

## CURRICULUM VITAE

*Rodger J. Elble, MD, PhD*

October 31, 2021

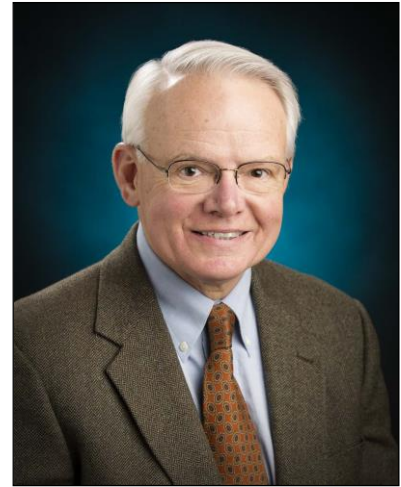
### PERSONAL DATA:

Office Address: Southern Illinois University School of Medicine  
Department of Neurology  
P.O. Box 19645  
Springfield, IL 62794-9645

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E-mail: relble@siu.edu

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  
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

Best full-time faculty teacher of the year award, Department of  
 Medicine, 1985-86

Outstanding Scholar at SIU School of Medicine, 2014

Outstanding Teaching Award, Dept. Neurology, SIUSM, 2016

Hall of Fame, East Alton-Wood River High School, 2017

**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 – July 2013      Neurology Clerkship Director, SIU School of Medicine

March 2004 – July 2019      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	Co-chair, June 2017-present
Evidence-Based Medicine Committee International Parkinson and Movement Disorder Society	Member, June 2017-2018

### **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
Kiwanis Neuroscience Research Foundation, Illinois-Eastern Iowa District	Medical Director, 2010 - <u>present</u>

### **RESEARCH STUDY GROUPS**

Tremor Research Group	2001 – <u>2017</u>
NINDS NET-PD Study Group	2003 – 2014
Parkinson Study Group	2005 – <u>present</u>
MDS Tremor Study Group	2017 – <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**



NIH, 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
	Clinical Neuroscience and Neurodegeneration (CNN) Study Section, June 2020
Louisiana Board of Regents	2013
National Institute on Aging	Special study section member (Locomotor Impairment and Falls in the Elderly), March 1986.
NIH, 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, 2020
NIH, CSR Anonymization Study	Reviewer, Jan. 2018 – 2019
NIH, Blueprint for Neuroscience Research	Reviewer, August 2021
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
Netherlands Organization for Scientific Research (Vici scheme)	Ad hoc grant reviewer, 2017
Austrian Science Fund (FWF)	Ad hoc grant reviewer, 2017
Swiss National Science Foundation	Ad hoc grant reviewer, 2020

## **EDITORIAL BOARDS OF PROFESSIONAL JOURNALS**

<b>Movement Disorders</b>	November 1992 - November 1996 January 1998 – January 2002
<b>Tremor and Other Hyperkinetic Movements</b>	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  
 Applied Sciences  
 Archives of Neurology  
 Artificial Intelligence in Medicine

Behavioral and Brain Sciences  
Behavioral Brain Research  
Biological Cybernetics  
BioMed Central  
BioMed Research International  
Biomedical Signal Processing and Control  
BMJ Open  
Brain  
Brain Research  
Brain Sciences  
Brain Stimulation  
Brain Topography  
Cerebellum & Ataxias  
Cerebral Cortex  
Chronic Illness  
Cleveland Clinic Journal  
Clinical Neurology and Neurosurgery  
Clinical Neuropharmacology  
Clinical Neurophysiology  
Complexity  
Computers in Biology and Medicine  
Computer Methods and Programs in Biomedicine  
Cureus  
Digital Medicine  
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  
Frontiers in Neurology  
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  
Indian Journal of Science and Technology  
International Journal of Neuroscience  
Journal of Applied Physiology  
Journal of Clinical Investigation  
Journal of Clinical Movement Disorders  
Journal of Electromyography and Kinesiology  
Journal of Geriatric Psychiatry and Neurology  
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 NeuroEngineering and Rehabilitation  
Journal of NeuroRehabilitation and Engineering  
Journal of Neuroscience  
Journal of Neuroscience Methods  
Journal of Parkinson's Disease  
Journal of Pediatric Neurology  
Journal of Physiology  
Journal of Theoretical Biology  
Lancet  
Lancet Neurology  
Lippincott - Raven Publishers (book reviews)  
Mechanical Systems and Signal Processing  
Medical & Biological Engineering & Computing  
Medical Engineering and Technology  
mHealth  
Motor Control  
Movement Disorders  
Movement Disorders Clinical Practice  
Neurodegenerative Disease Management  
Neuroepidemiology  
Neurology  
Neurorehabilitation and Neural Repair  
Neuroscience Journal  
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  
Scientific Reports  
Sensors  
Stroke  
Teaching and Learning in Medicine  
Technology and Health Care  
Therapeutic Advances in Neurological Disorders  
Therapeutic Advances in Drug Therapy  
Transactions on Neural Systems and Rehabilitation Engineering  
Tremor and Other Hyperkinetic Movement Disorders

The Cerebellum  
10th International Conference on Biomedical Engineering and Biotechnology (ICBEB  
2021)

## 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. <sup>1</sup>Elble 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.
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. <sup>2</sup>Brilliant 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  $\beta$ -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.

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<sup>1</sup> Selected for review in Sports Medicine Digest, 1992

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

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. <sup>3</sup>Henderson 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.
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.

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<sup>3</sup> Selected for expedited publication

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
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.<sup>4</sup>
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.

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<sup>4</sup> Winner of the 2015 Neurology® Resident and Fellow Writing Award

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
71. Elkouzi A, Bit-Ivan EN, Elble RJ. Pure akinesia with gait freezing: a clinicopathologic study. *J Clinical Movement Disorders* 2017; 4:15.
72. Bhatia KP, Bain P, Bajaj N, Elble RJ, Hallett M, Louis ED, et al. Consensus Statement on the classification of tremors. From the task force on tremor of the International Parkinson and Movement Disorder Society. *Mov Disord* 2018; 33(1): 75-87.
73. Ondo W, Hashem V, LeWitt PA, Pahwa R, Shih L, Tarsy D, Zesiewicz T, Elble R. Comparison of the Fahn-Tolosa-Marin Clinical Rating Scale and the Essential Tremor Rating Assessment Scale. *Mov Disord Clin Pract* 2018;5:60-5.
74. Muthuraman M, Raethjen J, Koirala N, Anwar AR, Mideksa KG, Elble R, et al. Cerebello-cortical network fingerprints differ between essential, Parkinson's and mimicked tremors. *Brain* 2018;141:1770-81.
75. Elble RJ. Estimating change in tremor amplitude using clinical ratings: recommendations for clinical trials. *Tremor Other Hyperkinet Mov*. 2018; 8. doi: 10.7916/D89C8F3C
76. Gövert F, Becktepe J, Balint B, Rocchi L, Brugger F, Garrido A, et al. Temporal discrimination is altered in patients with isolated asymmetric and jerky upper limb tremor. *Mov Disord*. 2019. doi: 10.1002/mds.27880
77. Kattah JC, Elble RJ, De Santo J, Shaikh AG. Oculopalatal tremor following sequential medullary infarcts that did not cause hypertrophic olivary degeneration. *Cerebellum & Ataxias* 2020;7(1). doi: 10.1186/s40673-020-00112-2
78. Handforth A, Tse W, Elble RJ. A Pilot Double-Blind Randomized Trial of Perampanel for Essential Tremor. *Mov Disord Clin Pract* 2020;7(4):399-404.
79. Merola A, Torres-Russotto DR, Stebbins GT, et al. Development and Validation of the Orthostatic Tremor Severity and Disability Scale (OT-10). *Mov Disord* 2020.

80. Ondo WG, Pascual B, Tremor Research Group. Essential Tremor Rating Scale (TETRAS): Assessing Impact of Different Item Instructions and Procedures. *Tremor Other Hyperkinet Mov (N Y)* 2020;10(0):
81. Becktepe J, Gövert F, Balint B, et al. Exploring interrater disagreement on essential tremor using a standardized tremor elements assessment. *Mov Disord Clin Pract* 2021.
82. Papapetropoulos S, Lee MS, Versavel S, et al. A Phase 2 Proof-of-Concept, Randomized, Placebo-Controlled Trial of CX-8998 in Essential Tremor. *Mov Disord* 2021.

### **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.<sup>5</sup> A responsive outcome for Parkinson's disease neuroprotection futility studies. *Ann Neurol* 2005;57:197-203.
2. The NINDS NET-PD Investigators.<sup>4</sup> 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.<sup>4</sup> Optimizing the ongoing search for new treatments for Parkinson's disease using futility designs. *Neurology* 2006;66:628-33.
4. The NINDS NET-PD Investigators.<sup>4</sup> 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.<sup>4</sup> 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.<sup>4</sup> 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.<sup>4</sup> 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.<sup>6</sup> A double-blind, delayed-start trial of rasagiline in Parkinson's disease. *N Engl J Med* 2009;361:1268-1278.

---

<sup>5</sup> R. Elble, contributing investigator

<sup>6</sup> R. Elble, investigator

9. Fernandez HH, Greeley DR, Zweig RM, Wojcieszek J, Mori A, Sussman NM; 6002-US-051 Study Group.<sup>7</sup> Istradefylline as monotherapy for Parkinson disease: results of the 6002-US-051 trial. *Parkinsonism Relat Disord* 2010;16:16-20.
10. Simon DK, Pankratz N, Kissell DK, Pauciulo MW, Halter CA, Rudolph A, Pfeiffer RF, Nichols WC, Foroud T; Parkinson Study Group-PROGENI Investigators.<sup>8</sup> Maternal inheritance and mitochondrial DNA variants in familial Parkinson's disease. *BMC medical genetics*. 2010;11:53.
11. Kieburtz K and The Parkinson Study Group Pramipexole Investigators.<sup>9</sup> Twice-daily, low-dose pramipexole in early Parkinson's disease: A randomized, placebo-controlled trial. *Mov Disord* 2011;26:37-44.
12. Pankratz N, Beecham GW, DeStefano AL, Dawson TM, Doherty KF, Factor SA, Hamza TH, Hung AY, Hyman BT, Iverson AJ, Krainc D, Latourelle JC, Clark LN, Marder K, Martin ER, Mayeux R, Ross OA, Scherzer CR, Simon DK, Tanner C, Vance JM, Wszolek ZK, Zabetian CP, Myers RH, Payami H, Scott WK, Foroud T; PD GWAS Consortium<sup>10</sup>. Meta-analysis of Parkinson's disease: identification of a novel locus, RIT2. *Ann Neurol* 2012;71:370-84
13. Elm JJ and the NINDS NET-PD Investigators<sup>11</sup>. Design innovations and baseline findings in a long-term Parkinson's trial: The national institute of neurological disorders and stroke exploratory trials in Parkinson's Disease Long-Term Study-1. *Mov Disord* 2012;27:1513-1521.
14. Parashos SA, Luo S, Biglan KM, et al.<sup>12</sup> Measuring Disease Progression in Early Parkinson Disease: The National Institutes of Health Exploratory Trials in Parkinson Disease (NET-PD) Experience. *JAMA Neurology* 2014;71:710-716.
15. Smith KM, Eyal E, Weintraub D.<sup>13</sup> Combined rasagiline and antidepressant use in Parkinson disease in the ADAGIO study: effects on nonmotor symptoms and tolerability. *JAMA Neurology* 2015;72:88-95.
16. Johnston SC, Easton JD, Farrant M, et al. Clopidogrel and Aspirin in Acute Ischemic Stroke and High-Risk TIA. *N Engl J Med* 2018;379(3):215-225.

### Invited editorial-reviews in peer-reviewed journals:

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<sup>7</sup> R. Elble, investigator

<sup>8</sup> R. Elble, investigator

<sup>9</sup> R. Elble, investigator

<sup>10</sup> R. Elble, investigator

<sup>11</sup> R. Elble, investigator

<sup>12</sup> R. Elble, investigator

<sup>13</sup> R. Elble, investigator

1. Kissel JT, Elble RJ. Stiff-person syndrome: stiff opposition to a simple explanation. *Neurology* 1998;51:11-14.
2. Elble RJ. Origins of tremor. *Lancet* 2000;355:1113-1114.
3. Elble RJ. Motion analysis to the rescue? *Mov Disord* 2000;15:595-597.
4. Elble RJ. Essential tremor is a monosymptomatic disorder. *Mov Disord* 2002;17: 633-637.
5. Elble R, Dubinsky R, Ala T. Alzheimer disease and essential tremor finally meet. *Mov Disord* 2007;22:1525-7
6. Elble RJ. Mechanisms of deep brain stimulation for essential tremor. *Brain* 2014;137:4-6.
7. Elble RJ. Essential tremor is a useful concept? No. *Mov Disord Clin Practice* 2017;4:663–665. doi: 10.1002/mdc3.12514
8. Deuschl G, Bhatia KP, Elble R, et al. Understanding the new tremor classification. *Mov Disord*. 2018
9. Torres-Russotto D, Elble RJ. Slow Orthostatic Tremor and the Case for Routine Electrophysiological Evaluation of All Tremors. *Tremor Other Hyperkinet Mov (N Y)* 2019;9.
10. Elble RJ. Essential Tremor as a "Waste Basket" Diagnosis: Diagnosing Essential Tremor Remains a Challenge. PracticeUpdate website. Available at: <https://www.practiceupdate.com/content/essential-tremor-diagnosis-remains-a-challenge/99374/65/7/1>. Accessed May 15, 2020

### **Review Articles:**

1. Elble RJ. Essential tremor. 1986. *Federazione Medica* 39:665-668.
2. Elble RJ. 1987. Physiologic and pathologic tremors: a holistic view. *Encyclopedia Medica Italiana*.
3. Elble RJ, Caiyun Q. 1993. The early diagnosis and pathophysiology of Alzheimer disease. *Chinese J Nervous Mental Diseases* 19:251-253.
4. Elble RJ. 1995. The role of aging in the clinical expression of essential tremor. *Exp Gerontol* 30:337-347.
5. Elble RJ. 1996. Central mechanisms of tremor. *J Clin Neurophysiol* 13:133-144.
6. Elble RJ. 1997. Syndromes of impaired mobility. In: Knopman, D, ed. *Continuum: Geriatric Neurology*. American Academy of Neurology.

7. Elble RJ. 1998. Animal models of action tremor. *Mov Disord* 13(suppl 3):35-39.
8. Deuschl G, Bain P, Brin M, ad hoc Scientific Committee (including R. Elble). Consensus statement of the Movement Disorder Society on Tremor. *Mov Disord* 1998;13(suppl 3):2-23.
9. Deuschl G, Elble RJ. The pathophysiology of essential tremor. *Neurology*. 2000;54(11 Suppl 4):S14-20.
10. Elble RJ. Diagnostic criteria for essential tremor and differential diagnosis. *Neurology*. 2000;54(11 Suppl 4):S2-6.
11. Bain P, Brin M, Deuschl G, Elble R, Jankovic J, Findley L, Koller WC, Pahwa R. Criteria for the diagnosis of essential tremor. *Neurology*. 2000;54(11 Suppl 4):S7.
12. <sup>14</sup>Litvan I and participants (including R. Elble) in the First International Brainstorming Conference on PSP. 2000. Research goals in progressive supranuclear palsy. *Mov Disord* 15:446-458.
13. Elble RJ. Tremor and dopamine agonists. *Neurology* 2002;58(Suppl 1):S57-S62.
14. Lyons K, Pahwa R, Comella C, Eisa M, Elble R, Fahn S, Jankovic J, Juncos J, Koller W, Ondo W, Sethi K, Stern M, Tanner C, Tintner R, Watts R. Benefits and risks of pharmacological treatments for essential tremor. *Drug Saf*. 2003;26(7):461-81.
15. Pahwa R, Lyons KE (Elble RJ, contributing author). 2003. Essential tremor: differential diagnosis and current therapy. *Am J Med*;115:134-142.
16. Elble RJ for the Tremor Research Group and Consensus Conference Attendees. Report from a US Conference on Essential Tremor. *Mov Disord* 2006;21:2052-2061
17. Elble RJ. Gait and dementia: moving beyond the notion of gait apraxia. *J Neural Transmission* 2007;114:1253-8.
18. Elble RJ, Deuschl G. An update on essential tremor. *Current Neurology and Neuroscience Reports* 2009;9:273-277.
19. Elble RJ. Tremor: Clinical Features, Pathophysiology and Treatment. *Neurologic Clinics* 2009;27:679-695.
20. Deuschl G, Elble RJ. Essential tremor -- neurodegenerative or non-degenerative disease. Towards a working definition of ET. *Movement Disorders* 2009;24:2033-41.
21. Deuschl G, Raethjen J, Hellriegel H, Elble R. Treatment of patients with essential tremor. *Lancet Neurol* 2011;10:148-161.
22. Elble R, Deuschl G. Milestones in tremor research. *Mov Disord* 2011;26:1096-1105.

---

<sup>14</sup> Invited participant and contributor

23. Carranza MA, Snyder MR, Elble RJ et al. Methodological issues in clinical drug development for essential tremor. *Tremor Other Hyperkinetic Movements* 2012; 2.
24. Elble R. Defining dystonic tremor. *Current Neuropharmacology* 2013;11: 48-52
25. Elble R. What is essential tremor? *Curr Neurol Neurosci Rep* 2013;13: 353-361
26. Elble RJ. Tremor disorders. *Curr Opin Neurol* 2013;26:413-419.
27. Elble RJ, McNames J. Using portable transducers to measure tremor severity. *Tremor Other Hyperkinet Mov* 2016; 6. doi: 10.7916/D8DR2VCC
28. Elble RJ. The essential tremor syndromes. *Curr Opin Neurol* 2016;29(4):507-12
29. Hopfner F, Haubenberger D, Galpern WR, Gwinn K, Van't Veer A, White S, et al.
30. Hopfner F, Haubenberger D, Galpern WR, et al. Knowledge gaps and research recommendations for essential tremor. *Parkinsonism Relat Disord.* 2016;33:27-35
31. Elble RJ, Shih L, Cozzens JW. Surgical treatments for essential tremor. *Expert Review of Neurotherapeutics.* 2018:1-19
32. Elble RJ. Estimating change in tremor amplitude using clinical ratings: recommendations for clinical trials. *Tremor Other Hyperkinet Mov.* 2019; 8. doi: 10.7916/D89C8F3C
33. Ferreira JJ, Mestre TA, Lyons KE, et al. MDS evidence-based review of treatments for essential tremor. *Mov Disord* 2019;34(7):950-958.
34. Kuo SH, Louis ED, Faust PL, et al. Current Opinions and Consensus for Studying Tremor in Animal Models. *Cerebellum* 2019;18(6):1036-1063.
35. Elble RJ. Do We Belittle Essential Tremor by Calling It a Syndrome Rather Than a Disease? No. *Front Neurol* 2020;11:586606.
36. Hallett M, DelRosso LM, Elble R, Ferri R, Horak FB, Lehericy S, Mancini M, Matsushashi M, Matsumoto R, Muthuraman M, Raethjen J, Shibasaki H. Evaluation of movement and brain activity. *Clin Neurophysiol* 2021;132(10):2608-2638.

### **Clinical Notes:**

1. Elble RJ. 1983. Intracerebral hemorrhage with herpes zoster ophthalmicus. *Ann Neurol* 14:591-592.
2. Elble RJ. 1983. Post-traumatic headaches? *Clini-Pearls* 6:3-4.
3. Elble RJ. 1992. Stride-dependent changes in gait of older people. *Sports Medicine Digest* 1:7-8.

**Letters:**

1. Elble RJ. 1982. Physiologic hand tremor. Arch Neurol 39:737-738.
2. Elble RJ. 1983. Peripheral neuropathies and tremor. Neurology 33:1389.
3. Smith RC, Kumar V, Khera G, Elble R, Giacobini E, Colliver J. 1988. Brain morphological measures and CSF acetylcholine in Alzheimer dementia. J Psychiat Res 23:111-114.
4. Ala TA, Hughes LF, Kyrouac GA, Ghobrial MW, Elble RJ. 2004. Use of the MMSE to differentiate Alzheimer's disease from dementia with Lewy bodies- response to Larner. Int J Geriatr Psychiatry. 19:1209-10.
5. Shatunov A, Jankovic J, Elble R, Sambuughin N, Singleton A, Hallett M, et al. A variant in the HS1-BP3 gene is associated with familial essential tremor. Neurology 2005;65(12):1995; author reply 1995.
6. Bhargava P, Elble RJ. Clinical reasoning: an unusual cause of transverse myelitis? Author response. Neurology 2014;83:666-667.

**Books:**

1. Elble RJ, Koller WC. 1990. Tremor. Baltimore: Johns Hopkins University Press.

**Book Chapters:**

1. Thach WT, Schieber MH, Gilbert PFC, Elble RJ. 1982. Cerebellar learning in limb movement? In: Woody CD (ed), Conditioning: Representation of Involved Neural Functions. New York: Plenum Press, pp 401-416.
2. Thach WT, Schieber MH, Elble RJ. 1984. Motor programs: trajectory versus stability. In: Bloedel JR, Dichgans J, Precht W (eds), Cerebellar Functions. Berlin: Springer Verlag, pp 36-51.
3. Giacobini E, Becker R, Elble R, Mattio T, McIlhany M. 1986. Acetylcholine metabolism in brain: is it reflected by CSF changes? In: Fisher A, Hanin I, Lachman C (eds), Alzheimer's and Parkinson's Diseases, New York: Plenum Press, pp 309-316.
4. Giacobini E, Becker R, Elble R, Mattio T, McIlhany M. 1986. Brain acetylcholine-a view from the cerebrospinal fluid, In: Dun N (ed), Neurobiol of Acetylcholine, Plenum Press.



5. Sherman KA, Kumar V, Ashford JW, Murphy JW, Elble RJ, Giacobini E. 1987. Effect of oral physostigmine in senile dementia patients: utility of blood cholinesterase inhibition and neuroendocrine responses to define pharmacokinetics and pharmacodynamics, In: Strong R, Wood WG, Burke J (eds), Central Nervous System Disorders of Aging: Clinical Intervention and Research. New York: Raven Press.
6. Elble RJ, Giacobini E, Becker R, Zec R, Vicari S, Womack C, Williams E, Higgins C. 1988. Treatment of Alzheimer dementia with steady-state infusion of physostigmine. In: Becker E, Giacobini E (eds), Current Research in Alzheimer Therapy, New York: Taylor & Francis, Inc., pp 123-139.
7. Giacobini E, Elble RJ. 1990. Markers of cholinergic dysfunction in Alzheimer disease. In: Fowler CJ, Carlson LA, Gottfries C-G, Winblad B (eds). Biological Markers in Dementia of Alzheimer Type. Nishimura: Smith-Gordon, pp 107-120.
8. Elble RJ. 1990. Early diagnosis of Alzheimer disease. In: Becker E, Giacobini E (eds). Current Research in Alzheimer Therapy II: Early Diagnosis. New York: Taylor and Francis, 19-30.
9. Giacobini E, Sugaya K, Elble RJ. 1990. Markers of cholinergic dysfunction in Alzheimer disease. In: Becker E, Giacobini E (eds). Current Research in Alzheimer Therapy II: Early Diagnosis. New York: Taylor and Francis, 137-156.
10. Elble RJ. 1992. Tremor. Neuroscience Year: Supplement 3 to the Encyclopedia of Neuroscience.
11. Elble RJ. 1993. Tremor. In: Smith B, Adelman G (eds). Neuroscience Year: Supplement 3 to the Encyclopedia of Neuroscience. Boston: Birkhäuser, 164-165.
12. Elble RJ. 1994. Gait disturbances and analysis. In: Good DC, Couch JR (eds). Handbook of Neurorehabilitation. New York: Marcel Dekker, 29-62.
13. Elble RJ. 1994. Mechanisms of physiologic tremor and relationship to essential tremor. In: Findley LJ, Koller WC (eds), Handbook of Tremor Disorders. New York: Marcel Dekker, 51-62.
14. Elble RJ. 1994. Disturbances of gait in patients with dementia. In: Giacobini E, Becker R (eds), Alzheimer Disease: Therapeutic Strategies. Boston: Birkhäuser, 359-364.
15. Elble RJ. 1996. Gait disturbances and cervical spondylosis. In: Mark M, Sage J (eds), Practical Neurology of the Elderly. New York: Marcel Dekker, 1996:145-187.
16. Elble RJ. Clinical and research methods of gait analysis. In: Masdeu JC, Sudarsky L, Wolfson LI (eds), Gait Disorders of Aging. Boston: Little, Brown and Company (in press).

17. Elble RJ. 1997. Changes in gait with normal aging. In: Masdeu JC, Sudarsky L, Wolfson LI (eds), Gait Disorders of Aging. Boston: Little, Brown and Company (in press).
18. Elble RJ. 1997. Gait disturbances and recurrent falls. In: Biller J (ed). A Practical Guide to Clinical Neurology. Boston: Little, Brown and Co.
19. Elble RJ. 1997. The pathophysiology of tremor. In: Watts RL, Koller WC, eds. Movement Disorders: Neurologic Principles and Practice. New York: McGraw-Hill, Inc., pp 405-417.
20. Elble RJ. 1998. Motor control and movement disorders. In: Jankovic J, Tolosa E, eds. Parkinson's Disease and Movement Disorders, 3<sup>rd</sup> edition. Baltimore: Williams & Wilkins, pp 15-45.
21. Elble RJ. 1999. Tremor. In: Smith B, Adelman G (eds). Encyclopedia of Neuroscience, 2<sup>nd</sup> edition. New York: Elsevier Science B.V.
22. Elble RJ. 2001. Essential tremor. In: Gilman S (ed). MedLink-Neurobase. San Diego: Arbor Publishing Corp.
23. Elble RJ, Deuschl G. 2002. Tremor. In: Brown WF, Bolton CF, Aminoff M, editors. Neuromuscular Function and Disease: Basic, Clinical and Electrodiagnostic Aspects. Philadelphia: W. B. Saunders Co., pp 1759-1779.
24. Elble RJ. 2002. Essential tremor. In: Gilman S (ed). MedLink-Neurobase. San Diego: Arbor Publishing Corp.
25. Elble RJ. 2002. Gait disturbances and recurrent falls. In: Biller J (ed). A Practical Guide to Clinical Neurology (2<sup>nd</sup> edition). Boston: Little, Brown and Co.
26. Elble RJ. 2002. Motor control and movement disorders. In: Jankovic J, Tolosa E, eds. Parkinson's Disease and Movement Disorders, 4<sup>th</sup> edition. Baltimore: Williams & Wilkins, pp 11-22.
27. Elble RJ. 2003. Essential tremor. In: Gilman S (ed). MedLink-Neurobase. San Diego: Arbor Publishing Corp.
28. Elble RJ. 2003. Binswanger disease. In: Gruson E (ed). The NORD Guide to Rare Disorders. Lippincott, Williams & Wilkins, Philadelphia, PA; pp 519.
29. Elble RJ. 2003. Progressive supranuclear palsy. In: Gruson E (ed). The NORD Guide to Rare Disorders. Lippincott, Williams & Wilkins, Philadelphia, PA; pp 573.
30. Elble RJ. 2003. Physiologic and enhanced physiologic tremor. In: Hallett M (ed). Handbook of Clinical Neurophysiology, vol. 1. Elsevier Science BV. pp 357-364.

31. Elble RJ. 2003. Accelerometry. In: Hallett M (ed). Handbook of Clinical Neurophysiology, vol. 1. Elsevier Science BV. pp 181-190.
32. Elble RJ. 2003. Tremor. In: Smith B, Adelman G (eds). Encyclopedia of Neuroscience, 3<sup>rd</sup> edition. New York: Elsevier Science B.V.
33. Elble RJ. 2004. Essential tremor. In: Gilman S (ed). MedLink-Neurobase. San Diego: Arbor Publishing Corp.
34. Elble RJ. 2004. The pathophysiology of tremor. In: Watts RL, Koller WC, eds. Movement Disorders: Neurologic Principles and Practice (2<sup>nd</sup> edition). New York: McGraw-Hill, Inc., pp 481-492.
35. Elble RJ. 2005. Essential tremor. In: Gilman S (ed). MedLink-Neurobase. San Diego: Arbor Publishing Corp.
36. Elble RJ. 2005. Neurophysiologic characterization of tremor. In: LeDoux M (ed). Animal Models of Movement Disorders. Amsterdam: Elsevier Academic Press, pp 335-346.
37. Elble RJ. 2005. Differential diagnosis and clinical characteristics of essential tremor. In: Lyons KE, Pahwa R (ed). Handbook of Essential Tremor and Other Tremor Disorders. Boca Raton: Taylor & Francis, pp 77-91.
38. Elble RJ. 2006. Essential tremor. In: Gilman S (ed). MedLink-Neurobase. San Diego: Arbor Publishing Corp.
39. Elble RJ. 2007. Essential tremor. In: Gilman S (ed). MedLink-Neurobase. San Diego: Arbor Publishing Corp.
40. Elble RJ, Kattah J. 2008. Approach to the patient with gait disturbances and recurrent falls. In: Biller J (ed). A Practical Guide to Clinical Neurology (3<sup>rd</sup> edition). Boston: Little, Brown and Co.
41. Elble RJ. 2008. Essential tremor. In: Therapeutics of Parkinson's Disease and Other Movement Disorders. Mark Hallett (Editor), Werner Poewe (eds). New York: Wiley Inc.
42. Elble RJ. 2009. Essential tremor. In: Gilman S (ed). MedLink-Neurobase. San Diego: Arbor Publishing Corp.
43. Elble RJ. 2009. Accelerometry. Encyclopedia of Movement Disorders. Oxford UK:
44. Elble RJ. 2009. Tremor. Encyclopedia of Movement Disorders. Oxford UK: Elsevier.
45. Elble RJ. 2009. Actigraphy. Encyclopedia of Movement Disorders. Oxford UK: Elsevier

46. Elble RJ. 2009. Beta Blockers. Encyclopedia of Movement Disorders. Oxford UK: Elsevier
47. Elble RJ. 2009. Myorhythmia. Encyclopedia of Movement Disorders. Oxford UK: Elsevier
48. Elble RJ. 2009. Pathophysiology of tremor. In: Movement Disorders (3<sup>rd</sup> edition). Ray Watts, MD; Jose A. Obeso, MD, and David Standaert, MD (eds). New York: McGraw-Hill.
49. Elble RJ. 2010. Essential tremor. In: Gilman S (ed). MedLink-Neurobase. San Diego: Arbor Publishing Corp.
50. Elble RJ. 2011. Essential tremor. In: Gilman S (ed). MedLink-Neurobase. San Diego: Arbor Publishing Corp.
51. Elble RJ. 2012. Binswanger disease. In: Gruson E (ed). The NORD Guide to Rare Disorders. Lippincott, Williams & Wilkins, Philadelphia, PA; 2012
52. Elble RJ. 2012. Progressive supranuclear palsy. In: Gruson E (ed). The NORD Guide to Rare Disorders. Lippincott, Williams & Wilkins, Philadelphia, PA; 2012
53. Elble RJ. 2012. Essential tremor. In: Gilman S (ed). MedLink-Neurobase. San Diego: Arbor Publishing Corp.
54. Elble RJ. 2013. Physiologic tremor. In: Grimaldi G, Manto M (eds). Mechanisms and Emerging Therapies in Tremor Disorders. New York: Springer.
55. Elble RJ. 2018. Tremor. In: Tousi B, Cummings J (eds). Neuro-Geriatrics: A Clinical Manual. New York: Springer, pp 311-326.

**Book Reviews:**

1. Elble RJ. 2002. Advances in Neurology, Vol. 87: Gait Disorders, by Ruzicka E, Hallett M, Jankovic J. Neurology 58:992.

**Miscellaneous Papers:**

1. Elble RJ. Essential tremor: a position paper submitted upon request to the National Institute on Aging, April 1990.
2. Elble RJ. 1991. Characteristics of gait in neurologically normal and abnormal elderly people. In: Couch JR (ed), Neurologic Rehabilitation, American Academy of Neurology.
3. Elble RJ. 1991. Characteristics of gait in healthy old people. In: Masdeu J (ed), Gait Disturbances in the Elderly, American Academy of Neurology.

4. Elble RJ. 1992. The pathophysiology of tremor. In: Hallett M (ed), Motor Control, American Academy of Neurology.
5. Elble RJ. 1993. Balance and locomotion in normal older people. In: Sudarsky L (ed), Gait Disturbances in the Elderly, American Academy of Neurology.
6. Elble RJ. 1994. Balance and locomotion in normal older people. In: Sudarsky L (ed), Gait Disturbances in the Elderly, American Academy of Neurology.
7. Elble RJ. 1994. The pathophysiology of tremor. In: Hallett M (ed), Motor Control, American Academy of Neurology.
8. Elble RJ. 1995. Control of posture and locomotion. In: Elble RJ (ed), Motor Control, American Academy of Neurology.
9. Elble RJ. 1995. Identification of geriatric gait disorders. In: DeKosky S (ed), Geriatric Neurology, American Academy of Neurology.
10. Elble RJ. 1996. Insights from patients with unusual tremor. In: Elble RJ (ed), Motor Control, American Academy of Neurology.
11. Elble RJ. 1997. Pathophysiology of tremor. In Hallett M (ed), Tremor, American Academy of Neurology.
12. Elble RJ. 1997. Cerebral control of locomotion: gait apraxia. In: Elble RJ (ed), Motor Control, American Academy of Neurology.
13. Elble RJ. 1998. Multi-joint movements: Lessons in biomechanics for the clinician. In: Elble RJ (ed), Motor Control, American Academy of Neurology.
14. Elble RJ. 1999. Movement disorders of the Guillain-Mollaret triangle. In: Elble RJ (ed), Motor Control, American Academy of Neurology.
15. Elble RJ. 1999. Gait disorders. In: Elble RJ (ed), Motor Control, American Academy of Neurology.
16. Elble RJ. 1999. Differential diagnosis and classification of essential tremor. In: Current Issues In Essential Tremor (a CME monograph by Embryon, Inc.).
17. Elble RJ. 2000. Common causes of impaired locomotion and less common treatable conditions. In: Giladi N, Elble RJ (eds), Gait Disorders in the Elderly, Movement Disorder Society's 6<sup>th</sup> International Congress. Barcelona, Spain.
18. Elble RJ. 2001. Why don't my medications control my tremor? Parkinson Report 12:8-11.

19. Elble RJ, Haubenberger D, Nahab F. MDS SIC Blog: Technological Advances for Tremor Assessment, March 16, 2020

### **RESEARCH PRESENTATIONS AT REGIONAL, NATIONAL AND INTERNATIONAL MEETINGS:**

1. Elble RJ, Randall JE. 1974. Motor unit activity responsible for the 8-12 Hz component of human physiologic tremor. Physiologist 17:216 (American Physiological Society 1974 Fall Meeting).
2. Elble RJ, Schieber MH, Thach WT. 1981. Involvement of nucleus interpositus in action tremor. Society for Neuroscience Fall Meeting, Abstract #223.17.
3. Elble RJ. 1982. Agonist and antagonist muscle interaction in the 8-12 Hz component of physiologic tremor. Society for Neuroscience Fall Meeting, Abstract #212.4.
4. Elble RJ. 1984. Relationships between physiologic and essential tremors. American Academy of Neurology Annual Meeting.
5. Giacobini E, Becker R, Elble R, Mattio T, McIlhany M. 1985. Acetylcholine metabolism in brain: is it reflected by CSF changes? OHOLO Biological Conference, Eilat, Israel, March 1985.
6. Elble RJ. 1985. Relationships between high- and low-frequency familial tremors. American Academy of Neurology Annual Meeting.
7. Elble RJ, Adelman J, Higgins C. 1985. Interaction between stretch-reflex and 8-12 Hz component of physiologic tremor. 15th Annual Meeting Society for Neuroscience, Dallas, Texas.
8. Giacobini E, Becker R, Elble R, Mattio T, McIlhany M. 1985. Acetylcholine metabolism in brain: is it reflected by CSF changes? 8th Midwest Neurobiology Meeting, Iowa City, Iowa.
9. Giacobini E, Becker R, Elble R, Mattio T, McIlhany M. 1985. Brain acetylcholine: a view from the cerebrospinal fluid. Neurobiology of Acetylcholine Symposium, Maywood, Illinois.
10. Giacobini E, Becker R, Elble R, Mattio T, McIlhany M. 1985. Brain Acetylcholine: a view from the cerebrospinal fluid. 15th Annual Meeting Society for Neuroscience, Dallas, Texas.
11. Giacobini E, Elble R, Hess J, and Becker R. 1986. Cholinergic markers in human cerebrospinal fluid. Amer Soc Neurochem, Montreal, Canada 1986.

12. Ashford JW, Sherman KA, Elble RJ, Hess J, Larson LS, Rey P, Higgins C, Best S, Woodruff EM, McIlhany M. 1986. Physostigmine effect on human memory and plasma cholinesterase. Ninth Annual Midwest Neurobiology Meeting, Springfield, Illinois.
13. Elble RJ. 1986. Relationship between mechanically-induced stretch reflex oscillations and essential tremor. 38th Annual Meeting of American Academy of Neurology, New Orleans.
14. Elble RJ, Giacobini E, Higgins C, Brown M. 1986. Reproducibility of CSF protein and acetylcholinesterase measurements in Alzheimer patients. 38th Annual Meeting of American Academy of Neurology, New Orleans.
15. Moody C, Elble RJ, Higgins C. 1986. Voluntary ballistic movements are time-locked to essential tremor. Ninth Annual Midwest Neurobiology Meeting, Springfield, Illinois.
16. Sherman KA, Ashford JW, Elble RJ, Hess J, McIlhany M, Kumar V, Becker RE, Giacobini E. 1986. Inhibition of blood cholinesterase after oral physostigmine in Alzheimer patients. Society for Neuroscience Annual Meeting.
17. Sherman KA, Elble RJ, Ashford JW, Hess J. 1986. Predicting response to physostigmine in senile dementia patients: inhibition of plasma or red blood cell cholinesterase. American Geriatrics Society Annual Meeting.
18. Elble RJ, Moody C, Higgins C. 1986. Interaction between essential tremor and voluntary movements. Society for Neuroscience Annual Meeting, New Orleans.
19. Elble RJ, Moody C, Higgins C. 1987. Primary writing tremor. 39th Annual Meeting of American Academy of Neurology, New York.
20. Elble RJ. 1987. Caveats of tremor research: a computer model. Society for Neuroscience Annual Meeting, New Orleans.
21. Elble RJ, Giacobini E, Becker R, Zec R, Vicari S, Womack C, Williams E, Higgins C. 1988. Treatment of Alzheimer dementia with steady-state infusion of physostigmine. Advances in Alzheimer Therapy: Cholinesterase Inhibitors, an International Symposium sponsored by The World Federation of Neurology Research, Group on Dementias and the Institute of Developmental Neuroscience and Aging. SIU School of Medicine, Springfield, Illinois.
22. Ashford W, Kumar V, Sherman K, Elble R, Giacobini E, Becker R. 1988. Physostigmine treatment of Alzheimer patients: Memory vs. plasma cholinesterase. The Third Congress of the International Psychogeriatric Association.
23. Elble RJ, Thomas SS, Moody C. 1988. Kinematic gait analysis in the quantification and elucidation of geriatric gait disturbances. Society for Neuroscience Annual Meeting, Toronto.

24. Elble RJ, Higgins C. 1989. Measuring tremor that is induced by writing and drawing. Annual Meeting of the American Academy of Neurology, Chicago.
25. Elble RJ, Thomas SS, Moody CJ. 1989. Characteristics of gait in healthy old people. Annual Meeting of the American Academy of Neurology, Chicago.
26. Elble RJ. 1989. Analysis of tremor with methods of nonlinear dynamics: attractor dimensions. 1989 Annual Meeting of the Society for Neuroscience, Phoenix, AZ. Neuroscience Abstr 15:604.
27. Elble RJ. 1990. The response of essential tremor to pulsatile and sinusoidal forcings. Movement Disorders 5 (suppl 1):46. Presented at the First International Congress of Movement Disorders, Washington, DC, April 26, 1990.
28. Elble RJ. 1990. Symmetrical gait disturbances in the elderly: senile gait. Central Society for Neurological Research, Two Harbors, MN, Sept. 14-16, 1990.
29. Elble RJ, Moody C, Higgins C. 1990. The physiology of gait initiation. Society for Neuroscience, Nov. 1990, St. Louis, MO.
30. Elble RJ. 1991. Periodic inhibition of forearm EMG by palatal myoclonus. Am Acad Neurology, Apr. 1991, Boston, MA. Neurology 41 (suppl 1):327.
31. Barnes WA, Seiz J, Kiel D, Elble RJ, Manyam BV. 1991. Outpatient Parkinson disease rehabilitation program. Arch Phys Med Rehab.
32. Harris RB, Hughes LF, Elble RJ, Manyam BV. 1991. Parkinson disease: factors of importance in rehabilitation. 10th International Symposium on Parkinson's Disease, Tokyo, Japan.
33. Elble RJ, Higgins CA. 1991. Response of essential wrist tremor to sinusoidal somatosensory feedback. Society for Neuroscience, Nov. 1991, New Orleans.
34. Elble RJ. 1992. The physiology of gait initiation: insight into the mechanisms of start hesitation. Central Society for Neurological Research, Oct. 3, Red Wing, Minnesota.
35. Elble RJ, Moody C. 1992. Characteristics of gait initiation in normal and abnormal older people. Abstr #18.5, Society for Neuroscience, Oct. 26, Anaheim, CA.
36. Zec RF, McCool M, Grames E, Landreth E, Hasara A, Fraiser W, Fritz S, Wairman S, Belman J, Harris R, O'Connell C, Robbs R, Manyam B, Elble R. 1992. Problem-solving ability in Parkinson disease. Abstr #395.10, Society for Neuroscience, Oct. 28, Anaheim, CA.
37. Zec R, Fraiser W, Landreth E, Wainman S, O'Connell, Fritz S, Hasara A, Grames E, McCool M, Harris R, Belman J, Kocis M, Robbs R, Elble R, Manyam B. 1993. Memory retrieval deficits in non-demented Parkinson's disease. 118th annual meeting of the Am Neurological Assoc, October 1993.



38. Elble RJ, Higgins C, Hughes L. 1993. Entrainment of rapid wrist movement by essential tremor. Society for Neuroscience, November 1993, Washington DC.
39. Elble RJ, Leffler K, Cousins B, Hill S, Elble S. 1994. Gait initiation in patients with Binswanger disease. *Mov Disord* 9 (suppl 1):126. Third International Congress of Movement Disorders.
40. Elble RJ. Quantitative analysis of essential tremor in posture and handwriting. *Neurology* 1995;45(suppl 4):218-219 (presented at the annual meeting of the Am. Academy of Neurology in Seattle, Washington).
41. Elble RJ. Tremor due to stroke and other focal lesions. Central Society of Neurological Research. Pere Marquette State Park, September 15-16, 1995.
42. Elble RJ, Leffler K, Cousins R. 1996. Anticipatory postural control in lower-half parkinsonism. Am. Academy of Neurology, San Francisco, March 1996.
43. Elble RJ. 1996. Critical unanswered questions pertaining to the pathophysiology of tremor. Central Society of Neurological Research. Red Wing, MN, Sept. 20, 1996.
44. Zec RF, Markwell S, Vost K, Ward M, Elble R, McManus D. 1996. A double learning association between the effect of number of learning trials on the early detection of Alzheimer dementia in patients with higher versus lower educational levels. *Soc Neuroscience Abstracts* 1996;22:2121.
45. Elble RJ, Cousins B, Leffler K, Elble S, Herrmann D, Hill S. 1996. Motor performance by patients with mild Alzheimer disease and Parkinson disease. *Soc Neuroscience Abstracts* 1996;22:1700.
46. Elble RJ. 1997. Mild essential tremor in ostensibly normal older people. Am. Academy of Neurology, Boston, April 1997.
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. 5<sup>th</sup> International Congress of Parkinson's Disease and Movement Disorders. New York.
48. Zec RF, Matthews B, Markwell S, Elble R. 1998. Impaired alternating word fluency in non-demented patients with Parkinson's disease but not in a subgroup of cognitively intact PD patients. Annual Meeting of the Society for Neuroscience. Los Angeles. *Soc Neurosci Abstracts* 24:763.
49. Matthews B, Zec RF, Elble R, Markwell S. 1998. Verbal planning deficit in otherwise cognitively intact patients with Parkinson's disease. Annual Meeting of the Society for Neuroscience. Los Angeles. *Soc Neurosci Abstracts* 24:763.
50. Zec RF, Matthews B, Markwell S, Elble R. 1998. Selective impairment in planning versus following instructions in non-demented PD. National Academy of Neuropsychology, Washington DC. *Arch Clin Neuropsychol*.

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).
57. Ala TA, Hughes LF, Kyrouac GA, Ghobrial MW, Elble RJ. The Mini-Mental State exam may help in the differentiation of Alzheimer and Lewy body dementias. In: Ageing Myths, Realities & Management of Alzheimer's Disease. An International (Mini) Symposium to the Millennium 52nd Indian Pharmaceutical Congress. Hyderabad, India: Indian Pharmaceutical Association; 2000:3 (Abstract).
58. Elble RJ, Higgins C, Elble S. 2001. Head tremor in patients with essential tremor. American Academy of Neurology. Philadelphia, May 9.
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
60. Ala TA, Elble RJ. 2002. Neuropsychological features help to distinguish dementia with Lewy bodies from Alzheimer disease. American Academy of Neurology, Denver, April 18.

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. 52<sup>nd</sup> Annual Meeting of the American Society of Human Genetics. Baltimore, Oct. 15, 2002.
62. Elble RJ. 2002. Limitations of accelerometry in motion analysis. 7<sup>th</sup> International Congress of Parkinson's Disease and Movement Disorders. Miami FL. Nov. 14.
63. Elble RJ. 2004. Gait disorders in the dementias. *Neurobiol Aging* 25(S1): S8.
64. Elble RJ. 2004. Tremor rating scales are crude and nonlinear. *Neurology* 62(suppl 5): 502-3.
65. Ondo WG, Jankovic J, Stacy MA, Elble RJ, et al. 2004. Topiramate in essential tremor: a multicenter, double-blind, placebo-controlled trial. Annual Meeting of the American Academy of Neurology, San Francisco, April 27.
66. Elble RJ, Higgins C, Elble S. 2004. Electrophysiologic transition from physiologic tremor to essential tremor. *Mov Disord* 19 (suppl 9): S448
67. Jankovic J, Ondo WG, Stacy MA, Elble RJ, et al. 2004. A multicenter, double-blind, placebo-controlled trial of topiramate in essential tremor. *Mov Disord* 19 (suppl 9): S448-9
68. Tintner R for the Tremor Research Group<sup>15</sup>. 2004. The Tremor Rating Scale (TRS). *Mov Disord* 19:1131-1132.
69. Elble RJ, Matsumoto J, Pullman SL. 2005. How might a clinician's concept of severe and normal tremor affect the mathematical relationship between a tremor rating scale and actual tremor amplitude? *Mov Disord* 20 (suppl 10): S170.
70. Ala TA, Vicari SK, Ghobrial MW, Elble RJ. The response of neuropathologically-proven Alzheimer and dementia with Lewy body patients to metrifonate. In: Book of Abstracts; Insights, Progress and Perspectives. Alzheimer's and Parkinson's Diseases 7th International Conference; Sorrento, Italy. Geneva, Switzerland; Kenes International; 2005:137 (Abstract).
71. Elble RJ, Matsumoto JY, Pullman SL. Quantification of 5-point tremor rating scales. *Neurology* 2005;64(suppl 1):A255.
72. Elble RJ. Clinical assessment of ET with motion transducers: Better than rating scales? Consensus Conference on Essential Tremor, Washington DC, October 20-21, 2005.

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<sup>15</sup> RJE is president of the Tremor Research Group

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 2<sup>nd</sup> 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. 12<sup>th</sup> 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. 12<sup>th</sup> 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). 12<sup>th</sup> 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). 12<sup>th</sup> 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.
99. Gövert F, Becktepe J, Brugger F, Rocchi L, Garrido A, Balint B, Hannah R, Walter T, Rothwell J, Elble R, Bhatia K, Deuschl G. Distinguishing isolated asymmetric limb tremor from essential tremor: An electrophysiological study. *Mov Disord* 2018;33:S551
100. Papapetropoulos S, Lee MS, Boyer S, Krouse A, Pahwa R, Lyons K, Ondo W, Jinnah HA, Elble RJ on Behalf of the T-CALM Investigators (USA). Proof-of-Concept, Double-Blind, Placebo-Controlled Study for CX-8998 a State-Dependent T Type Calcium (Cav3) Channel Antagonist in Essential Tremor Patients (T-CALM): Efficacy and Safety Results. International Congress of the Parkinson Disease and Movement Disorders, October 2018. Hong Kong.
101. Jinnah HA, Papapetropoulos S, Lee M, Versavel S, Newbold E, Pahwa R, Lyons KE, Elble R, Ondo W, Zesiewicz T, Hedera P, Handforth A, Elder J, Versavel M. Efficacy and Safety of CX-8998 in T-CALM, a Randomized, Double-Blind, Placebo-Controlled, Phase 2a Trial in Participants with Essential Tremor: Subgroup Analysis by Baseline Tremor Severity. American Academy of Neurology Annual Meeting, April 25 to May 1, 2020, Toronto Canada.
102. Sterkel AL, Ondo W, Elble R, LeWitt P, Pahwa R, Urrea C, Huang L, Hickey L, Baladi M. A phase 2b randomized, double-blind, placebo-controlled study of JZP385 in the treatment of adults with moderate to severe essential tremor: study design and methodology. International Parkinson and Movement Disorder Society Meeting, 2021.

103. Bankole K, Takahashi K, Qin M, Colquhoun H, Elble RJ. SAGE-324/BIIB124 in patients with essential tremor: results from the phase 2, placebo-controlled KINETIC Study. American Neurological Association Meeting, 2021.

### 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. **5<sup>th</sup> 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. **5<sup>th</sup> 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 6<sup>th</sup> 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. **7<sup>th</sup> 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. **7<sup>th</sup> 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. **8<sup>th</sup> 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. **8<sup>th</sup> International Congress of Parkinson's Disease and Movement Disorders, Rome, Italy**, April 14.
51. Elble RJ. 2006. Gait and dementia. **1<sup>st</sup> 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, **13<sup>th</sup> International Congress of Parkinson's Disease and Movement Disorders**. Paris, France. June 7.
67. Elble RJ. 2009. Gait disorders. Video session, **13<sup>th</sup> 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, **14<sup>th</sup> 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, **29<sup>th</sup> International Congress of Clinical Neurophysiology.** Kobe Japan. October 31, 2010.
78. Elble RJ. 2010. Neurophysiology of tremor. **29<sup>th</sup> International Congress of Clinical Neurophysiology.** Kobe Japan. October 31, 2010.
79. Elble RJ. 2011. History of objective measures of movement disorders. **15<sup>th</sup> 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? **5<sup>th</sup> 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. **16<sup>th</sup> 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? **16<sup>th</sup> 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. **30<sup>th</sup> 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. **14<sup>th</sup> International Athens/Springfield Symposium on Advances in Alzheimer Therapy**, Athens Greece, March 12.
97. Elble RJ. 2016. Should we redefine essential tremor? **20<sup>th</sup> 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.
99. Elble RJ. 2018. Tremor measurement with rating scales and transducers. **Washington University, St. Louis, Missouri.** April 12.
100. Elble RJ. 2018. Wearable device for tremor. **1<sup>st</sup> International Tremor Conference. Columbia University College of Physicians and Surgeons, New York.** May 12.
101. Elble RJ. 2018. Essential tremor is a useful concept – No. **2nd Pan American Parkinson's Disease and Movement Disorders Congress. International Parkinson and Movement Disorder Society, Miami FL, June 24.**
102. Elble RJ. 2018. Tremor update. **International Parkinson's Disease and Movement Disorders Congress. International Parkinson and Movement Disorder Society, Hong Kong, October 7.**
103. Elble RJ. 2019. Overview of the new classification scheme for tremor. **International Parkinson's Disease and Movement Disorders Congress. International Parkinson and Movement Disorder Society, Nice France, September 24.**
104. Elble RJ. 2020. Essential tremor and essential tremor plus. **Movement Disorder Society of India, New Delhi, August 15.**
105. Elble RJ. 2020. Common and uncommon tremor disorders. Video rounds. **University of California San Diego, San Diego, October 15.**
106. Elble RJ. 2020. Essential tremor. What's in a name. Neurology grand rounds. **University of California San Diego. San Diego, October 16.**

## 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. Kiwanis Neuroscience Research Foundation, 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)

Session Chair,

Technology Based Assessments in Movement Disorders:  
Assessing Health and Treatment Response, Hong Kong (2018)

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)

Tour Leader  
Guided poster tour: Tremor,  
Hong Kong (2018)

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)

1<sup>st</sup> 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)