

CURRICULUM VITAE

Rodger J. Elble, MD, PhD

July 18, 2017

PERSONAL DATA:

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Date of Birth: August 10, 1948



EDUCATION:

1966	East-Alton-Wood River Community High School Wood River, Illinois	
1966-1971	Co-operative engineering program. Purdue University and the McDonnell-Douglas Corp.	
1971	Purdue University W. Lafayette, Indiana B.S. Aeronautical Engineering	BSAE
1975	Indiana University Bloomington, Indiana Ph.D. Physiology (minor in biochemistry) Thesis: Contribution of Motor Unit Statistics to Physiological Tremor Major Professor: James E. Randall, Ph.D.	PhD
1977	Indiana University School of Medicine Indianapolis, Indiana	MD

POSTGRADUATE EDUCATION:

- July 1977 - June 1978 Indiana University School of Medicine, Indianapolis, IN
Internship, Internal Medicine
- July 1978 - June 1981 Washington University School of Medicine, Barnes Hospital
Complex, St. Louis, MO.
Neurology residency and postdoctoral neuroscience training with
W. T. Thach, MD. Topic: Role of cerebellum and stretch reflex
in action tremor
- June 1987 Biomechanics of Human Movement.
Special summer course at Massachusetts Institute of Technology,
Laboratory of Prof. Robert W. Mann.
- May 15 – Aug 30, 2010 Research sabbatical, Department of Neurology, Prof. Günther
Deuschl, Chair, Christian-Albrechts University, Kiel Germany.

LICENSE: Illinois State Board of Medical Examiners
July, 1981-present

BOARD CERTIFIED: American Board of Psychiatry and Neurology
November 1982

HONORS AND AWARDS:

Phi Eta Sigma
Sigma Gamma Tau
Tau Beta Pi
Phi Kappa Phi
Alpha Omega Alpha
Best full-time faculty teacher of the year award, Department of
Medicine, 1985-86
Fellow, American Academy of Neurology (1990)

Best Doctors in America (1996-present)
Castle Connolly Top Doctor (2015-present)
America's Top Physicians, Consumers' Research Council of
America (2006-present)

Associate, Behavioral and Brain Sciences (1991)
IBC Leading Scientists of the World (2008)
Who's Who Among Students in American Colleges and
Universities (1977)
Who's Who in Frontiers of Science and Technology (1985)
Who's Who in the Midwest (1988)
Who's Who of Emerging Leaders in America (1990)

Who's Who in Medicine and Healthcare (1996)
Who's Who in America (2002)

Pfizer Visiting Professor of Neurology, U. of Arkansas, 2007
Visiting Professor, Oregon Health Science University, 2010
Visiting Professor, University of Saskatchewan, 2013

Outstanding Scholar at SIU School of Medicine, 2014
Outstanding Teaching Award, Dept. Neurology, SIUSM, 2016

MEMBERSHIPS:

American Academy of Neurology
Association of University Professors of Neurology
Central Society for Neurological Research
Movement Disorder Society
Society for Neuroscience
Tremor Research Group
Parkinson Study Group
Neuroprotection Exploratory Trials in Parkinson Disease
(National Institute of Neurological Disorders and Stroke)

POSITIONS HELD:

June 1966 to June 1971	Student, Cooperative Engineering Program, McDonnell-Douglas Corp. and Purdue U.
Aug. 1971 to Aug. 1974	National Institutes of Health Physiology Training Grant Indiana University, Bloomington, IN
Aug. 1973 to June 1975	Teaching Assistant, Department of Anatomy and Physiology, Indiana University, Bloomington, IN
July 1977 to July 1978	Intern, Department of Internal Medicine, School of Medicine, Indiana University, Indianapolis, IN
July 1978 to July 1981	Resident, Department of Neurology Washington University School of Medicine, Barnes Hospital, St. Louis, MO
July 1981 to July 1987	Assistant Professor of Neurology Southern Illinois University School of Medicine, Springfield, IL

- July 1987 to March 1996 Associate Professor of Neurology
Southern Illinois University School of Medicine,
Springfield, IL
- Nov. 1988 to March 1996 Associate Professor of Psychiatry
Southern Illinois University School of Medicine,
Springfield, IL
- Nov. 1988 to Sept. 2007 Director
Center for Alzheimer Disease and Related Disorders,
Southern Illinois University School of Medicine,
Springfield, IL
- Sept. 1992 to Feb. 1993 Acting Chief
Division of Neurology, Department of Medicine
Southern Illinois University School of Medicine,
Springfield, IL
- July 1993 to 2004 Director
Neurology senior student electives
- Feb. 1993 to May 1996 Interim Chair
Department of Neurology
Southern Illinois University School of Medicine,
Springfield, IL
- Oct. 1993 to 1997 Member, Neurology Study Section A
National Institute of Neurological Disorders and Stroke
Bethesda, Maryland
- July 1994 to 2000 Director, Student Neurology Clerkship
Department of Neurology
Southern Illinois University School of Medicine
Springfield, IL
- March 1996 to June 2014 Professor of Neurology
Southern Illinois University School of Medicine
- March 1996 to June 2014 Professor of Psychiatry
Southern Illinois University School of Medicine
- May 1996 to Nov. 2012 Chair of Neurology
Southern Illinois University School of Medicine
- July 1998 to June 2014 Director, Neurology Residency Program

Department of Neurology, Southern Illinois U. School of
Medicine

July 1999 to Feb. 2001 Director, National Parkinson Foundation Center of Excellence
March 1, 2004 – July 2005 Southern Illinois University School of Medicine

Dec. 2007 – January 2010 Medical Director, Stroke Center, St. John’s Hospital

Nov. 2011 – 2013 Neurology Clerkship Director, SIU School of Medicine

March 2004 – present Director, Parkinson Disease and Movement Disorders Center,
SIU School of Medicine

UNIVERSITY COMMITTEES AND SPECIAL ASSIGNMENTS:

Chair Laboratory Animal Care Committee
July 1985 - June 1988

Member Search committee for the director of Laboratory Animal Resources
1985

Chair Central Research Committee
July 1985 - September 1989

Member Springfield Committee for Research Involving Human Subjects
July 1988 – September 1989

Chair Springfield Committee for Research Involving Human Subjects
September 1989 - November 1992

Member Ad hoc committee for utilization of laboratory space
1989

Member Ad hoc committee for review of the Department of
Family Practice: 1991

Member Computing Advisory Committee, 1990

Chair Alzheimer Center Policy Advisory Committee
November 1988 - 2007

Member University Patents and Copyrights Committee
July 1985 - June 1996

Member	Misconduct in Science Committee July 1990 - June 1996
Chair	Misconduct in Science Committee July 1996 - 1998
Member	Research Policy Advisory Committee July 1985 - Sept. 1993
Member	Utilization Review for Memorial Medical Center. 1986 - 1992
Member	LCME Subcommittee for institutional research: 1992
Member	Clinical Chairs' Committee Feb. 1993 -2012
Member	Executive Committee, Feb 1993 – 2012
Member	Medical Service and Research Plan Committee April 1993 – November 1997
Member	Student Progress System Subcommittee on Appeals July 1994 - 2001
Member	Search Committee, Chair of Neurology 1994
Member	Search Committee, Chair of Internal Medicine 1995
Member	ad hoc Committee, Scholars in Biomedical Research Program 1998
Member	Graduate Medical Education Committee 1998 - 2014
Member	LCME task force subcommittee for graduate education in the basic sciences and research. 1998
Member	Curriculum 2000 workgroup on integration of basic sciences and clinical medicine. 1999
Chair	Curriculum 2000 neuroscience clerkship committee. 1999

Member	Internal Medicine and Pulmonary Medicine Internal Review Committee, 1999
Chair	Dept of Neurology, St. John's Hospital, Springfield, IL, 2000-2012
Member	Student Progress Committee, 2001-2005
Member	Department of Medicine Research Development Task Force. September 2001-2002
Member	Dean and Provost search committee. November 2001-June 2002
Member	General Surgery Internal Review Committee, 2002
Chair	Chair of Psychiatry search committee, August 2002-November 2002
Chair	SIUSOM grant overhead committee, June 2003-November 2003
Member	Associate Dean for Research search committee, Sept. 2004-Dec. 2004
Chair	Psychiatry Residency internal review committee, November 2004-February 2005
Member	Translational research task force, December 2007 – May 2008

OFFICES IN PROFESSIONAL ORGANIZATIONS

Oct. 1993-Oct. 1996	Secretary-Treasurer, Central Society for Neurological Research
Oct. 1996-Oct. 1997	President, Central Society for Neurological Research
May 2004-Feb. 2013	President, Tremor Research Group

COMMITTEES IN PROFESSIONAL SOCIETIES

American Academy of Neurology Clinical Practice Committee, Geriatric Neurology and Dementia Section	Member, 1998-2007
Movement Disorder Society Membership committee	Member, 1998-2000
European Union Project NeuroTREMOR	Scientific Advisory Board May 2011-2013
Parkinson Study Group Credentials Committee	Member, 2011-2015
Task Force: European Recommendations on the Diagnosis and Management of Essential Tremor European Federation of Neurological Societies	External scientific advisor Feb 2012 - 2015
Tremor Rating Scale Task Force International Parkinson and Movement Disorder Society	Chair, September 2011-2014
Tremor Task Force International Parkinson and Movement Disorder Society	Chair, September 2011-2017
Tremor Study Group International Parkinson and Movement Disorder Society	Chair, June 2017-present

PROFESSIONAL ADVISORY BOARDS

International Essential Tremor Foundation, Kansas City, KS	Member, Medical Advisory Board, 1988 - <u>present</u>
Alzheimer's Disease and Related Disorders Association, Springfield Chapter	Member, Medical Advisory Board, 1986 - 2007
BlueCross-BlueShield of Illinois	Medical Consultant, 1998 - 2003
Spastic Paralysis Research Foundation Kiwanis International, Illinois-Eastern Iowa District	Medical Director, 2010 - <u>present</u>

RESEARCH STUDY GROUPS

Tremor Research Group	2001 – <u>present</u>
NINDS NET-PD Study Group	2003 – 2014
Parkinson Study Group	2005 – <u>present</u>

CERTIFICATIONS (date of recertification)

NIH Stroke Scale	November 4, 2010
ABCD2 Scale	November 4, 2010
Modified Rankin Scale	November 4, 2010
UPDRS	November 4, 2011

GRANT REVIEWS

National Institute of Neurological Diseases and Stroke	Special Reviewer, Neurology Study Section A, October 1992 - October 1993 Regular Member, October 1993 - October 1996. Reserve member, October 1996 - 1997
Louisiana Board of Regents	2013
National Institute on Aging	Special study section member (Locomotor Impairment and Falls in the Elderly), March 1986.
National Institute on Deafness and Other Communicative Diseases	Ad hoc grant reviewer, 1998
NIH, SBIR (BBBP-1)	Ad hoc grant reviewer, 2001
NIH, Clinical Neuroscience and Neurodegeneration Study Section	Reviewer, 2013 - 2015
National Science Foundation	Ad hoc grant reviewer, 1984
Veterans Administration	Ad hoc grant reviewer, 1986, 2000, 2003
Spinal Cord Research Foundation Paralyzed Veterans of America	Ad hoc grant reviewer, 1997
Illinois Department of Public Health	Ad hoc grant reviewer, 1996
International Tremor Foundation	Ad hoc grant reviewer, 1997

International Essential Tremor Foundation	Grant reviewer, 2005- <u>present</u>
Prinses Beatrix Fonds	Grant reviewer, 2010
German Ministry of Education and Research	Grant reviewer, 2010
Alzheimer Research Alliance of Oregon	Ad hoc grant reviewer, 1995
United States-Israel Binational Science Foundation	Ad hoc grant reviewer, 1997, 2006, 2007
University of Texas Health Science Center at San Antonio	Ad hoc grant reviewer, 2000
Natural Sciences and Engineering Research Council of Canada	Ad hoc grant reviewer, 1998
The Wellcome Trust, London UK Joint Infrastructure Fund	Ad hoc grant reviewer, 1999, 2003, 2007
Michael J Fox Foundation	Ad hoc grant reviewer, 2014
Netherlands Brain Foundation (Hersenstichting)	Ad hoc grant reviewer, 2016

EDITORIAL BOARDS OF PROFESSIONAL JOURNALS

Movement Disorders	November 1992 - November 1996 January 1998 – January 2002
Tremor and Other Hyperkinetic Movements	November 2014 - <u>present</u>

REFeree SERVICE FOR PROFESSIONAL JOURNALS AND PUBLISHERS

Acta Neurologica Scandinavica
 American Academy of Neurology
 Annals of Biomedical Engineering
 Annals of Neurology
 Archives of Neurology

Behavioral and Brain Sciences
Behavioral Brain Research
Biological Cybernetics
BioMed Central
BMJ Open
Brain
Brain Research
Brain Stimulation
Brain Topography
Cerebral Cortex
Chronic Illness
Cleveland Clinic Journal
Clinical Neuropharmacology
Clinical Neurophysiology
Complexity
Computer Methods and Programs in Biomedicine
Electroencephalography and Clinical Neurophysiology
Engineering Science and Technology
Experimental Aging Research
Experimental Brain Research
European Journal of Neurology
European Journal of Applied Physiology
European Journal of Applied Physiology and Occupational Physiology
F.A. Davis (book reviews)
Human Movement Science
IEEE Press (Institute of Electrical and Electronics Engineers, Inc.) (book reviews)
IEEE Journal of Biomedical and Health Informatics
International Journal of Neuroscience
Journal of Applied Physiology
Journal of Clinical Investigation
Journal of Clinical Movement Disorders
Journal of Electromyography and Kinesiology
Journal of Motor Behavior
Journal of Neurology
Journal of Neurophysiology
Journal of Neural Transmission
Journal of Neurological Sciences
Journal of Neurology, Neurosurgery and Psychiatry
Journal of NeuroRehabilitation and Engineering
Journal of Neuroscience
Journal of Neuroscience Methods
Journal of Parkinson's Disease
Journal of Physiology
Journal of Theoretical Biology
Lancet

Lancet Neurology
 Lippincott - Raven Publishers (book reviews)
 Medical & Biological Engineering & Computing
 Medical Engineering and Technology
 Motor Control
 Movement Disorders
 Movement Disorders Clinical Practice
 Neurodegenerative Disease Management
 Neuroepidemiology
 Neurology
 Neurorehabilitation and Neural Repair
 Neurotherapeutics
 Neurotoxicology and Teratology
 New England Journal of Medicine
 Parkinson's Disease
 Parkinsonism & Related Disorders
 Perceptual and Motor Skills
 PLOS ONE
 Progress in Neurobiology
 Psychological Reports
 Psychopharmacology
 Science
 Stroke
 Teaching and Learning in Medicine
 Transactions on Neural Systems and Rehabilitation Engineering
 Tremor and Other Hyperkinetic Movement Disorders
 The Cerebellum

PUBLICATIONS:

Papers in peer-reviewed journals:

1. Elble RJ, Randall JE. 1976. Motor unit activity responsible for the 8- to 12-Hz component of human physiological finger tremor. J Neurophysiol 39:370-383.
2. Elble RJ, Randall JE. 1978. Mechanistic components of normal hand tremor. Electroenceph Clin Neurophysiol 44:72-82.
3. Kapila A, Elble R, Ratcheson RA, Burde R, Gado M. 1982. Radiologic demonstration of the dorsal medullocervical spur in adult Chiari malformation. J Clin Neuro-Ophthalmology 2:235-240.
4. Elble RJ, Schieber MH, Thach WT. 1984. Activity of muscle spindles, motor cortex and cerebellar nuclei during action tremor. Brain Res 323:330-334.

5. Elble RJ. 1986. Physiologic and essential tremor. Neurology 36:225-231.
6. Elble RJ, Higgins C, Moody C. 1987. Stretch reflex oscillations and essential tremor. J Neurol Neurosurg Psychiatry 50:691-698.
7. Elble RJ, Giacobini E, Scarsella GF. 1987. Cholinesterases in cerebrospinal fluid: a longitudinal study in Alzheimer disease. Arch Neurol 44:403-407.
8. Norfray JF, Couch JR, Elble RJ, Good DC, Manyam BV, Patrick JL. 1988. Visualization of brain iron by mid-field MR. Am J Neuroradiol 9:77-82.
9. Becker R, Giacobini E, Elble R, McIlhany M, Sherman K. 1988. Potential pharmacotherapy of Alzheimer disease: a comparison of various forms of physostigmine administration. Acta Neurol Scandinav 77(suppl 116):19-29.
10. Elble RJ, Giacobini E, Higgins C. 1989. Choline levels are increased in cerebral spinal fluid of Alzheimer patients. Neurobiol of Aging 10:45-50.
11. Elble RJ, Moody C, Higgins C. 1990. Primary writing tremor: a form of focal dystonia? Movement Disorders 5:118-126.
12. Becker RE, Colliver J, Elble RJ, et al. 1990. Effects of metrifonate, a long-acting cholinesterase inhibitor, in Alzheimer disease: a report of an open trial. Drug Development Res 19:425-434.
13. Elble RJ, Sinha R, Higgins C. 1990. Quantification of tremor with a digitizing tablet. J Neurosci Methods 32:193-198.
14. ¹Elble RJ, Thomas SS, Higgins C, Colliver J. 1991. Stride-dependent changes in gait of older people. J Neurol 238:1-5.
15. Elble RJ. 1991. Inhibition of forearm EMG by palatal myoclonus. Mov Disord 6:324-329.
16. Elble RJ, Higgins C, Hughes L. 1992. The syndrome of senile gait. J Neurol 239:71-75.
17. Elble RJ, Higgins C, Hughes L. 1992. Longitudinal study of essential tremor. Neurology 42:441-443.
18. Elble RJ, Higgins C, Hughes L. 1992. Phase resetting and frequency entrainment of essential tremor. Exp Neurol 116:355-361.
19. Brilliant M, Elble RJ, Ghobrial M, Struble RG. 1992. Distribution of amyloid in the brainstems of patients with Alzheimer disease. Neurosci Lett 148:23-26.

¹ Selected for review in Sports Medicine Digest, 1992

20. Elble RJ, Moody C, Leffler K, Sinha R. 1994. The initiation of normal walking. Mov Disord 9:139-146.
21. Elble RJ, Higgins C, Hughes L. 1994. Essential tremor entrains rapid voluntary movements. Exp Neurol 126:138-143.
22. Elble RJ, Higgins C, Leffler K, Hughes L. 1994. Factors influencing the amplitude and frequency of essential tremor. Mov Disord 9:589-596.
23. ²Brilliant M, Hughes L, Anderson D, Ghobrial M, Elble R. 1995. Rarefied white matter in patients with Alzheimer disease. Alzheimer Disease Related Disorders 9:39-46.
24. Elble RJ, Brilliant M, Leffler K, Higgins C. 1996. Quantification of essential tremor in writing and drawing. Mov Disord 11:70-78.
25. Qureshi F, Morales A, Elble RJ. 1996. Tremor due to infarction in the ventrolateral thalamus. Mov Disord 11:440-444.
26. Elble RJ, Cousins R, Leffler K, Hughes L. 1996. Gait initiation by patients with lower-half parkinsonism. Brain 119:101-112.
27. Brilliant MJ, Elble RJ, Ghobrial M, Struble RG. 1997. Distribution of amyloid β -protein deposition in the corpus striatum of patients with Alzheimer's disease. Neuropath Applied Neurobiol 23:322-325.
28. Bashir K, Elble RJ, Ghobrial M, Struble RG, Brilliant M. Hemianopsia in dementia with Lewy bodies. Arch Neurol 1998;55:1132-1135.
29. Elble RJ. Tremor in ostensibly normal elderly people. Mov Disord 1998;13:457-464.
30. Zec RF, Landreth ES, Belman J, Fritz S, Hasara A, Fraizer W, Wainman S, McCool M, Grames E, O'Connell C, Harris R, Robbs R, Elble R, Manyam B. 1999. A comparison of phonemic, semantic, and alternating word fluency in Parkinson disease. Arch Clin Neuropsychol 14:255-264.
31. Matthews B, Zec RF, Elble RJ, Markwell SJ. Global executive functioning is commensurate with global cognitive functioning in PD. Arch Clin Neuropsychol 1999;14:634-5
32. Zec RF, Matthews B, Vost KG, Markwell SJ, Elble RJ. A comparison of mild AD patients and nondemented PD patients on the FLOPS. Arch Clin Neuropsychol 1999;14:622
33. ³Henderson VW, Paganini-Hill A, Miller BL, Elble RJ, Reyes PF, Shoupe D, McCleary CA, Klein RA, Hake AM, Farlow MR. 2000. Estrogen for Alzheimer's disease in women: randomized, double-blind, placebo-controlled trial. Neurology 54:295-301.

² Selected for review in the 1995 Parkinson/Alzheimer Digest, PMSI Bugamor, The Netherlands.

34. Elble RJ, Leffler K. 2000. Pushing and pulling with the upper extremities while standing: the effects of mild Alzheimer dementia and Parkinson disease. *Mov Disord*;15:255-268.
35. Elble RJ. 2000. Essential tremor frequency decreases with time. *Neurology* 55:1547-1551.
36. Ala TA, Hughes LF, Kyrouac GA, Ghobrial MW, Elble RJ. 2001. Pentagon copying is more impaired in dementia with Lewy bodies than in Alzheimer's disease. *J Neurol Neurosurg Psychiatry* 70:483-488.
37. Kovach MJ, Ruiz J, Kimonis K, Mueed S, Sinha S, Higgins C, Elble S, Elble R, Kimonis VE. 2001. Genetic heterogeneity in autosomal dominant essential tremor. *Genetics Medicine* 3:197-199.
38. Ala TA, Hughes LF, Kyrouac GA, Ghobrial MW, Elble RJ. The Mini Mental State Exam may help in the differentiation of dementia with Lewy bodies and Alzheimer's disease. *International Journal of Geriatric Psychiatry* 2002;17:503-509.
39. Elble RJ. Characteristics of physiologic tremor in young and elderly adults. *Clin Neurophysiol* 2003;114:624-635
40. Ala TA, Hughes LF, Kyrouac GA, Ghobrial MW, Elble RJ. The Mini-Mental State exam may help in the differentiation of dementia with Lewy bodies and Alzheimer's disease. *Research and Practice in Alzheimer's Disease*. 2003;7:231-235.
41. Elble RJ, Higgins C, Elble S. Electrophysiologic transition from physiologic tremor to essential tremor. *Mov Disord* 2005;20:1038-1042.
42. Zesiewicz TA, Elble R, Louis ED, Hauser RA, Sullivan KL, Dewey RB Jr, Ondo W, Gronseth GS, Weiner WJ. Practice Parameter: Therapies for Essential Tremor (An Evidence Based Review). Report of the Quality Standards Subcommittee of the American Academy of Neurology. *Neurology* 2005;64:2008-2020.
43. Elble RJ. Gravitational artifact in accelerometric measurements of tremor. *Clin Neurophysiol* 2005;116:1638-1643.
44. Ondo WG, Jankovic J, Connor GS, Pahwa R, Elble R, Stacy MA, et al. Topiramate in essential tremor. *Neurology* 2006;66:672-7.
45. Pyo G, Elble RJ, Ala T, Markwell SJ. The characteristics of patients with uncertain/mild cognitive impairment on the Alzheimer's Disease Assessment Scale. *Alzheimer Dis Assoc Disord* 2006;20:16-22

³ Selected for expedited publication

46. Shatunov A, Sambuughin N, Jankovic J, Elble R, Lee HS, Singleton AB, Dagvadorj A, Ji J, Zhang Y, Kimonis VE, Hardy J, Hallett M, Goldfarb LG. Genomewide scans in American families reveal genetic linkage of essential tremor to a region on chromosome 6p23. *Brain* 2006;129:2318-31
47. Elble RJ, Pullman SL, Matsumoto J, Raethjen J, Deuschl G, Tintner R. Tremor amplitude is logarithmically related to 4- and 5-point tremor rating scales. *Brain* 2006;129:2660-6
48. Stacy MA, Elble RJ, Ondo WG, Wu S-C, and Hulihan J, for the *TRS Study Group. Assessment of Inter-Rater and Intra-Rater Reliability of the Fahn-Tolosa-Marín Tremor Rating Scale (TRS) in Essential Tremor. *Mov Disord* 2007;22:833-8.
49. Elble RJ, Lyons KE, Pahwa R. Levetiracetam is not effective for essential tremor. *Clin Neuropharmacol* 2007;30:350-356.
50. Goetz CG, Stebbins GT, Wolff D, Deleeuw W, Bronte-Stewart H, Elble R, Hallett M, Nutt J, Ramig L, Sanger T, Wu AD, Kraus PH, Blasucci LM, Shamim EA, Sethi KD, Spielman J, Kubota K, Grove AS, Dishman E, Taylor CB. Testing objective measures of motor impairment in early Parkinson's disease: Feasibility study of an at-home testing device. *Mov Disord* 2009;24:551-556.
51. Louis ED, Faust PL, Vonsattel JPG, Honig LS, Rajput A, Rajput A, Pahwa R, Lyons KE, Ross GW, Elble RJ, Erickson-Davis C, Moskowitz CB, Lawton A. Torpedoes in Parkinson's disease, Alzheimer's disease, essential tremor, and control brains. *Mov Disord* 2009;24:1600-1605.
52. Elble RJ, Biondi DM, Ascher S, Wiegand F, Hulihan J. Carisbamate in essential tremor: brief report of a proof of concept study. *Mov Disord* 2010;25:634-8.
53. Elble RJ, Suchowersky O, Shaftman S, Weiner WJ, Huang P, Tilley B, on behalf of the NINDS NET-PD investigators. Impact of belief in neuroprotection on therapeutic intervention in Parkinson disease. *Mov Disord* 2010;25:1082-6.
54. Fasano A, Herzog J, Raethjen J, Rose FEM, Muthuraman M, Volkmann J, Falk D, Elble R, Deuschl G. Gait ataxia in essential tremor is differentially modulated by thalamic stimulation. *Brain* 2010;133:3635-48.
55. Heldman DA, Jankovic J, Vaillancourt DE, Prodoehl J, Elble RJ, Giuffrida JP. Essential tremor quantification during activities of daily living. *Parkinsonism Relat Disord* 2011;17:537-42.
56. Zesiewicz TA, Elble RJ, Louis ED, Gronseth GS, Ondo WG, Dewey RB, Jr., et al. Evidence-based guideline update: Treatment of essential tremor: Report of the Quality Standards Subcommittee of the American Academy of Neurology. *Neurology* 2011;77:1752-5.

57. Muthuraman M, Heute U, Arning K, Anwar AR, Elble R, Deuschl G, Raethjen J. Oscillating central motor networks in pathological tremors and voluntary movements. What makes the difference? *Neuroimage* 2012;60:1331-1339.
58. Elble R, Comella C, Fahn S, et al. Reliability of a new scale for essential tremor. *Mov Disord* 2012;27:1567-1569.
59. Zesiewicz TA, Sullivan KL, Hinson V, Stover NP, Fang J, Jahan I, Miller A, Carranza MA, Elble R. Multisite, double-blind, randomized, controlled study of pregabalin for essential tremor. *Mov Disord* 2013;28:249-50
60. Elble R, Bain P, Joao Forjaz M, et al. Task force report: Scales for screening and evaluating tremor: Critique and recommendations. *Mov Disord* 2013;28:1793-800.
61. Kaul S, Elble RJ. Impaired pentagon drawing is an early predictor of cognitive decline in Parkinson's disease. *Mov Disord* 2014;29:427-8.
62. Bhargava P, Elble RJ. Clinical Reasoning: An unusual cause of transverse myelitis? *Neurology* 2014;82:e46-50.⁴
63. Forjaz MJ, Ayala A, Testa CM, Bain PG, Elble R, Haubenberger D, Rodriguez-Blazquez C, Deuschl G, Martinez-Martin P. Proposing a Parkinson's disease specific tremor scale from the MDS-UPDRS. *Mov Disord*. 2015;30:1139-1143.
64. Bhargava P, Siddiqui F, Aggarwal B, Moore BE, Elble RJ. A unique case of intravascular lymphoma mimicking encephalomyeloradiculoneuropathy. *Neurologist* 2015;20:18-21.
65. Elkouzi A, Kattah JC, Elble RJ. Hypertrophic olivary degeneration does not reduce essential tremor. *Movement Disorders Clinical Practice*. 2016;3 (2):209-211
66. Haubenberger D, Abbruzzese G, Bain PG, et al. Transducer-based evaluation of tremor. *Mov Disord* 2016;31(9):1327-36.
67. Elble RJ. The Essential Tremor Rating Assessment Scale. *J Neurol Neuromed* 2016;1(4):34-38.
68. Elble R, Hellriegel H, Raethjen J, Deuschl G. Assessment of head tremor with accelerometers versus gyroscopic transducers. *Movement Disorders Clinical Practice* 2017;4(2):205-211.
69. Michael AP, Elkouzi A, Elble RJ. Pearls & Oysters: Low-pressure hydrocephalus and inadequate shunting. *Neurology* 2017;88(17):e174-e177.
70. Elble RJ, Ellenbogen A. Digitizing tablet and Fahn–Tolosa–Marin ratings of Archimedes spirals have comparable minimum detectable change in essential tremor. *Tremor Other Hyperkinet Mov* 2017; 7. doi: 10.7916/D89S20H7

⁴ Winner of the 2015 Neurology® Resident and Fellow Writing Award

71.

Other papers from multicenter trials

1. Elm JJ, Goetz CG, Ravina B, Shannon K, Wooten GF, Tanner CM, Palesch YY, Huang P, Guimaraes P, Kamp C, Tilley BC, Kieburtz K; NET-PD Investigators.⁵ A responsive outcome for Parkinson's disease neuroprotection futility studies. *Ann Neurol* 2005;57:197-203.
2. The NINDS NET-PD Investigators.⁴ A phase II, randomized, double blinded, futility clinical trial of creatine and minocycline in early Parkinson's disease. *Neurology* 2006;66:664-71
3. Tilley BC, Palesch YY, Kieburtz K, Ravina B, Huang P, Elm JJ, Shannon K, Wooten GF, Tanner CM, Goetz CG on behalf of the NET-PD Investigators.⁴ Optimizing the ongoing search for new treatments for Parkinson's disease using futility designs. *Neurology* 2006 2006;66:628-33.
4. The NINDS NET-PD Investigators.⁴ A Randomized Clinical Trial of Coenzyme Q10 and GPI-1485 in Early Parkinson's Disease. *Neurology* 2007;68:20-28
5. Elm JJ, Kamp C, Tilley BC, et al.⁴ Self-reported adherence versus pill count in Parkinson's disease: the NET-PD experience. *Mov Disord* 2007;22:822-827.
6. Goetz CG, Tilley BC, Shaftman SR, et al.⁴ Movement Disorder Society-sponsored revision of the Unified Parkinson's Disease Rating Scale (MDS-UPDRS): scale presentation and clinimetric testing results. *Mov Disord* 2008;23(15):2129-2170.
7. The NINDS NET-PD Investigators.⁴ A pilot clinical trial of creatine and minocycline in early Parkinson disease: 18-month results. *Clin Neuropharmacol* 2008;31:141-50.
8. Olanow CW, Rascol O, Hauser R, Feigin PD, Jankovic J, Lang A, Langston W, Melamed E, Poewe W, Stocchi F, Tolosa E, for the ADAGIO Study Investigators.⁶ A double-blind, delayed-start trial of rasagiline in Parkinson's disease. *N Engl J Med* 2009;361:1268-1278.
9. Fernandez HH, Greeley DR, Zweig RM, Wojcieszek J, Mori A, Sussman NM; 6002-US-051 Study Group.⁷ Istradefylline as monotherapy for Parkinson disease: results of the 6002-US-051 trial. *Parkinsonism Relat Disord* 2010;16:16-20.

⁵ R. Elble, contributing investigator

⁶ R. Elble, investigator

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43. Elble RJ. 1996. Critical unanswered questions pertaining to the pathophysiology of tremor. Central Society of Neurological Research. Red Wing, MN, Sept. 20, 1996.
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47. Elble RJ, Higgins C, Leffler K, Elble S. 1998. Tremor that does not change in frequency with mass loading: prevalence in ostensibly normal volunteers. 5th International Congress of Parkinson's Disease and Movement Disorders. New York.
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51. Matthews B, Zec RF, Markwell S, Elble R. 1998. Wide range of cognitive impairment in PD patients with intact MMSE scores. National Academy of Neuropsychology, Washington DC. Arch Clin Neuropsychol.
52. Matthews B, Zec RF, Elble R, Markwell SJ. 1999. No evidence for a global or disproportionate impairment of executive functioning in non-demented patients with Parkinson's disease. Tenth annual meeting of the American Neuropsychiatric Association/Behavioral Neurology Society, New Orleans. J Neuropsychiatry Clin Neurosci.
53. Zec RF, Matthews B, Vost K, Elble R, Markwell SJ. 1999. Mildly demented AD patients but not mildly cognitively impaired PD patients lack insight regarding their level of everyday executive functioning. Tenth annual meeting of the American Neuropsychiatric Association/Behavioral Neurology Society, New Orleans. J Neuropsychiatry Clin Neurosci.
54. Elble RJ, Higgins C, Elble S. 2000. Essential tremor: a prospective longitudinal study of tremor frequency. American Academy of Neurology. San Diego.
55. Henderson VW, Paganini-Hill A, Miller BL, Elble RJ, Reyes PF, Farlow MR. 2000. A randomized controlled trial of estrogen for the treatment of Alzheimer's disease in women. American Academy of Neurology. San Diego.
56. Ala TA, Hughes LF, Kyrouac GA, Ghobrial MW, Elble RJ. Patients with Lewy body dementia draw the interlocking pentagons on the Mini-Mental State examination less accurately than patients with Alzheimer disease: a cliniconeuropathological study. Neurobiol Aging. 2000;21:S83 (Washington DC).

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59. Ala TA, Hughes LF, Kyrouac GA, Ghobrial MW, Elble RJ. The Mini-Mental State Examination may help in the differentiation of dementia with Lewy bodies and Alzheimer's disease. In: Programme Book of the 17th International Conference. Christchurch, New Zealand: Alzheimer's Disease International; 2001:149
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61. Shatunov A, Jankovic J, Elble R, Sambuughin N, Zhang Y, Ji J, Lee H-S, Hallett M, Goldfarb LG. 2002. Chromosomal mapping of Essential Tremor. 52nd Annual Meeting of the American Society of Human Genetics. Baltimore, Oct. 15, 2002.
62. Elble RJ. 2002. Limitations of accelerometry in motion analysis. 7th International Congress of Parkinson's Disease and Movement Disorders. Miami FL. Nov. 14.
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¹⁵ RJE is president of the Tremor Research Group

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73. Christopher G. Goetz, Ken Kubota, Glenn T. Stebbins, Helen Bronte-Stewart, Rodger Elble, Mark Hallett, John Nutt, Lorraine Ramig, Terrance Sanger, Allen Wu, Peter Kraus, C. Barr Taylor. At-Home Testing Battery for collecting objective motor data: technology to capture longitudinal changes in Parkinson disease. World Parkinson Conference, Washington, DC, 2006.
74. Ala T, Vicari S, Ghobrial M, Elble R. Neuropathological study of the response of patients with dementia with Lewy bodies to metrifonate. *Neurobiol Aging*. 2006;27S1:S1 (Abstract).
75. Christopher G. Goetz, Ken Kubota, Glenn T. Stebbins, William DeLeeuw, Helen Bronte-Stewart, Rodger Elble, Mark Hallett, John Nutt, Lorraine Ramig, Terrance Sanger, Allen Wu, Peter Kraus, Lucia M. Blasucci, Ejaz M. Shamin, C Barr Taylor. Parkinson's Disease At-Home Testing Battery: Reliability of data collection and transmission of objective motor data from home to a central study center. Parkinson Disease and Movement Disorders Congress, Kyowa Japan, 2006.
76. Elble RJ. Low pressure adult hydrocephalus. The 2nd International Congress on Gait and Mental Function. Amsterdam, The Netherlands, Feb. 1, 2008.
77. Christopher G. Goetz, Glenn T. Stebbins, Ken Kubota, William C. DeLeeuw, Helen Bronte-Stewart, Rodger Elble, Mark Hallett, John Nutt, Lorraine Ramig, Terence Sanger, Allan D. Wu, Peter H. Kraus, Lucia M. Blasucci, Ejaz A. Shamim, Kapil Sethi, Jennifer Spielman, David Wolff, Andrew S. Grove, Craig B. Taylor. Parkinson's Disease At-Home Testing Device: Feasibility and Relationship to UPDRS Changes over Six Months. Annual Meeting of the American Academy of Neurology, April 15, 2008, Chicago IL.
78. Suchowersky O, Huang P, Elble R, Weiner W. Effect of investigator perception of treatment efficacy on outcome measures in a clinical trial of neuroprotective agents in Parkinson disease. 12th International Congress of Parkinson Disease and Movement Disorders. June 24, 2008, Chicago IL.

79. Kaul S, Elble R. Impaired pentagon drawing is an early indication of impending dementia in Parkinson disease. 12th International Congress of Parkinson Disease and Movement Disorders. June 26, 2008, Chicago IL.
80. Goetz CG, Stebbins GT, Wolff DJ, DeLeeuw H, Bronte-Stewart H, Elble RJ, Hallett M, Nutt JG, Ramig LA, Sanger TD, Wu AD, Kraus PH, Blasucci LM, Shamim EA, Sethi KD, Spielman J, Kubota K, Grove AS, Taylor CB. Objective at-home testing measures as predictors of UPDRS change in early Parkinson's disease (PD). 12th International Congress of Parkinson Disease and Movement Disorders. June 26, 2008, Chicago IL.
81. Elble R, Comella C, Fahn S, Hallett M, Jankovic J, Juncos J, Louis E, Lyons K, Ondo W, Pahwa R, Sethi K, Stern M, Tanner C, Tarsy D, Tintner R, Watts R, Tremor Research Group. The essential tremor rating assessment scale (TETRAS). 12th International Congress of Parkinson Disease and Movement Disorders. June 26, 2008, Chicago IL.
82. Agrawal BK, Siddiqui FM, Elble RJ. A unique case of angiotropic lymphoma mimicking encephalomyeloradiculoneuritis. *Neurology* 2009;72:A30. Annual Meeting of the American Academy of Neurology. April 28, 2009. Seattle WA.
83. Louis EA, Faust P, Vonsattel J-P, Honig L, Rajput A, Rajput A, Pahwa R, Lyons K, Web R, Elble R, Erickson-Davis C. Torpedoes in essential tremor, Parkinson's disease, Alzheimer's disease, and control brains. *Neurology* 2009;72:A101. Annual Meeting of the American Academy of Neurology. April 28, 2009. Seattle WA.
84. Ottaviani D, Elble R, Colosimo C, Fabbrini G, Berardelli A, Williams DR. Clinical syndromes and disease progression in progressive supranuclear palsy. *Mov Disord* 2009;24:S416. Parkinson Disease and Movement Disorders Congress. Paris France. June 2009.
85. Siddiqui FM, Agrawal BK, Acharya HK, Elble RJ. A Unique Case of Hyperviscosity Syndrome in a Patient with Chronic Lymphocytic Leukemia Treated with Rituximab. 2010 Annual Meeting of the American Academy of Neurology. Toronto. April 15.
86. Elble RJ. Neurophysiology of tremor. *Clinical Neurophysiology* 2010; 121: S81-82.
87. Heldman D, Filipkowski D, Jankovic J, Vaillancourt D, Prodoehl J, Elble R, Giuffrida J. Essential tremor quantification during activities of daily living. 2011 Annual Meeting of the American Academy of Neurology. Honolulu HI, April 12.
88. Elble R, Kaul S. Impaired pentagon drawing is an early indication of impending cognitive decline in Parkinson disease. 2011 Annual Meeting of the American Academy of Neurology. Honolulu HI, April 12.
89. Elble R, Hellriegel H, Raethjen J, Deuschl G. Logarithmic relationship between head tremor and 5-point tremor rating. 2011 International Congress of Parkinson Disease and Movement Disorders. Toronto.

90. Heldman D, Filipkowski D, Jankovic J, Vaillancourt D, Prodoehl J, Elble R, Giuffrida J. Essential tremor quantification during activities of daily living. 2011 International Congress of Parkinson Disease and Movement Disorders. Toronto.
91. Elble R, LeWitt P, Lyons K, Ondo W, Pahwa R, Sethi K, Stover N, Tarsy D, Testa C, Tintner R, Zesiewicz T. Inter-Rater Reliability of the Essential Tremor Rating Assessment Scale (TETRAS). 2012 Annual Meeting of the American Academy of Neurology. New Orleans, April 25.
92. Elble R, LeWitt P, Lyons K, Ondo W, Pahwa R, Sethi K, Stover N, Tarsy D, Testa C, Tintner R, Zesiewicz T for the Tremor Research Group. Reliability of the Essential Tremor Rating Assessment Scale (TETRAS). 2012 Congress of the Movement Disorder Society. Dublin Ireland, June 21.
93. Elble R, Dhakal L, Bhargava P, Kaul S, Jalan P, Pandav V, Lyons K, Ondo W, Pahwa R, Sethi K, Tarsy D, Tintner R. Reliability of the Essential Tremor Rating Assessment Scale in untrained neurology residents. 2013 Annual Meeting of the American Academy of Neurology. San Diego, March 21.
94. Elkouzi A, Kattah J, Elble R. Hypertrophic olivary degeneration does not reduce essential tremor. Annual Congress of the International Parkinson and Movement Disorder Society. San Diego, June 18, 2015
95. Elble R, Zesiewicz T. Fahn-Tolosa-Marín tremor rating scale and digitizing tablet have comparable minimum detectable change. Annual Congress of the International Parkinson and Movement Disorder Society. San Diego, June 18, 2015
96. Akano E, Zesiewicz T, Elble R. Fahn-Tolosa-Marín scale, digitizing tablet and accelerometry have comparable minimum detectable change. Annual Congress of the International Parkinson and Movement Disorder Society. San Diego, June 18, 2015
97. Elble, R. Digitizing tablet and Fahn-Tolosa-Marín tremor ratings have comparable minimum detectable change. Annual Congress of the International Parkinson and Movement Disorder Society. Berlin Germany, June 22, 2016.
98. Maricich Y, Newbold E, Elble R. TETRAS Applicability and Study Design In Randomized, Placebo Controlled Clinical Trial Of Cav3 Modulation For Essential Tremor Patients. *Mov Disord.* 2017;32(Suppl S2):506.

INVITED REGIONAL, NATIONAL AND INTERNATIONAL LECTURES

1. Elble RJ. 1988. Tremor. **University of Minnesota**, Minneapolis, October 1988.
2. Elble RJ. 1990. Relationship between essential and physiological tremor. Presented at the Symposium on Essential Tremor, **International Tremor Foundation**, Washington, DC, April 28, 1990.

3. Elble RJ. 1990. Neurophysiological methods of classifying essential tremor. **National Institute on Aging workshop** on Essential Tremor in the Aging Nervous System, Bethesda, MD, April 24, 1990.
4. Elble RJ. 1991. Characteristics of gait in neurologically normal and abnormal elderly people. Presented at the 1991 annual meeting of the **American Academy of Neurology**, as a part of a course entitled Neurologic Rehabilitation, April 26, Boston, MA.
5. Elble RJ. 1991. Characteristics of gait in healthy old people. Presented at the 1991 annual meeting of the **American Academy of Neurology**, as a part of a course entitled Gait Disturbances in the Elderly, April 27, Boston, MA.
6. Elble RJ. 1991. Characteristics of gait in neurologically normal and abnormal elderly people. Presented for the **American Academy of Neurology**, as a part of a one-week workshop entitled Neurologic Rehabilitation of Stroke Patients, October 17, Springfield, IL.
7. Elble RJ. 1992. A mechanistic view of normal and abnormal tremors. Dept. of Kinesiology, **University of Illinois**, Urbana (April 17).
8. Elble RJ. 1992. The pathophysiology of tremor. Presented at the 1992 annual meeting of the **American Academy of Neurology** as a part of a course entitled Motor Control, May 1992, San Diego, CA.
9. Elble RJ. 1992. What causes essential tremor? Visiting lecture at **Albert-Ludwigs University**, Freiburg, Germany, June 17, 1992.
10. Elble RJ. 1992. Relationship of essential and physiologic tremor. **Second International Congress of Movement Disorders**, Munich, Germany (June 27).
11. Elble RJ. 1992. Differential diagnosis: medical and cognitive markers in Alzheimer disease and related disorders. **Am Society on Aging**, Chicago, IL (August 4, 1992).
12. Elble RJ. 1992. Sensorimotor Integration and Disintegration. Workshop sponsored by the **National Institute on Aging and the Life Sciences Division of NASA**, Bethesda, MD (August 19-21).
13. Elble RJ. 1992. The mystery of essential tremor. International Tremor Foundation Symposium for the establishment of a support group in Kansas City, **U. of Kansas Medical Center**, Kansas City, Kansas (August 29, 1992).
14. Elble RJ. 1992. Current therapy for tremor. The **University of Medicine and Dentistry of New Jersey**, Newark, September 23.
15. Elble RJ. 1993. Balance and locomotion in normal older people. Presented at the 1993 annual meeting of the **American Academy of Neurology**, as a part of a course entitled Gait Disturbances in the Elderly, April 26, New York.

16. Elble RJ. 1994. Balance and locomotion in normal older people. Presented at the 1994 annual meeting of the **American Academy of Neurology**, as a part of a course entitled Gait Disturbances in the Elderly, May 1994, Washington DC.
17. Elble RJ. 1994. The pathophysiology of tremor. Presented at the 1994 annual meeting of the **American Academy of Neurology** as a part of a course entitled Motor Control, May 1994, Washington DC.
18. Elble RJ. 1994. Disturbances of gait in patients with dementia. Presented at the **Third International Springfield Alzheimer Symposium**, May 1994, Springfield IL.
19. Elble RJ. 1994. The role of aging in the clinical expression of essential tremor. **Second International Symposium on Neurobiology and Neuroendocrinology of Aging**, July 1994, Bregenz, Austria.
20. Elble RJ. 1994. Tremor: unanswered questions. **Third International Congress of Movement Disorders**. Nov. 8, 1994, Orlando, Florida.
21. Elble RJ. 1995. Control of posture and locomotion. Presented at the 1995 annual meeting of the **American Academy of Neurology** as a part of a course entitled Motor Control, May 1995, Seattle, Washington.
22. Elble RJ. 1995. Identification of geriatric gait disorders. Presented at the 1995 annual meeting of the **American Academy of Neurology** as a part of a course entitled Geriatric Neurology, May 1995, Seattle, Washington.
23. Elble RJ. 1996. Insights from patients with unusual tremor. Presented at the 1996 annual meeting of the **American Academy of Neurology** as a part of a course entitled Motor Control, March 1996, San Francisco.
24. Elble RJ. 1996. Tremors resulting from lesions in the Guillain-Mollaret triangle. **Christian-Albrechts University**, Kiel, Germany. June 27, 1996.
25. Elble RJ. 1996. Update on essential tremor: keynote address. Tenth annual symposium on Hyperkinetic Movement Disorders. **Parkinson Study Group and the Movement Disorders Society**. Oct. 13, Miami, Florida.
26. Elble RJ. 1997. Pathophysiology of tremor. Presented at the annual meeting of the **American Academy of Neurology**, Motor Control dinner seminar, Boston, MA.
27. Elble RJ. 1997. Cerebral control of locomotion: gait apraxia. Presented at the annual meeting of the **American Academy of Neurology**, Motor Control Course, Boston, MA.
28. Elble RJ. 1997. Animal models of action tremor. Presented at the international meeting Tremor: mechanisms and clinical aspects in **Kiel, Germany**, July 11-12, 1997.

29. Elble RJ. 1998. Multi-joint movements: Lessons in biomechanics for the clinician. Presented at the annual meeting of the **American Academy of Neurology**, Motor Control Course, Minneapolis, MN.
30. Elble RJ. 1998. Differential diagnosis and classification of essential tremor. **Current Issues in Essential Tremor**, an invited workshop sponsored by Athena Neurosciences. **Bermuda**. Sept. 14, 1998.
31. Elble RJ. 1998. Gait disorders: pathophysiology of standing and locomotion. Plenary lecture. **5th International Congress of Parkinson's Disease and Movement Disorders**. New York. Oct. 11, 1998.
32. Elble RJ and Giladi N. 1998. Gait and freezing in Parkinson's disease. Breakfast seminar. **5th International Congress of Parkinson's Disease and Movement Disorders**. New York. Oct. 13, 1998.
33. Elble RJ. 1999. Gait disorders in progressive supranuclear palsy: a comment on the utility of electrophysiologic tests. **First International Brainstorming Conference on PSP**. National Institutes of Health, Bethesda, MD, March 18-19.
34. Elble RJ. 1999. Movement disorders of the Guillain-Mollaret triangle. Presented at the annual meeting of the **American Academy of Neurology**, Motor Control Course, Toronto, Canada.
35. Elble RJ. 1999. Gait disorders. Presented at the annual meeting of the **American Academy of Neurology**, Motor Control Course, Toronto, Canada.
36. Elble, RJ. 1999. Tremor: pathophysiology and treatment. Grand Rounds, Department of Neurology, Neurosurgery and Neuroscience. **University of Illinois, Peoria**. Sept. 3.
37. Elble RJ. 2000. Pathophysiology of tremor. Presented at the annual meeting of the **American Academy of Neurology**, Diagnosis and Treatment of Tremor dinner seminar, San Diego.
38. Elble RJ. 2000. Common causes of impaired locomotion and less common treatable conditions. **Movement Disorder Society's 6th International Congress**. Barcelona, Spain. June 11.
39. Elble RJ. 2000. Gait disorders in the elderly. **University of Kentucky**. Lexington. October 27.
40. Elble RJ. 2001. Pathophysiology of common tremor disorders. **American Academy of Neurology**, Diagnosis and Treatment of Tremor dinner seminar, Philadelphia, May 6.
41. Elble RJ. 2001. Tremor and dopamine agonists. Presented at an **invited panel workshop sponsored by Pharmacia**, June 29, New York.

42. Elble RJ. 2002. AD: Motor control deficits and therapy. **7th International Geneva/Springfield Symposium on Advances in Alzheimer Therapy**. April 4, Geneva Switzerland.
43. Elble RJ. 2002. Pathophysiology of common tremor disorders. **American Academy of Neurology**, Diagnosis and Treatment of Tremor dinner seminar, Denver, April 14.
44. Elble RJ. 2002. Treatment options in tremor disorders. **7th International Congress of Parkinson's Disease and Movement Disorders**. Miami, FL. Nov. 11.
45. Elble RJ. 2003. Pathophysiology and treatment of tremor. **American Academy of Neurology**, Diagnosis and Treatment of Tremor dinner seminar, Honolulu, March 30.
46. Elble RJ. 2004. Gait disorders in the dementias. **8th International Montreal/Springfield Symposium on Advances in Alzheimer Therapy**. Montreal Canada. April 14, 2004.
47. Elble, RJ. 2004. Alzheimer disease and related disorders: treatment update. Grand Rounds, Department of Neurology, Neurosurgery and Neuroscience. **University of Illinois, Peoria**. April 21.
48. Elble, RJ. 2004. Non-Parkinson movement disorders. **U. of Illinois – Champaign**. May 21, 2004.
49. Elble, RJ. 2004. Quantitative assessment of Parkinson tremor. **Kinetics Foundation, Palo Alto, CA**. May 26, 2004.
50. Elble RJ. 2004. Gait disorders. **8th International Congress of Parkinson's Disease and Movement Disorders, Rome, Italy**, April 14.
51. Elble RJ. 2006. Gait and dementia. **1st International Congress on Gait and Mental Function**. Madrid, Spain, Feb. 3-5, 2006
52. Elble RJ. 2006. Update on essential tremor. **Northwestern University**, Chicago IL, March 3, 2006.
53. Elble RJ. 2006. Update on essential tremor. **Barrow Neurological Institute**, Phoenix AZ, March 10, 2006.
54. Elble RJ. 2006. Gait and balance disorders. **American Academy of Neurology**, Breakfast seminar, San Diego, CA, April 8.
55. Elble RJ. 2006. Essential tremor: quest for a cure. **University of Alabama Birmingham**, Birmingham AL, May 9, 2006.

56. Elble RJ. 2006. Tremor pathophysiology: the role of neuronal oscillation in producing symptoms other than tremor. **Movement Disorders Congress, Kyoto Japan**, November 1, 2006.
57. Elble RJ. 2006. Essential tremor: the road to finding a cure. **Sun Yat-Sen University**, Guangzhou China. November 3, 2006.
58. Elble RJ. 2007. Gait and balance disorders. **American Academy of Neurology**, Breakfast seminar, Boston, MA, April 29.
59. Elble RJ. 2007. Update on movement disorders. **American Academy of Family Physicians annual assembly**. Chicago, Illinois, October 5, 2007.
60. Elble RJ. 2007. Essential tremor: progress toward a cure. **University of Arkansas Medical Center**, Little Rock AR, November 30, 2007.
61. Elble RJ. 2007. Practical approach to gait disorders. **University of Arkansas Medical Center**, Little Rock AR, November 30, 2007.
62. Elble RJ. 2008. Parkinson dementia: Do we have a treatment? **10th International Hong Kong / Springfield Symposium on Advances in Alzheimer Therapy**. Hong Kong, March 1, 2008.
63. Elble RJ. 2008. Gait and balance disorders. **American Academy of Neurology**, Breakfast seminar, Boston, MA, April 17.
64. Elble RJ. 2009. Gait and balance disorders. **American Academy of Neurology**, Breakfast seminar, Seattle WA, April 27.
65. Elble RJ. 2009. Hyperkinetic movement disorders. **American Academy of Neurology**, Evening seminar, Seattle WA, May 1.
66. Elble RJ. 2009. Tremor. Plenary lecture, **13th International Congress of Parkinson's Disease and Movement Disorders**. Paris, France. June 7.
67. Elble RJ. 2009. Gait disorders. Video session, **13th International Congress of Parkinson's Disease and Movement Disorders**. Paris, France. June 7.
68. Elble RJ. 2009. Tremor: five questions to be answered. **Neurology Grand Rounds. Rush University Medical Center**, Chicago, Illinois. September 1.
69. Elble RJ. 2009. Hyperkinetic movement disorders: diagnosis and treatment. **Neurology Grand Rounds. University of Illinois**, Peoria, Illinois. October 2.
70. Elble RJ. 2010. Cerebrospinal fluid drainage in dementia. AD and normal pressure hydrocephalus. **Springfield-Geneva Alzheimer Symposium. Geneva, Switzerland**. March 25.

71. Elble RJ. 2010. Gait disorders in neurodegenerative disease: focused evaluation and quantification. **Department of Mechanical Engineering. University of Maryland BC.** Baltimore, Maryland. May 7.
72. Elble RJ. 2010. Scoring tremor severity: tools and rating scales. Teaching course, **14th International Congress of Parkinson's Disease and Movement Disorders.** Buenos Aires. June 17.
73. Elble RJ. 2010. Mechanisms of tremor: what can be learned from MEG? **Christian-Albrechts University**, Kiel, Germany. June 10, 2010.
74. Elble RJ. 2010. The travails of treating tremor: how much did the treatment help? **Christian-Albrechts University**, Kiel, Germany. August 29, 2010.
75. Elble RJ. 2010. Normal pressure hydrocephalus: why is initial improvement frequently not sustained? **Oregon Health Sciences University**, Portland, Oregon. October 9, 2010.
76. Elble RJ. 2010. Essential tremor: 3 barriers to finding a cure. **Oregon Health Sciences University**, Portland Oregon. October 9, 2010.
77. Elble RJ. 2010. The clinical physiology of tremor. Special Lecture, **29th International Congress of Clinical Neurophysiology.** Kobe Japan. October 31, 2010.
78. Elble RJ. 2010. Neurophysiology of tremor. **29th International Congress of Clinical Neurophysiology.** Kobe Japan. October 31, 2010.
79. Elble RJ. 2011. History of objective measures of movement disorders. **15th International Congress of Parkinson Disease and Movement Disorders. Workshop sponsored by the Kinetics Foundation.** Toronto. June 7.
80. Elble RJ. 2011. What is dystonic tremor? **5th International Dystonia Symposium.** Barcelona Spain. October 20.
81. Elble RJ. 2012. How similar and dissimilar are AD, PD, DLB and FTD? **Springfield-Stockholm Alzheimer Symposium.** Stockholm, Sweden. May 12.
82. Elble RJ. 2012. What is essential tremor? Clinical perspective. **16th International Congress of Parkinson Disease and Movement Disorders.** Dublin Ireland, June 21.
83. Elble RJ. 2012. Objective measures of movement disorders. What is taking so long? **16th International Congress of Parkinson Disease and Movement Disorders. Workshop sponsored by the Kinetics Foundation.** Dublin. June 19.
84. Elble RJ. 2013. Essential Tremor. Parkinson Disease and Movement Disorders Update. **Annual Meeting of the American Academy of Neurology.** San Diego. March 16.

85. Elble RJ. 2013. Practical approach to gait disorders. **University of Saskatchewan**, Div. of Neurology. Saskatoon, Saskatchewan. Sept. 26.
86. Elble RJ. 2013. Living with Parkinson disease. **Parkinson Society Saskatchewan**, Saskatoon, Saskatchewan. Sept. 26.
87. Elble RJ. 2013. The Achilles heel of tremor. **University of Saskatchewan**, Div. of Neurology. Saskatoon, Saskatchewan. Sept. 27.
88. Elble RJ. 2014. Deep brain stimulation for disabling tremor. **University of Illinois**, Dept. of Neurology. Peoria, Illinois, March 14.
89. Elble RJ. 2014. Tremor measurements and neurophysiological tests for the diagnosis of tremors. **30th International Congress of Clinical Neurophysiology (ICCN)**, Berlin Germany, March 21.
90. Elble RJ. 2014. Is essential tremor a dementing neurodegenerative disorder? **Geneva-Springfield Symposium on Advances in Alzheimer Therapy**. Geneva Switzerland. March 28.
91. Elble RJ. 2014. Essential Tremor. Parkinson Disease and Movement Disorders Update. **Annual Meeting of the American Academy of Neurology**. Philadelphia. May 2.
92. Elble RJ. 2014. Pathophysiology and treatment of tremor. **Indiana Neurological Society**. Indianapolis. November 14.
93. Elble RJ. 2015. Pathophysiology and treatment of tremor. Parkinson Disease and Movement Disorders Update. **Annual Meeting of the American Academy of Neurology**. Washington DC. April 20.
94. Elble RJ. 2015. Pathology of essential tremor. **Essential Knowledge Gaps in the Field of Essential Tremor**, NIH Bethesda MD, May 2015
95. Elble RJ. 2015. Clinical measurement of essential tremor. **Essential Knowledge Gaps in the Field of Essential Tremor**, NIH Bethesda MD, May 2015
96. Elble RJ. 2016. Alzheimer disease and sleep. **14th International Athens/Springfield Symposium on Advances in Alzheimer Therapy**, Athens Greece, March 12.
97. Elble RJ. 2016. Should we redefine essential tremor? **20th International Congress of Parkinson Disease and Movement Disorders**. Berlin Germany, June 2016.
98. Elble RJ. 2016. Living with Parkinson disease. **Central Indiana Parkinson Disease Symposium**, Indianapolis, Indiana. Oct. 22.

RESEARCH PROJECTS AND FUNDING

1. Neuromuscular Control in Action Tremor (Principal Investigator)
7/84-6/85: American Parkinson Disease Association Grant
7/84-6/87: NINDS Grant 1-RO1 NS20973
7/88-6/92: NINDS Grant 2-RO1 NS20973
12/92-11/97: NINDS Grant 2-RO1 NS20973
2. Aging of the Brain and Dementia: Early Detection (Co-Investigator)
Principal Investigator: Ezio Giacobini, MD, PhD
Collaborators: Robert Becker, MD
12/85-12/88: NIA Grant 1-R01-AG05416
3. Regional Alzheimer Disease Assistance Center Grant (Director)
Collaborators: R. Becker, MD, E. Giacobini, MD, PhD, et al.
Funding:
1989-2007 Illinois Department of Public Health
4. Gait Disturbances in the Elderly: Senile Gait (Principal Investigator)
Funding:
7/87-6/90: Whitaker Foundation
7/90-6/92: NIA grant P30 AG08014
7/92-6/97: NIA grant RO1 AG10837
5. A long-term tolerance and safety study of HP 029 (1,2,3,4-tetrahydro-9-aminoacridin-1-OL maleate) in patients with Alzheimer's disease (Hoechst-Roussel Pharmaceuticals, Inc). 1/91-12/91
6. Alzheimer Disease Research Center Grant. NIA grant P30 AG08014, Principal Investigator: Robert E. Becker, MD; Clinical Core Director: Rodger J. Elble, MD, PhD; 1991-1996
7. Conjugated estrogens for women with Alzheimer's disease: a randomized, double-blind, placebo-controlled, multi-center trial (Wyeth-Ayerst Laboratories). V. Henderson (PI), U. Southern California. April 1997-1998.
8. Noncomparative, open-label study to identify Tasmar dosage regimen in nonfluctuating Parkinson's disease patients treated with Sinemet, with follow-up extension of Tasmar (Hoffman-La Roche, Inc). Co-investigator with Dr. Bala Manyam. May 1997-1998.
9. Metrifonate Investigational Nationwide Trial (MINT). Bayer Pharmaceutical. Sept. 1997-Sept. 1998.
10. Akinesia in patients with Parkinson disease and other parkinsonian illnesses. A \$10,000 gift from Harriss Malan and his late wife, Fannie Bell Roe Malan to Southern Illinois U. School of Medicine, 1998.

11. The Genetics and Electrophysiologic Characteristics of Essential Tremor. \$20,000 per year, beginning August 1998. Spastic Paralysis Research Foundation of Kiwanis International, Illinois-Eastern Iowa District.
12. Global Parkinson Disease Study. February 1999.
13. Parkinson Disease Center Grant, National Parkinson Foundation Center of Excellence Funded by the Illinois Department of Public Health 7/00-7/05
14. A comparison of the efficacy and safety of topiramate versus placebo in the treatment of essential tremor: protocol CAPSS-149. Ortho-McNeil. March 2001-2004
15. Principal Investigator. Participating clinical center. Neuroprotection Exploratory Trials in Parkinson Disease (NET-PD). NIH (NINDS) 5U10 NS044450-02. March 2003-present
16. Principal Investigator. Participating center. Feasibility Study on the Characteristics of Parkinson's Disease Symptoms for the Planned Phase III Studies with Sarizotan (EMR 62 225). Merck KGaA. March 2004-June 2004.
17. Principal Investigator. Participating center. A double-blind, placebo controlled, multicenter, multinational Phase III study to evaluate the safety and efficacy of Sarizotan HCl 1mg bid in patients with Parkinson's disease suffering from treatment associated dyskinesias (PADDY-1). Merck KGaA. September 2004- June 2006.
18. Principal Investigator. Participating center. A 12-week, double-blind, placebo-controlled, randomized, parallel-group, multicenter, fixed dose-response study to evaluate the efficacy and safety of 10, 20 and 40 mg/d oral doses of KW-6002 (istradefylline) as treatment for Parkinson's disease in patients with motor response complications of levodopa/carbidopa therapy. Kyowa Pharmaceutical Inc. September 2004-October 2005.
19. Principal Investigator. Participating center. Levetiracetam (Keppra®) in the Treatment of Essential Tremor. A Multi-center, Double-Blind Randomized, Cross-over, Placebo-controlled Investigation. UCB Pharma. September 2004-October 2006.
20. Principal Investigator. Participating center. Evaluation of the Efficacy and Safety of ALTROPANE for Differentiating Parkinsonian Syndromes from Non-Parkinsonian Syndromes in Patients with Tremors. Boston Life Sciences, Inc. Nov. 2004- April 2006.
21. Principal Investigator. NIH scientific conference grant 1R13NS052017-01. Critical Research Issues in Essential Tremor. April 1, 2005 – March 31, 2006.

22. Principal Investigator. Participating center. An open-label, multicenter, multinational Phase III follow-up study to investigate the long-term safety and efficacy of Sarizotan HCl 1mg bid in patients with Parkinson's disease suffering from treatment-associated dyskinesia (PADDY-O). Merck KGaA. June 2005-January 2007.
23. Principal Investigator. Participating center. A phase 2, double-blind, placebo-controlled, randomized, parallel-group, multicenter study of the efficacy and safety of 40 mg/day of KW-6002 (istradefylline) as a monotherapy in subjects with Parkinson's disease. Kyowa Pharmaceutical Inc. May 2005- April 2007.
24. Principal Investigator. Participating center. A long-term, multicenter, open-label safety study with oral 20 or 40 mg/d doses of KW-6002 (istradefylline) as treatment for Parkinson's disease in patients with motor response complications on levodopa therapy. Kyowa Pharmaceutical Inc. July 2005- June 2006.
25. Principal Investigator. Participating center. A multi-center, double-blind, randomized start, placebo-controlled, parallel-group study to assess rasagiline as a disease modifying therapy in early Parkinson's disease patients. Teva Pharmaceutical. October 2005-2008
26. Principal Investigator. Participating center. Testing objective measures of motor impairment in early Parkinson's disease. Kinetics Foundation. September 2005-July 2007
27. Principal Investigator. Participating center. Clinimetric Studies of a New Scale for Parkinson's Disease. Movement Disorder Society. June 2006-March 2008.
28. Principal Investigator. Participating center. A multi-center, randomized, double-blind, placebo-controlled, parallel group study of the efficacy, safety and tolerability of E2007 in levodopa treated Parkinson's disease patients with motor fluctuations. Phase III. Eisai Study E2007-A001-302. May 2006-November 2008.
29. Principal Investigator. Participating center (Parkinson Study Group). A randomized, double-blind, active (pramipexole 0.5 mg tid) and placebo controlled, efficacy study of pramipexole given 0.5 mg and 0.75 mg bid over a 12-week treatment phase in early Parkinson's disease patients (PramiBID). Boehringer Ingelheim. October 2006 – 2008.
30. Principal Investigator. Participating center (NET-PD Study Group). A Multi-center, Double-Blind, parallel Group, Placebo Controlled Study of Creatine in Participants with Treated Parkinson's disease (PD). Large Study-1 (LS-1). NINDS. October 2006 – 2014.
31. Principal Investigator. Participating center. A Multi-Center, Placebo-Controlled, Double-Blind Trial To Examine the Safety and Efficacy of ACP-103 in the Treatment of Psychosis in Parkinson's Disease Protocol Number ACP-103-012. Study Phase IIb/III. ACADIA. July 2007-August 2008.

32. Principal Investigator. Participating center. A Randomized, Double Blind, Placebo-Controlled, Crossover Study to Evaluate the Efficacy and Safety of Carisbamate in the Treatment of Essential Tremor. Protocol CARISEPY 2008; Phase II. Ortho-McNeil. July 2007-2008.
33. Principal Investigator. Participating center. Parkinson Disease Collaborative Study of Genetic Linkage A.K.A. Parkinson's Research: The Organized Genetics Initiative (PROGENI). NINDS. August 2008-November 2009.
34. Principal Investigator. Participating center. A multi-site, double-blind, randomized, placebo-controlled, crossover study of pregabalin (Lyrica, PGB) in the treatment of essential tremor (Version 2). Grant to MoveDocs from Pfizer. January 2009-2011.
35. Principal Investigator. Participating center. Validation of the TRG essential tremor rating scale (TETRAS). Grant to the Tremor Research Group from GlaxoSmithKlein. April 2009-December 2012.
36. Participating center. Platelet-Oriented Inhibition in New TIA and minor ischemic stroke Trial (POINT). NIH NINDS CRC study. November 2010-July 2011.
37. Principal Investigator. Participating center. Phytopharm CONFIDENT-PD. Phytopharm plc. March 2011-December 2012.
38. Principal Investigator. Participating center (NET-PD Study Group). A Multi-Center, Double-Blind, Placebo-Controlled Phase II Study of Pioglitazone in Early Parkinson's Disease (FS-ZONE). NINDS. May 2011-2013.
39. Principal Investigator. Participating center. A double-blind, randomized, placebo controlled study of the safety and efficacy of SYN115 as adjunctive therapy in levodopa-treated Parkinson's subjects with end of dose wearing off. Biotie Therapies. December 2011-August 2012

SPECIAL EDUCATIONAL ACTIVITIES

University Educational Programs (Southern Illinois U. School of Medicine):

Authored a case for the Post-Clerkship Examination, 1990

Established the Neurology Clerkship

Established a senior elective in the Alzheimer Center

Developed *Neurology Learning Center* web site for students and residents.

Doctoral Advisory Committees:

Steven Kane, Dept. Neurobiology, Washington U., St. Louis
May 1985 to May 1989.

National and International Educational and Research Programs:

Chair of scientific platform sessions:

American Academy of Neurology (1992, 1995)

Society for Neuroscience (1993)

Tremor: mechanisms and clinical aspects, Kiel, Germany (1997)

International Congress of Parkinson Disease and Movement Disorders

Session Chair,
Essential tremor: challenges and future strategies, Toronto (2011)

Tour Leader,
Guided poster tour: Essential Tremor, Toronto (2011)

Tour Leader,
Guided poster tour: Tremor, Dublin Ireland (2012)

Session Chair,
What is essential tremor? Dublin Ireland (2012)

Tour Leader,
Guided poster tour: Tremor, Berlin (2016)

Tour Leader,
Guided poster tour: Hyperkinetic movement disorders,
Vancouver (2017)

American Academy of Neurology Educational Programs:

Director and speaker, Motor Control Course, AAN Annual Meeting, 1995-1999

Invited speaker, Motor Control Course, AAN Annual Meeting
1992, 1994

Invited speaker, Geriatric Neurology Course, AAN Annual Meeting, 1995

Invited speaker, Neurorehabilitation Course, AAN Annual Meeting, 1991

Invited speaker, Gait Disturbances in the Elderly Course, AAN Annual Meeting, 1991, 1993, 1994

Invited speaker, Motor Control, dinner seminar, AAN Annual Meeting, 1997

Invited speaker, Diagnosis and Treatment of Tremor, dinner seminar, AAN Annual Meeting, 2000-2003.

Director and speaker, Balance and Gait course, AAN Annual Meeting, 2006-2009

Invited speaker, Movement Disorders Therapy, AAN Annual Meeting, 2009

Invited speaker, Parkinson Disease and Movement Disorders Update, AAN Annual Meeting, 2013, 2014, 2015

American Academy of Neurology Continuing Medical Education:

Contributing author, Continuum: Geriatric Neurology, Jan. 1995-1996.

- Organizing committees:**
- Tremor: mechanisms and clinical aspects, Kiel Germany, July 11-12, 1997
 - Consensus Conference on Essential tremor, Washington DC, October 2005 (Conference director)
 - 1st International Congress on Gait and Mental Function, Madrid, Spain, February 2006
 - Geneva-Springfield Alzheimer Conference, Geneva, April 2006
 - Hong Kong-Springfield Alzheimer Conference, Hong Kong, March 2008
 - Geneva-Springfield Alzheimer Conference, Geneva, March 2010
 - Geneva-Springfield Alzheimer Conference, Stockholm, May 2012

Geneva-Springfield Alzheimer Conference, Geneva, March 2014

Essential Knowledge Gaps in the Field of Essential Tremor, NIH
Bethesda MD, May 2015

Athens-Springfield Alzheimer Conference, Athens, March 2016

Board Examiner: American Board of Psychiatry and Neurology (inactive)