Expanding the Original Behavioral Infantile Nystagmus Syndrome Model to Jerk Waveforms and Gaze-Angle Variations" (presented by Zhong I. Wang)

"Extending the eXpanded Nystagmus Acuity Function to Vertical and Multiplanar Data" (presented by Jonathan B. Jacobs)

"Vergence Hysteresis in Infantile Nystagmus" (presented by Alessandro Serra)

"A Summing Up" (presented with R.B. Daroff)

- 261. "Idiosyncratic Gaze-angle Variation of Infantile Nystagmus Syndrome Waveform Amplitude Guided by Alexander's Law Embodied in a Behavioral Ocular Motor System Model." Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 6–10, 2007.
- 262. "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. (presented by Z.I. Wang)
- 263. "Extension of the eXpanded Nystagmus Acuity Function to Vertical and Multiplanar Data." Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 6–10, 2007. (presented by J.B. Jacobs)
- 264. "An Optimized Adeno-associated Virus (AAV) for Treatment of Leber Congenital Amaurosis." Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 6–10, 2007. (presented by J. Bennett)
- 265. 8 European Neuro-ophthalmology Society Meeting (EUNOS), Istanbul, Turkey, May 26-29, 2007. Invited Presentation: "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."

Co-chairman: Guided Poster Tour: Motility 1

- 266. "X-Linked Congenital Nystagmus Clinical and Molecular Genetic Features in Four Families." Cole Eye Institute Annual Research, Residents and Alumni Meeting Cleveland, Ohio, June 21-22, 2007. (presented by E. Traboulsi)
- 267. "Latest Research Developments in Infantile Nystagmus Syndrome." Welcome Opening Keynote Speaker at The American Nystagmus Network, Inc., Fifth Biennial Conference, Pittsburgh, Pennsylvania, July 13-15, 2007.

- 268. "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 (presented by Z.I. Wang).
- 269. "Extraocular Proprioception and New Treatments for Infantile Nystagmus Syndrome." Using Eye Movements as an Experimental Probe of Brain Function. A Symposium in Honour of Jean Büttner-Ennever, London, UK., December 5-6, 2007.
- 270. "Wavelet Analysis in Infantile Nystagmus Syndrome: Limitations and Abilities." Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, April 27 May 1, 2008. (presented by L.A. Abel)
- 271. "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 27 May 1, 2008. (presented by Z.I. Wang)
- 272. "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 27 May 1, 2008.
- 273. "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 27 May 1, 2008. (presented by G. Taibbi)
- 274. Faculty of Course "Parkinsonismi—Clinica e Terapia," Su Gologone, Oliena, Sardinia, Italy, June 6, 2008.

Presentation: "Anomalie del Motore Oculari e Malattia del Ganglia Basale."

- 275. "Characteristics of Infantile Nystagmus Syndrome and their Variation with Therapy." Poster at National Graduate Student Research Festival, NIH campus, Bethesda, MD, September 11-12, 2008. (Presented by Z.I. Wang)
- 276. "In Infantile Nystagmus Syndrome Patients, being "Slow to See" is a Behavioral Consequence of Interactions between Ocular Motor Sub-functions." Society for Neuroscience Annual Meeting, Washington DC, November 16–19, 2008. (Presented by Z.I. Wang)
- 277. Faculty of "Asia-ARVO 2009," Hyderabad, India, January 15-18, 2009.
 - Presentations: "Nystagmus Surgery: Modified Tenotomy and Reattachment Procedures and Proposed Tendon-Suture Procedures." Controversies in Strabismus Symposium. "NAFX-Based Analysis of INS: Visual vs. Nystagmus Components of Acuity and *A Priori* Estimation of Therapeutic Improvements in Visual Function." Poster and short oral presentation. Amblyopia/Nystagmus Symposium.

 "The Importance of Extraocular Proprioception in Treatments for Infantile Nystagmus Syndrome and Normal Ocular Motor Control." Pediatric Ophthalmology, Strabismus, Neuro-ophthalmology Symposium.
- 278. "Nystagmus Surgery: Augmented Tenotomy and Reattachment Procedures and Proposed Tendon-Suture Procedures." Poster at North American Neuro-Ophthalmology Society, Lake Tahoe, NV, February 21-26, 2009.
- 279. "Dynamic Improvements in Visual Function after the Tenotomy and Reattachment Procedure: Model Predictions and Patient Data." Poster at North American Neuro-Ophthalmology Society, Lake Tahoe, NV, February 21-26, 2009.
- 280. "Dynamic Improvements in Visual Function after the Tenotomy and Reattachment Procedure: Model Predictions and Patient Data." Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 3-7, 2009.
- 281. "Investigating the Veracity of a Commercial, Non-Medical, Magnetic "Treatment" for Infantile Nystagmus Syndrome." Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 3-7, 2009. (presented by J.B. Jacobs)

- 282. "Infantile Nystagmus Syndrome: Cause(s), Analysis, Therapies." Welcome Opening Keynote Speaker at The American Nystagmus Network, Inc., Sixth Biennial Conference, Pittsburgh, Pennsylvania, July 17-19, 2009.
- 283. "Waveforms in Infantile Nystagmus: Mechanisms Yield the Best Classification." Invited lecture at the Second International Research Workshop, sponsored by The Nystagmus Network, Abington, England, September 2-5, 2009.
- 284. "Predicting Treatment Outcomes in Infantile Nystagmus: NAFX Analysis of Ocular Motor Data." Invited lecture at the Second International Research Workshop, sponsored by The Nystagmus Network, Abington, England, September 2-5, 2009.
- 285. "Infantile Nystagmus Syndrome 1. NAFX Prediction of Treatment Outcomes 2. Augmented Suture Technique *sans* Tenotomy." Invited lecture at the First World Congress of Paediatric Ophthalmology and Strabismus, Barcelona, Spain, September 12-13, 2009.
- 286. Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 2-6, 2010.

Session Moderator: "Nystagmus"

Presentation: "Smooth Pursuit Errors in Normals First Discovered in Infantile Nystagmus Syndrome." (presented by J.B. Jacobs)

- 287. "The Mechanism of Oscillopsia and its Suppression." Invited presentation at A Tribute to John Leigh, Buenos Aires, Argentina, March 25-27, 2011.
- 288. "A Half Century of Research in Infantile Nystagmus Syndrome: Take-home Messages." Invited lecture at the Second World Congress of Paediatric Ophthalmology and Strabismus, Milan, Italy, September 7-9, 2012.
- 289. Invited lectures at Nova Southeastern University, Ft. Lauderdale, FL, March 14-15, 2013.

Presentations: "A Half Century of Research in Infantile Nystagmus Syndrome:

Take-home Messages 1."

"A Half Century of Research in Infantile Nystagmus Syndrome: Take-home Messages 2."

- 290. "A Neurologic Mechanism for Infantile Nystagmus." Invited lecture at the Third International Research Workshop, sponsored by The Nystagmus Network, Abington, England, September 2-5, 2013. (presented by M.C. Brodsky)
- 291. Course Co-Director of "Nystagmus in Infancy and Childhood" web cast sponsored by Akron Children's Hospital and GlobalCastMD, 8am-11am on November 13, 2013.

Presentation: "Overview Physiology — Infantile Nystagmus Syndrome"

292. Invited lectures at Nova Southeastern University, Ft. Lauderdale, FL, February 28 and March 6, 2014. Presentations: "A Half Century of Research in Infantile Nystagmus Syndrome:

Take-home Messages 1."

"A Half Century of Research in Infantile Nystagmus Syndrome: Take-home Messages 2."

- 293. "Efficacy and Safety of New Topical Sodium Pump Inhibitor (NSPI) in Reducing Eye Oscillations in a Canine model of Infantile Nystagmus Syndrome (INS)." Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 4-8, 2014. (presented by R.W. Hertle)
- 294. "Efficacy and Safety of Topical New Sodium Pump Inhibitor (NSPI) in Reducing Intraocular Pressure in a Canine Model." Poster at Association for Research in Vision and Ophthalmology, Spring Meeting, Ft. Lauderdale, Florida, May 4-8, 2014. (presented by J.B. Jacobs)
- 295. Invited lecture: "A Half Century of Research in Infantile Nystagmus Syndrome: Take-home Messages." AACO Midwest Regional Meeting, Cleveland, Ohio, May 22-24, 2014.

- 296. "A Neurologic Mechanism for Infantile Nystagmus." Squint Club, Indianapolis, IN, September 6, 2014. (presented by M.C. Brodsky)
- 297. "A Neurologic Mechanism for Infantile Nystagmus." International Strabismological Association, Kyoto, Japan, December 2, 2014. (presented by M.C. Brodsky)
- 298. Invited lectures at Nova Southeastern University, Ft. Lauderdale, FL, February 28 and 29, 2015.

Presentations: "A Half Century of Research in Infantile Nystagmus Syndrome:

Take-home Messages 1."

"A Half Century of Research in Infantile Nystagmus Syndrome: Take-home Messages 2."

- 299. Invited lecture at Nova Southeastern University, Ft. Lauderdale, FL, March 31, 2016. "A Half Century of Research in Infantile Nystagmus Syndrome: Take-home Messages."
- 300. Invited lectures at Nova Southeastern University, Ft. Lauderdale, FL, February 16 and 17, 2017.

Presentations: "A Half Century of Research in Infantile Nystagmus Syndrome:

Take-home Messages 1."

"A Half Century of Research in Infantile Nystagmus Syndrome: Take-home Messages 2."

- 301. Invited lecture at Nova Southeastern University, Ft. Lauderdale, FL, March 29, 2018. "A Half Century of Research in Infantile Nystagmus Syndrome: Take-home Messages."
- 302. Invited lectures at Nova Southeastern University, Ft. Lauderdale, FL, February 28 and March 1, 2019.

Presentations: "A Half Century of Research in Infantile Nystagmus Syndrome:

Take-home Messages 1."

"A Half Century of Research in Infantile Nystagmus Syndrome: Take-home Messages 2."

- 303. Webinar Panelist "Nystagmus Decoded" web cast sponsored by ACES, Madurai, 9am 11:30am on July 30, 2020.
 - Presentation: "NAFX and Visual Function in Infantile Nystagmus Syndrome: Evaluation, Therapy Estimations, and Outcome Measures."
- 304. Expert-Witness testimony in a case of DUI and AGN Roadside Sobriety Test. Municipal Court, Clermont County, OH. April 23, 2021.
- 305. Distinguished Guest Lecturer at the "International Forum for Vision and Ocular Motility, Jinan 2022" web cast December 9-11,2022.

One-Hour Presentation: "A Half-Century of Research in Infantile Nystagmus Syndrome: Theoretical and Clinical Messages