

CURRICULUM VITAE

NAME: Morris Alan Fisher, MD, FAAN, FANA, FAANEM
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Diplomat, American Board of Psychiatry and
Neurology (1975)
Diplomat, American Board of Electrodiagnostic
Medicine (1988)
Diplomat, Neurology with Added Qualifications in
Clinical Neurophysiology (1994)
Active Member, American Association of
Electromyography and Electrodiagnosis (1976)

EDUCATION:

1951 - 1957 Horace Mann School, Bronx New York

1957 - 1961 Yale University, B.A. Magna Cum Laude (Phi Beta
Kappa)

1961 Entered Harvard Medical School

1968 M.D. Harvard Medical School

PROFESSIONAL TRAINING AND EXPERIENCE:

Postgraduate Training:

1963 - 1965 Research Assistant (Neurophysiology),
Massachusetts General Hospital, Boston, MA

1964 - 1965 Special Graduate Student
(Biology-Neurophysiology and Biological
Electronics), Massachusetts Institute of
Technology, Cambridge, MA

1968 - 1969 Internship (Medicine), Cleveland Metropolitan
General Hospital, Cleveland, OH

1969 - 1970 Assistant resident in Neurology, Massachusetts General Hospital, Boston, MA

1972 - 1974 Clinical Fellow of Harvard University in the Department of Neurology at the Massachusetts General Hospital

1974 - 1975 Fellow in Clinical Neurophysiology, Massachusetts General Hospital

Academic Positions:

1975 - 1978 Assistant Professor, Dept. Neurological Science, Rush Medical College, Chicago, Illinois

1978 - 1980 Associate Professor, Dept. Neurological Sciences, Rush Medical College

1980 - 1989 Associate Professor, Department of Neurology, Pritzker School of Medicine The University of Chicago

1989 - 1991 Associate Professor, Department of Neurology, College of Medicine University of Illinois at Chicago

1991 - 1992 Professor of Clinical Neurology, College of Medicine, University of Illinois at Chicago

1992-Present Professor of Neurology, Loyola University Medical Center, Stritch School of Medicine

2012-Present Adjunct Professor Department of Physical Medicine and Rehabilitation, Northwestern University Feinberg School of Medicine

2015-Present Adjunct Professor Department of Neurology, Northwestern University Feinberg School of Medicine

Hospital Positions:

1970 - 1972 Neurologist U.S. Army Medical Corps, Womack Army Hospital, Fort Bragg, NC

1975 - 1977 Assistant Attending in Neurology, Rush-Presbyterian St. Luke's Medical Center, Chicago, IL

1975 - 1980 Head, Section of EMG and Clinical Neurophysiology, Rush-Presbyterian St. Luke's Medical, Chicago, IL

1978 - 1980 Co-Director, Muscular Dystrophy Association Clinic, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL

1980 - 1982 Associate Neurologist, Michael Reese Hospital and Medical Center, Chicago, IL

1982 -1992 Attending Neurologist, Michael Reese Hospital and Medical Center, Chicago, IL

1980 - 1982 Director, Electromyography (EMG, Somatosensory Evoked Responses) Laboratory, Michael Reese Hospital and Medical Center, Chicago, IL

1982 - 1987 Co-Director, Muscular Dystrophy Association Clinic, Michael Reese Hospital and Medical Center, Chicago, IL

1982 -1992 Director, Clinical Neurophysiology
Michael Reese Hospital and Medical Center, Chicago, IL

1985 - 1986 Acting Vice Chairman of Neurology, Michael Reese Hospital and Medical Center, Chicago, IL

1986 - 1990 Vice Chairman, Department of Neurology Michael Reese Hospital and Medical Center, Chicago, IL

1988 - 1989 Director, Low Back Pain Program, Michael Reese Hospital and Medical Center, Chicago, IL

1990 - 1992 Acting Chief of Service, Department of Neurology,
Michael Reese Hospital and Medical Center (Humana Hospital Michael Reese, Chicago, IL

1992 - 2006 Attending Neurologist, Hines VAH and Loyola University Medical Center;
Director Neuromuscular Program, Loyola University Medical Center;
Director, EMG Laboratory, Hines VAH, Hines, IL

2006-2015	Attending Neurologist Hines VAH
1993 -2010	Director, Clinical Diagnostic Neurophysiology Laboratories, Hines VAH, Hines, IL
2001-2006	Director Clinical Neurophysiology Program, Loyola University Medical Center, Maywood, IL
2008-2009	Acting Chief of Neurology, Hines VAH
2008-2011	Lecturer, Department of Neurology at Rosalind Franklin University of Medicine and Science,
2015 -2023	Consulting Neurologist Hines VAH

Organizational Activities:

- *American Association Electromyography and Electrodiagnosis* (AAEE, 1983-1989).

- *American Association of Electrodiagnostic Medicine (AAEM, 1989-1997)*

1977 - 1978 Constitutional Committee

1979, 1981-1988 Examiner for Active Membership

1981 - 1984 Examination Committee

1984 - 1985 Ad Hoc Committee to Evaluate Affiliation with
Muscle Nerve

1985 - 1988 Executive Board

1986 - 1990 Chairman, Quality Assurance Committee

1987 - 1988 Fee Schedule Committee

1988 - 1992 Director, AAEE Regional Workshops, Chicago

1989 - 1991 Nominating Committee

1990 - 1991 Chairman, Nominating Committee

1991 - 1994 Workshop Committee

1994 - 1997 Professional Practice Committee

- *American Academy Clinical Neurophysiology*

1993 - 1996 Board of Directors
Long Range Planning Committee

1997 - 1999 President Elect

1999-2001 President

- *American Board Electrodiagnostic Medicine*

1989-2002, 2005, 2008 Examiner

- *American Medical Association*

1985-1987, 1990 Invited Participant, Section Council on
Neurology

- *Muscular Dystrophy Association*

1986 - 1987 Chapter Member, Chicago - Cook County

The Neuropathy Association

1994- 1996 Board of Directors
2005 – Medical Advisory Board
2010 – Director Center of Excellence at the Hines VAH

American Clinical Neurophysiologic Society

2007- Program Committee
2007- CCNDP-WorkGroup

Harvard Medical School

2015-2020 President Harvard Medical Society of Chicago

Hospital Committees:

Past: Medical Board, Professional Activities Committee, Library Committee -
Michael Reese Hospital (Humana Hospital Michael Reese);Quality Assurance
Committee, Rules Committee, Credentials Committee - Department of Neurology,
Michael Reese Hospital Humana Hospital Michael Reese)
Hines VAH: TQI Committee, Physician Order Entry Task Force, Pain Clinic,

Med/Surg Users Group

LUMC: Residency Selection, Neurology Clerkship,
Neurophysiology, Fellowship, Nominating
Resident Selection, Research, Graduate Medical Education

Promotion, Clinical

Organizations:

American Academy of Neurology (Fellow)
American Neurological Association (Fellow)
American Association of Neuromuscular and
Electrodiagnostic Medicine
American Association for the Advancement
of Science
American Academy of Clinical Neurophysiology (Fellow)
American Academy of Immunotherapy
Peripheral Nerve Society

Editorial Positions:

Consulting Editor, Electroencephalography and
Clinical Neurophysiology (1997- 2003)
Editorial Board, American Society for
Clinical Evoked Potentials (1988-1990)
Editorial Board, Neurology and Clinical Neurophysiology
(2001-2003)

Ad Hoc Reviewer:

Acta Neurologica Scandinavica
Arch Neurol
Brain
Clin Neuropharm
Clin Neurophysiol
Diabetes
Electroenceph Clin Neurophysiol
Eur J of Neurology
J Clin Neurophysiol
J Neurol Sci
Medicine & Science in Sports &
Exercise
Measurement Science and Technology
Muscle Nerve
Neurology
New England Journal of Medicine
Perspectives in Biology and
Medicine
The Scientific World

Miscellaneous:

- Committee, Clinical Guidelines for Low Back Problems (1993).
- Reviewer: Agency for Health Care Policy and Research (AHCPR)(1993)
- Chairman, Administrative Board of Investigation, Alleged Quality care Issue, North Chicago VAH, 1993
- Course Co-Director: Clinical Neurophysiology: a Focused Review and Recent Advances. Department of Neurology, Loyola University Stritch School of Medicine, February 19, 1994.
- Director: Special Interest Forum, "Upper Motor Syndromes and their Electrophysiology", AACN Meeting, Boston, 1994.
- Examiner, Part II Examination of the American Board of Psychiatry and Neurology March, 1998
- Polyneuropathy Task Force sponsored by American Academy Neurology, American Association Electrodiagnostic Medicine, and American Academy Physical Medicine And Rehabilitation Medicine. 2002-2008
- Autoimmune Neuropathies, Bermuda, 2004.
- PhD Review Committee: (1)Jason Sarkey, (2)Michael Calik, (3)Sahadev A. Shankarappa. Program in Neuroscience, Loyola University Chicago Stritch School of Medicine

Research Funding:

- 1993 – Co-PI: “Effects of Supported Standing and Upper Body Exercise on Lower Extremity Spasticity in Persons with Spinal Cord Injury”. Research Rehabilitation and Development, Hines VAH, \$4100 for pilot studies (PI: E. Langbein, Ph.D.; Co-PI: L. Fehrs, M.A.).
- 1994 – Co-PI: VA Golden Age Games Research Award. Research Rehabilitation and Development, Hines VAH, \$5,000. (PI: E. Langbein, Ph.D.; Co-PI: L. Fehrs, M.A.; Collaborator: P. Sibley, R.N.)

1994 – Co-PI: “Effects of Supported Standing and Upper Body Exercise on Lower Extremity Spasticity in Persons with Spinal Cord Injury”. Research Rehabilitation and Development Service, Department of Veterans Affairs. Total funding - \$124,500 (FY 95 \$72,475, FY96 \$40,500, FY97 \$11,525). (PI: E. Langbein, Ph.D.; Co-PI: L. Fehrs, M.A.; Collaborator: P. Sibley, R.N.)

1997 – PI: A Phase III Multicenter, Double-Blind, Placebo Controlled, Parallel-Group Study of the Efficacy and Safety of Recombinant Human Nerve Growth Factor (rhNGF) in Subjects with Diabetic Neuropathy. Sponsor – Genentech, Inc. 10/’97- 1/99. Income - \$81,000.

1998 – PI: Investigation of Neuropathies in Patients with Monoclonal Gammopathies of Uncertain Significance (MGUS). Intramural Funding (LUMC#9234). 7/’98-12/’98. \$2500.

1998 – Co-PI: Molecular Mechanisms of MGUS Neuropathies. CARES Hines VAH). 6/’98-5/’99. \$15,000 (PI: George DeVries, Ph.D.)

1998 - Collaborator: National Health Survey of Gulf War Era Veterans and their Families. VA Cooperative Study #458. 9/’98-3/’00. Anticipated income - \$10,000 (PI: John Crayton, M.D.)

1999 – Co-PI: Immunological Disturbances in Complications of Diabetes Mellitus. Falk Foundation Neuroscience Award. 10/’99-10/’00. \$20,000.

2000 - Co-Investigator :Humoral Mechanisms of MGUS Neuropathy in Veterans. VA Merit Grant - \$111,900/year x 3 years starting 6/1/2000 (PI: Evan B. Stubbs, Jr., Ph.D.)

2001 – Co-PI: Characterization of Antibody-Mediated Peripheral Nerve Injury in MGUS Neuropathy. Falk Foundation Neuroscience Award. 4/’01-4/02. \$20,000

2003- Co-Investigator :Humoral Mechanisms in MGUS Neuropathy in Veterans. VA Merit Grant - \$183,000 year 1, \$150,000/year x years 2-4. starting 1/1/2004 (PI: Evan B. Stubbs, Jr., Ph.D.)

2004 – Co-PI : Exercise-Induced Neuroplasticity-Mediated Rehabilitation in Type 2 Diabetic Veterans with Peripheral Neuropathy. VA Merit Grant - \$119,600 year 2004,\$300,575 year 2005, 310,200 year 2006, 318,225 year 2007, \$243,900 year 2008. starting 7/04 (PI: Evan Stubbs, Jr., Ph.D.)

2008 - Co- Investigator :Leukocyte Transendothelial Migration and Acute Inflammatory Neuropathy (Pilot Study).
\$31,000 Neuroscience Institute and Research Funding Committee LUMC
(PI: Evan Stubbs, Jr., PhD)

2008 – Co- Investigator: Can Neural Adapation after Severe Brain Injury be Facilitated? VA Merit Grant\$295,900 year 1; \$269,200 year 2; \$237,700 year 3. starting 7/01/2007 (PIs: Pape, Theresa Louise-Bender DrPH, MA; Steiner, Monica, MD, McNamee, Shane, MD)

2009 - Co – PI: Exercise-Facilitated NeuroRehabilitation in Diabetic Neuropathy. VA Merit Grant (R6954R). \$231,200/year for 4years 10/01-9/30/13. (Evan Stubbs, Jr. PI)

Research collaborator:

1993 - Enhanced Carbon Filament Prosthesis as Substrate for Regrowth of Injured Spinal Cord (Talet Khan).

PUBLICATIONS

PEER REVIEWED JOURNAL ARTICLES

1. **Fisher, M.A.**, Hagen, D.Q., and Colvin, R.B. Aminocoxycetic Acid: Interaction with Gamma-amino butyric acid and blood-bran barrier. Science 163: 16605-1670, 1966.
2. Levine, D.R., **Fisher, M.A.**, and Caviness, V.A. Porencephaly with Microgyria: A Pathologic Study. Acta Neuropath 29: 99-113, 1974.
3. Garcia, H.A., and **Fisher, M.A.** F response and H reflex analysis of the physiological unity of gravity and antigravity muscles in man. Acta Neurol Lat Amer 23: 231-244, 1977.
4. **Fisher, M.A.**, Shivde, A.J., Teixeira, C., and Grainer, L.S. A clinical electrophysiological appraisal of the significance of radicular injury in back pain. J. Neurol Neurosurg Psych

- 41: 303-6, 1978.
5. **Fisher, M.A.**, and Penn, R.D. Evidence for changes in segmental motoneuron pools by chronic cerebellar stimulation and its clinical significance. *J Neurol Neurosurg Psych* 630-635, 1978.
 6. **Fisher, M.A.** An Electrophysiological appraisal of relative segmental motoneuron pool excitability in flexor and extensor muscles. *J Neurol Neurosurg Psych* 41: 624-629, 1978.
 7. **Fisher, M.A.**, Shahani, B.T., and Young R.R. Quantitative assessment of excitability at segmental levels of the CNS following acute rostral lesions. I Study of the F response. *Neurology* 28: 1265-1271, 1978.
 8. **Fisher, M.A.**, Shahani, B.T., and Young R.R. Quantitative assessment of excitability at segmental levels of the CNS following acute rostral lesions. II Study of the blink reflex. *Neurology* 29: 45-50, 1979.
 9. **Fisher, M.A.**, Shahani, B.T., and Young, R.R.
Electrophysiological analysis of the motor system during the early phase after a stroke. I Studies of the Flexor reflex. *Arch Phys Med Rehab* 60: 7-11, 1979.
 10. **Fisher, M.A.**, Shahani, B.T., and Young, R.R.
Electrophysiological analysis of the motor system during the early phase after a stroke. II Studies of the "suppressive" effect of the vibration. *Arch Phys Med Rehab* 60: 11-14, 1979.
 11. Milner-Brown, H.S., **Fisher, M.A.**, and Weiner, W. Electrical properties of motor units in Parkinsonism and a possible relationship with bradykinesia. *J Neurol Neurosurg Psych* 42: 35-41, 1979.
 12. **Fisher, M.A.**, Shivde, A.J., Teixeira, C. and Grainer, L.S.
The F response - a clinically useful physiological parameter for the evaluation of radicular injury. *Electromyogr clin Neurophysiol* 19: 65-75, 1979.
 13. Garcia, H.A., **Fisher, M.A.**, and Gilai, A. H reflex analysis of segmental reflex excitability in flexor and extensor muscles. *Neurology* 29: 984-991, 1979.
 14. **Fisher, M.A.** Relative changes with contraction in the central excitability state of the tibialis anterior and calf muscles. *J Neurol Neurosurg Psych* 43: 243-247, 1980.

15. Garcia, H.A., Milner-Brown, H.S., and **Fisher, M.A.** "Turns" analysis in the physiological evaluation of neuromuscular disorders. *J Neurol Neurosurg Psych* 43: 1091-1097, 1981.
16. Shivde, A.J., Dreizin, I., and **Fisher, M.A.** The carpal tunnel syndrome: a clinical electrodiagnostic analysis. *Electromyogr clin Neurophysiol* 21:143-153, 1981.
17. **Fisher, M.A.**, Milner-Brown, H.S., and Garcia, H.A. Automatic analysis of motor unit potentials with varying loads. *Electromyogr clin Neurophysiol* 25:557-566, 1985.
18. **Fisher, M.A.** F response latency determination. *Muscle Nerve*. 5: 730-734, 1982.
19. **Fisher, M.A.** Cross correlation analysis of F response variability and its physiological significance. *Electromyogr clin Neurophysiol* 23: 329-339, 1983.
20. **Fisher, M.A.** F response analysis of motor disorders of central origin. *J Neurol Sci* 62: 13-22, 1983.
21. **Fisher, M.A.** Peripheral Neuropathy. *Geriatrics* 39: 115-129, 1984.
22. Hammer R.A., Patel D.V., Levin B., and **Fisher M.A.** Primary osteogenic sarcoma of the spine. *Skeletal Radiology*. 12: 276-297, 1984.
23. **Fisher, M.A.**, Kaur, D., and Houchins, J. Electrodiagnostic examination, back pain, and entrapment of posterior rami. *Electromyogr clin Neurophysiol* 25: 183-189, 1985.
24. **Fisher M.A.**, Perlik S.J. N-20 and P-40 somatosensory evoked potentials--thalamic lesions and subcortical origin. *Acta NeurolScand* 71: 25-30, 1985.
25. **Fisher M.A.** F response latencies and durations in upper motoneuron lesions. *Electromyogr clin Neurophysiol*. 26: 327-332, 1986.
26. Perlik S.J., **Fisher M.A.**, Patel D.V., Slack C. On the usefulness of somatosensory evoked responses for the evaluation of lower back pain. *Arch Neurol* 43: 907-913, 1986.
27. Perlik S.J., **Fisher M.A.** Somatosensory evoked response evaluation of cervical spondylitic myelopathy. *Muscle Nerve*. 10: 481-489, 1987.
28. Kelly, M.A., Perlik, S.J., **Fisher, M.A.** Somatosensory evoked potentials in lacunar syndromes of pure motor and ataxic hemiparesis. *Stroke*. 18:1093-1097, 1987.
29. **Fisher M.A.** F/M ratios in polyneuropathy and spastic hyperreflexia. *Muscle Nerve*. 11:217-222, 1988.
30. **Fisher, M.A.** Inhibition of motoneuron discharge by peripheral nerve stimulation: an F response

analysis. Muscle Nerve. 14:120-123, 1991.

31. **Fisher, M.A.** Physiological and clinical considerations of the H reflex and F response. Muscle Nerve. 15:1223-1233, 1992.
32. Quality Assurance Committee AAEE, **Morris A. Fisher**, (Co-Chair) Suggested guidelines for electrodiagnostic medical consultations. Muscle and Nerve. Muscle Nerve. 15:247-253, 1992.
33. Perlik, S., Van Egeren, R., Fisher, M.A. SSEP surgical monitoring: observations during combined isoflurane-nitrous oxide anesthesia. Spine. 17:273-276, 1992.
34. Walk, D., Doundoulakis, S., Hemmati, M., **Fisher, M.A.** Somatosensory evoked responses in the evaluation of lumbosacral radiculopathies. Neurology. 42:1197-1202, 1992.
35. Walk, D., **Fisher, M.A.** Effects of cutaneous stimulation on ipsilateral and contralateral motoneuron excitability: an analysis using H reflexes and F waves. Electromyogr clin Neurophysiol 33:259-264, 1993.
36. **Fisher, M.A.**, Hoffen, B., Hultman, C.: Normative F wave values and the number of recorded F waves. Muscle Nerve. 17:1185-1189, 1994.
37. **Fisher, M.A.**, Itkin, A: V_{rms}/T quantitation: usefulness in patients with neuropathies. Muscle Nerve 18:1398-1402, 1995.
38. **Fisher, M.A.**, Hoffen, B. F-wave analysis of patients with carpal tunnel syndrome. Electromyogr clin Neurophysiol 37:27-31, 1997.
39. **Fisher, M.A.** Root mean square voltage/turns in chronic neuropathies is related to increase in fiber density. Muscle Nerve. 20:201-203, 1997.
40. **Fisher, M.A.**, Glass, S. Butorphanol (Stadol^R) - a study in Problems of Current Drug Information and Control. Neurology 48:1156-1160, 1997.
41. **Fisher, M.A.**, Leehey, D.J., Vasant, G., Todd, I.: Phrenic nerve palsies and persistent respiratory acidosis in a patient with respiratory acidosis. Muscle Nerve. 20:900-902, 1997.
42. Wilson J.R., Bhoopalani N, **Fisher, M.** Hemolytic anemia associated with intravenous immunoglobulin. Muscle Nerve. 20:1142-1145, 1997.
43. Stubbs, E.B. Jr, **Fisher, M.A.**, Siegel, G.J. Anti-tubulin antibodies in a sensorimotor neuropathy alter tubulin polymerization. Acta Neuropathologica. 95:302-305, 1998.
44. **Fisher, M.A.** F-waves: clinical utility. Muscle Nerve 21:1098-1101, 1998.
45. Wilson, J.R., Stittsworth, J.D., Jr., Kadir, A., **Fisher, M.A.** Conduction velocity vs.

- amplitude analysis: evidence for demyelination in diabetic neuropathy. *Muscle Nerve*. 21:1228-1230, 1998.
46. Eisen, A., **Fisher, M.** The F-wave. *Electroenceph. Clin. Neurophysiol. Suppl.* 52:255-257, 1999.
 47. Randall, D.P., **Fisher, M.A.**, Thomas, C. Rhabdomyolysis as the presenting manifestation of calciphylaxis. *Muscle Nerve* 23:289-293, 1999.
 48. Wilson, J.R., Park, Y., **Fisher, M.A.** Electrodiagnostic criteria in CIDP: comparison with diabetic neuropathy. *Electromyogr clin Neurophysiol* 40:181-185, 2000.
 49. Lawlor, M.W., Richards, M.P., **Fisher, M.A.**, Stubbs, Jr., E.B. Sensory nerve conduction block in experimental MGUS neuropathy. *Muscle Nerve*. *Muscle Nerve* 24:809-816, 2001.
 50. Ellis, T.E., Le P.T., DeVries G., Stubbs E., **Fisher M.**, Bhoopalam N. Alterations in CD30+ T cells in monoclonal gammopathy of undetermined significance (MGUS). *Clin Immunol* 98:301-307, 2001.
 51. Wilson, J.R., Park, Y., Stittsworth, J.D., **Fisher, M.A.** Electrodiagnostic patterns in MGUS neuropathy. *Electromyogr clin Neurophysiol* 41:409-418, 2001.
 52. **Fisher, M.A.** Electrophysiology of Radiculopathies. *Clin Neurophysiol* 113:317-335, 2002.
 53. **Fisher, M.A.**, Wilson, J.R.: A clinical paradigm for characterizing patients with MGUS neuropathies consistent with varying fiber size injury. *Neurology and Clinical Neurophysiology*. Article Approved by Peer Review. <http://mitpress.mit.edu/e-journals/NCN/> 2002.
 54. Lawlor, M.A., Richards, M.P., De Vries, G.H., **Fisher, M.A.**, Stubbs Jr., E.B. Antibodies to L-periaxin in sera of patients with peripheral neuropathy produce experimental sensory nerve conduction deficits. *J. Neurochem.* 83:592-600, 2002.
 55. Stubbs Jr., E.B., Lawlor, M.A., Richards, M.P., Sidiqqi, K., **Fisher, M.A.**, Bhoopalam, N., Siegel, G.J. Anti-Neurofilament antibodies in MGUS neuropathy produce experimental motor nerve conduction block. *Acta Neuropathologica*. *Acta Neuropathol* 105:109-116, 2003.
 56. **Fisher, M.A.** Physicians and the Pharmaceutical Industry: a Dysfunctional Relationship. *Perspectives in Biology and Medicine*. 46:254-272, 2003.
 57. **Fisher, M.A.**, Naved, S. Vrms/T Quantitation in Patients with Spinal Stenosis. *Neurology and Clinical Neurophysiology* <http://mitpress.mit.edu/e-journals/NCN/> 2003.

58. England, J.D., Gronseth, G.S., Franklin, G., Miller, R.G., Asbury, A.K., Carter, G.T., Cohen, J.A., **Fisher, M.A.**, Howard, J.F., Kinsella, L.J., Latov, N., Lewis, R.A., Low, P.A., Sumner, A.J.. Distal symmetrical polyneuropathy: Definition for clinical research. *Muscle Nerve* 31:113-123, 2005; *Neurology* 64:199-207, 2005.
59. **Fisher, M.A.** Comparison of automated and manual F-wave measurements. *Clin Neurophysiol.* 116:264-269, 2005..
60. Wilson, J., Chawla, J., **Fisher, M.** Sensitivity and specificity of electrodiagnostic criteria for CIDP using ROC curves: comparison to patients with diabetes and MGUS neuropathies. *J Neurol Sci.* 231:19-28, 2005.
61. Chawla, J., Thomas, C., **Fisher, M.** Focal nodular sarcoid myositis: case report and literature review. *Case Rep Clin Pract Rev* 6: 2005.
62. Latov N, Gorson KC, Brannagan III TH, Freeman RL, Apostolski S, Berger AR, Bradley W, Briani C, Bril V, Busis V, Cros DP, Dalakas MC, Donofrio PD, Dyck PJB, England JD, **Fisher MA**, Hemmman DN, Menkes DL, Sabenk Z, Sander HW, Triggs WJ, Vallat JM. Diagnosis and treatment of chronic immune-mediated neuropathies. *J Clin Neuromuscular Dis* 7:141-157, 2006.
63. Gozani SN, Kong X, **Fisher M.A.** Factors influencing F-wave latency detection of lumbosacral root lesions using a detection theory based model. *Clin Neurophysiol.* 117:1449-1457, 2006.
64. **Fisher, M.A.**, Chawla, J., Webber, Jr., Charles L. Deterministic recurrences of sequential F-waves. *Neurol Neurophysiol Neurosci.* 2006;8:1-12 <http://www.neurojournal.com/496/533>.
65. **Fisher, M.A.** Medicine and industry: a necessary but conflicted relationship. *Perspectives in Biology and Medicine.* 50:1-6, 2007.
66. **Fisher, M.A.** F-waves – physiology and clinical uses. *TheScientificWorldJOURNAL* 7:144-160, 2007.
67. **Fisher, M.A.**, Langbein, W.E., Collins, E.G., Williams, K., Corzine, L. Physiological improvement with moderate exercise in type II diabetic neuropathy. *Electromyogr clin Neurophysiol* 47:23-28, 2007.
68. **Fisher, M.A.**, Bajwa, R., Somashekar, K.N. Lumbosacral radiculopathies – the importance to EDX information other than needle electromyography. *Electromyogr. clin. Neurophysiol.* 47:377-384, 2007..
69. **Fisher, M.A.**, Bajwa, R., Somashekar, K.N. Routine electrodiagnosis and a multiparameter technique in lumbosacral radiculopathies. *Acta Neurol. Scand.* 118:99-105, 2008.

70. Bagai, K., Wilson, J.R., Khanna, M., Song, Y., L. Wang, **Fisher, M.A.** Electrophysiological patterns of diabetic Polyneuropathy. *Electromyogr. clin. Neurophysiol.* 48:139-145, 2008..
71. **Fisher, M.A.**, Zhu, J.Q., Uddin, M.K., Grindstaff, P. Submaximal stimulation and F-wave parameters. *J Clin Neurophysiol.* 25:299-303, 2008.
72. England, J.D., Gronseth, G.S., Franklin, G., Carter, GT, Kinsella, L.J., Cohen, J.A., Asbury, A.K. Sziget, K., Lupski, Latov, N., Lewis, R.A., Low, P.A., **Fisher, M.A.**, Herrmann, D., Howard, J.F., Lauria, G., Miller, R.G., Polydefkis, M., Sumner, A.J. Evaluation of distal symmetric polyneuropathy: The role of autonomic testing, nerve biopsy, and skin biopsy (an evidence-based review). *Muscle Nerve* 39:106-115, 2009.
73. **Fisher, M.A.** F-waves in lumbosacral radiculopathies: its time has come. *Eur J Neurol* 16: 1171–1172, 2009
74. Venizelos, A.P., Brown, H.G., **Fisher, M.A.** Rapidly fatal neuropathies and an ALS clinical presentation. *Acta Neurol Scand.* 124 (4):282-289, 2011.
75. Venizelos, A., Park, Y., **Fisher, M.A.** A patient with ALS and atypical clinical and electrodiagnostic features: a case report. *Journal of Medical Case Reports. J Med Case Reports.* Published online 2011 November 2. doi: [10.1186/1752-1947-5-538](https://doi.org/10.1186/1752-1947-5-538)
76. Sood, A., Crisan, E., **Fisher, M.** Cranial neuropathies, confusion, and ataxia— Challenges for diagnosis and therapy. *Case Reports in Clinical Medicine* pp 147-151, Pub. Date: May 24, 2013 DOI: 10.4236/crcm.2013.22040.
77. Epstein, N.U., Guo, R., Farlow, M.R., Singh, J.P., **Fisher, M.** Medication for Alzheimer's Disease and Associated Fall Hazard: A Retrospective Cohort Study from the Alzheimer's Disease Neuroimaging Initiative. *Drugs Aging.* 31:125-129, 2014.
78. **Fisher, M.A.** F-waves in diabetes mellitus: answers and questions. *Muscle Nerve* 49:783-785, 2014
79. Li, X., **Fisher, M.**, Rymer W.Z., Zhou, P. Application of the F-response motor unit number and amplitude distribution in hand muscles of stroke survivors. *IEEE Trans Neural Syst Rehabil Eng* 2015, Jul 8
80. **Fisher, M.**, Patil, V.J., Webber, C.L. Recurrence Quantification Analysis of F-waves and the evaluation of neuropathies. *Neurol Res Int.* Volume 2015 (2015), Article ID 183608
81. Stubbs, E.R., **Fisher, M.A.**, Miller, C.M., Jelinik, C., Butler, J., McButney, C., Collins, E. Randomized Controlled

Trial of Physical Exercise in Diabetic Veterans with Length-Dependent Distal Symmetric Polyneuropathy. *Frontiers in Neurology*. (2019) *Front. Neurosci.* 13:51. Doi: 10.3389/fnins.2019.00051.

- 82 Klein, C., Rymer, W.Z., **Fisher, M.A.** Altered nerve excitability properties in chronic strikes are associated with reduced neuromuscular excitability. *Clinical Neurophysiology*. 131:1407-1418, 2020.

BOOK CHAPTERS AND INVITED REVIEWS

1. Hejna, D.R., **Fisher, M.A.**: Electrodiagnosis in Meltzer W. (ed.) *Practice of Surgery (Orthopedics)*, Harper & Row, N.Y., 1976, pp.1-23.
2. **Fisher, M.A.**: Physiological considerations in the EMG evaluation of patients with back pain. In *the Lumbar Spine*. C.V. Mosby Co., St. Louis, 1981, pp. 45-53.
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MONOGRAPH ARTICLE

Fehr, L.S., **Fisher, M.A.**, Langbein, E.W.,Sibley, P.S.: Physiological effects of upper body exercise on muscle Tone and reflexes in older persons. National Veterans Golden Age Games Research Monograph: Health-Related Activity. Department of Veterans Affairs and the Veterans of Foreign Wars. June, 1994.

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22. Co-Director, Symposium "H Reflexes, F Waves, Silent Period and Blink Reflexes", X International Congress of EMG andClinical Neurophysiology, Kyoto, Japan, 1995
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25. Fisher, M.A.: Electrophysiological quantification of spasticity - H reflexes and F waves. In Quantitative Assessment of Spasticity, American Academy of Physical Medicine and Rehabilitation, Chicago, 1996.
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28. Fisher, M.A. F Wave Study is Useful. In Debates in Electrodiagnostic Medicine, 48th Annual Meeting of the AAEM, Albuquerque, 2001, 11-15.
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30. Fisher, M.A.: H reflexes in radiculopathies. In Physiological and Pathological Mechanism of the H Reflex (SIG). 49th Annual Meeting of the AAEM, Toronto, 2002.
31. H Reflexes, F Waves, and A Waves. 18th Annual AACN Clinical Neurophysiology Review Course, Boston, February 12, 2003.
32. Fisher, M.A.: H-reflexes and F-waves. 20th Annual Clinical Neurophysiology Review Course, AACN, Scottsdale, 2/23/05.
33. Fisher, M.A.: H-reflexes, F-waves, and A-waves. 21st Annual AACN Clinical Neurophysiology Review Course. New Orleans. March 2, 2006
34. Fisher, M.A.: F-waves are underutilized in radiculopathies. CrossFire. Controversies in Neuromuscular and EDX Medicine. Annual Meeting AANEM, October 12, 2006
35. Fisher, M.A.: H reflexes and F-waves; EDX Polyneuropathies, Annual Meeting of the American Clinical Neurophysiology Society, November 1, 2006
36. Fisher, M.A. H reflexes and F-waves. Annual Meeting of the American Clinical Neurophysiology Society, February 14, 2008.
37. Fisher, M.A. F-Waves: Methodology and Myth. Symposium F-Waves Revisited Annual Meeting American Clinical Neurophysiology Society, Savannah, 2008.

38. Director Symposium "F-waves Revisited", Annual Meeting American Clinical Neurophysiology Society, Savannah, 2008.
39. Fisher, M.A. F-Waves – Physiology and Clinical Uses. Annual Meeting American Association of Neuromuscular Medicine and Electrodiagnostic Medicine, Providence, 2008
40. Fisher, M.A. H reflexes and F-waves. Annual Meeting of the American Clinical Neurophysiology Society, Orlando, March 4, 2009.
41. Fisher, M.A. Chair, Symposium: Classification of Neuropathies including lecture “Electrodiagnostic Data and Neuropathic Classifications: Novel Approaches. Annual Meeting American Clinical Neurophysiology Society, Orlando, 2009.
42. Fisher MA. 21st International Congress of Clinical Neurophysiology, Puerto Vallarta, Mexico, May 19-22, 2010.
Radiculopathies-Plexopathies; Axonal/Demyelinating: Classification of Neuropathies; History of Modern Neurology in the United States
43. Director Special Interest Group Neuromuscular/EMG Annual American Clinical Neurophysiology Society, New Orleans, 2011.
44. Symposium Chair “New Techniques and Controversies in Electrodiagnosis” with lecture F-Waves: Mythology, Fact and the Future, Annual Meeting of the American Clinical Neurophysiology Society, San Antonio, 2012
45. Symposium Chair “Spasticity – What is it and What is the Electrophysiology?” with lecture “Spasticity – A Historical and Clinical Conundrum” Annual Meeting of the American Clinical Neurophysiology Society, Atlanta, 2014

Miscellaneous Lectures:

Departments of Anesthesiology, Orthopedics, Surgery and Rehabilitation Medicine, Michael Reese Hospital.

Department of Rehabilitation Medicine, Northwestern University (Chicago).

Department of Rehabilitation Medicine, Baylor University (Houston, Texas).

Research Conference, Department of Neurology, Billings Hospital, University of Chicago Pritzker School of Medicine.

Seminars American Academy Clinical Neurophysiology 1987-1993.

Departments of Neurology, Neurosurgery, Psychiatry, Intensive Neuroscience Review.
University of Illinois at Chicago.

Numerous lectures and Grand Rounds Michael Reese Hospital (Chicago), Loyola University
Medical Center (Maywood, IL).

LETTERS

1. Fisher, M.A.: F waves: Comments on the central control of recurrent discharges. *Muscle and Nerve* 2: 406, 1979.
2. Shahani, B.T., Young, R.R., Fisher, M.A.: H reflex Vibration Suppression. *Arch Phys Med Rehab* 324, 1979.
3. Fisher, M.A.: Reciprocal excitation of antagonistic muscles in "spasticity". *Ann Neurol* 14: 94-95, 1983.
4. Fisher, M.A.: F waves. *Muscle Nerve* 8:71-72, 1985.
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6. Fisher, M.A.: F waves and motor unit type. *Muscle Nerve* 16: 876, 1993.
7. Fisher, M.A.: Nerve conduction biopsy correlation in over 100 consecutive patients with suspected neuropathy. *Muscle Nerve* 18:1078-1079, 1995.
8. Fisher, M.A.: Are H reflexes and F responses equally sensitive to changes in motoneuronal excitability? *Muscle Nerve* 19:1345-1346, 1996.
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10. Fisher, M.A.: Dermatomal/segmental somatosensory evoked potential evaluation of L5/S1 unilateral/unilevel radiculopathies. *Muscle Nerve* 1997;20:392.
11. Fisher, M.A.: F Waves - a Reply. *Muscle Nerve* 22:426-427, 1999.
12. Fisher, M.A.: Comments on *Spine* 2005;30:2667-76 in *Spine* 2006;31:1288.

BOOK REVIEWS

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Perspectives in Biology and Medicine 43:455-456, 2000.

New England Journal of Medicine 2003:349:512-513.

Clinical Neurophysiology 2004, 2005;116:986-987.

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CONFERENCES ATTENDED WITH SCIENTIFIC PRESENTATIONS AND/OR INVITED PARTICIPANT

American Academy of Neurology, Toronto, Canada, April 1976.

American Association of Electromyography and Electrodiagnosis,
San Diego, California, November 1976.

American Association of Electromyography and Electrodiagnosis,
Salt Lake City, Utah, September 1977.

International Congress of Electromyography and Electrodiagnosis, Amsterdam, September 1977.

American Academy of Neurology, Los Angeles, California,
April 1978.

American Association of Electromyography and Electrodiagnosis,
St. Louis, Missouri, October 1978.

Sixth International Congress of Electromyography, Stockholm,
Sweden, June 1979.

American Association of Electromyography and Electrodiagnosis,
Philadelphia, Pennsylvania 1980.

Computerized Electromyography, New York, New York 1981.

American Association of Electromyography and Electrodiagnosis,
Portland, Oregon 1981.

American Association of Electromyography and Electrodiagnosis,
St. Paul, Minnesota, 1982.

American Association of Electromyography and Electrodiagnosis,
Toronto, Canada, 1983.

American Academy of Neurology, Boston, Massachusetts, 1984.
American Association of Electromyography and Electrodiagnosis,
Kansas City, 1984.

American Association of Electromyography and Electrodiagnosis,
Las Vegas, 1985.

American Association of Electromyography and Electrodiagnosis,
Boston, 1986.

American Academy of Clinical Neurophysiology, Boston, 1987.

American Association of Electromyography and Electrodiagnosis,
San Antonio, 1987.

American Academy of Neurology, Cincinnati, 1988.

American Academy of Clinical Neurophysiology, Boston, 1988.

American Association of Electromyography and Electrodiagnosis, San Diego, 1988.

American Academy of Clinical Neurophysiology, Boston, 1989.

American Association of Electromyography and Electrodiagnosis, Washington D.C., 1989.

American Academy Clinical Neurophysiology, Boston, 1990

American Society Clinical Evoked Potentials, Chicago, 1990.

American Association of Electrodiagnostic Medicine, Chicago, 1990.

American Academy Clinical Neurophysiology, Boston, 1991.

American Association of Electrodiagnostic Medicine, Vancouver, 1991.

IX International Congress of Electromyography and Clinical Neurophysiology, Jerusalem, Israel,
1992.

American Academy of Clinical Neurophysiology, Chicago, 1992.

American Association of Electrodiagnostic Medicine, Charleston, 1992.

American Academy of Neurology, New York, 1993.

American Academy of Clinical Neurophysiology, San Francisco, 1993.

American Association of Electrodiagnostic Medicine, New Orleans, 1993.

American Academy of Neurology, Washington, D.C., 1994.

American Association of Electrodiagnostic Medicine, San Francisco, 1994.

American Academy of Clinical Neurophysiology, New York, 1995.

American Association of Electrodiagnostic Medicine, Montreal, Canada, 1995

X International Congress of EMG and Clinical Neurophysiology, Kyoto, Japan, 1995*

American Academy of Clinical Neurophysiology, Chicago, 1996

American Academy of Physical Medicine and Rehabilitation, Chicago, 1996

American Association of Electrodiagnostic Medicine, San Diego, 1997

American Academy of Clinical Neurophysiology, New Orleans, 1997

American Association of Electrodiagnostic Medicine, Orlando, 1998

American Academy of Clinical Neurophysiology, Santa Fe, 1999

Eleventh (XI) International Congress of EMG and Clinical Neurophysiology, Prague, 1999

American Association of Electrodiagnostic Medicine, Vancouver, 1999

American Academy of Clinical Neurophysiology, St. Petersburg, 2000 (Symposium Director: Electrophysiology of the Motor Unit)

52nd Annual Meeting of the American Academy of Neurology, San Diego, 2000

American Association of Electrodiagnostic Medicine, Philadelphia, 2000

American Association of Electrodiagnostic Medicine, Albuquerque, 2001

American Academy of Clinical Neurophysiology, New Orleans, 2002 (Symposium Director:

Electrophysiology of Radiculopathies)

American Academy of Clinical Neurophysiology, Boston, 2003

American Association of Electrodiagnostic Medicine, San Francisco, 2003*

American Academy of Clinical Neurophysiology, New Orleans, 2004

American Academy of Neurology, San Francisco, 2004

American Association of Electrodiagnostic Medicine, Savannah, 2004

American Academy of Clinical Neurophysiology, Scottsdale, 2005

American Academy of Clinical Neurophysiology, New Orleans, 2006

International Congress of Clinical Neurophysiology, Edinburgh, 2006

American Association of Neuromuscular Diseases and Electrodiagnostic Medicine,
Washington, D.C. 2006

Annual Meeting American Clinical Neurophysiologic Society, Chicago, 2006

Biannual Meeting of the Peripheral Nerve Society, Snowbird, 2007

Annual Meeting American Clinical Neurophysiologic Society, Savannah, 2008

Annual Meeting American Association of Neuromuscular Medicine and Electrodiagnostic
Medicine, Providence, 2008

Annual Courses and Meeting American Clinical Neurophysiology Society, Orlando, 2009

Biennial Meeting of the Peripheral Nerve Society, Wurzburg, Germany, 2009

International Congress of Gait and Mental Function, Washington D.C., 2010

Annual Meeting and Courses American Clinical Neurophysiologic Society, San Diego, 2010

Annual Meeting American Association of Neuromuscular Medicine and Electrodiagnostic
Medicine, Quebec, 2010

Annual Meeting American Clinical Neurophysiology Society, New Orleans, 2011

Biennial Meeting of the Peripheral Nerve Society, Potomac MD, 2011

Annual meeting of the American Academy of Clinical Neurophysiology, San Antonio, 2012

Annual meeting American Academy of Clinical Neurophysiology Miami 2013

Annual meeting American Association Neuromuscular and Electrodiagnostic Medicine, San Antonio 2013

Annual meeting American Academy of Clinical Neurophysiology. Atlanta, 2014

Annual meeting American Academy of Clinical Neurophysiology. San Antonio, 2015

Annual meeting American Academy of Clinical Neurophysiology. San Orlando, 2016 **Robert S. Schwab Lifetime Achievement Award**

The Schwab Award is presented annually to an individual who has made significant contributions in the area of clinical neurophysiology.

VIDEOTAPE

H Reflexes and F Waves, AAEM 1987; revised 2006

MISCELLANEOUS

Interviewer, Yale College
Harvard Medical School
Loyola University Medical School

Director Ex Officio Harvard Club of Chicago 2017

Board of Trustees Evanston History Center 2023
Treasurer, Board of Trustees, North Shore Village Network 2024

STATE MEDICAL LICENSES

Illinois
California (Inactive)