

Vitae  
Howard N. Zelaznik  
hzelaz@purdue.edu

Present Position: Professor, Health and Kinesiology, Purdue University  
Associate Vice President for Research

Education:

B.S.	Brooklyn College - CUNY	1974	Physical Ed.
M.S.	University of Michigan -	1975	Physical Ed.
Ph.D.	University of Southern California	1978	Physical Ed.

EMPLOYMENT HISTORY:

August 1990 - present: Professor, Purdue University  
August 1983 - August 1990: Associate Professor, Purdue University  
August 1979 - August 1983: Assistant Professor, Purdue University  
Sept. 1978 - June 1979: Assistant Professor, Florida State University

VISITING FACULTY POSTIONS:

June 2006	Visiting Research Professor, University of Montpellier 1, France
Summer 1980	Visiting Assistant Professor, UCLA
Summer 1988	Visiting Associate Professor, University of Wisconsin Fall 1988
	Visiting Associate Professor, Univ. of Massachusetts Summer 1990
	Visiting Associate Professor, University of Wisconsin

OTHER APPOINTMENTS:

Fall 1981 - present	Department of Psychological Sciences, Purdue (Courtesy)
Fall 1985 - present	Purdue University Neuroscience Program
July 1994 – July 2002	Chair, Purdue University Committee on the Use of Human Research Subjects (generically called the IRB)
August 1999 – Sept 2004	Associate Dean for Research and Graduate Education, College of Liberal Arts, Purdue
August 2010 – May 2011	Provost Fellow, Purdue.
January 2011 – Aug 2012	Associate Dean for Research and Graduate Programs, College of Health and Human Sciences, Purdue
Sept 2012	Associate Vice President for Research, Purdue
July 2014	Professor, Speech, Language and Hearing Sciences (Courtesy)

FACULTY GOVERNANCE:

JUNE 2008 — MAY 2009	Vice-Chair, University Senate
JUNE 2009 — MAY 2010	Chair, University Senate

JUNE 2009 — MAY 2011 Chair, Intercampus Faculty Council

HONORS:

Fellow American Association for the Advancement of Science (AAAS), Psychology, 2012  
 Founding Fellow Association for Psychological Science  
 Fellow National Academy of Kinesiology #337  
 President North American Society for the Psychology of Sport and Physical Activity (1997)

**RESEARCH**

RESEARCH IMPACT (as of February 23, 2015)

H-Factor = 26

Zelanik has six (3) papers with greater than 200 citations, one paper with over 800 citations, the Science paper (Spencer et al., 2003) has over 200 citations. The total number of non-self citations is 3130.

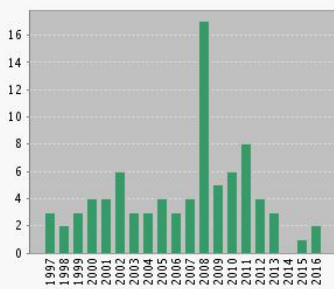
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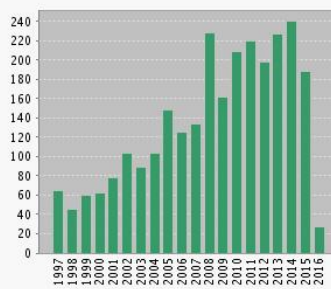
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Citing Articles [?]	2435
Citing Articles without self-citations [?]	2383
Average Citations per Item [?]	25.85
h-Index [?]	26

PUBLICATIONS:

## a. Book Chapters

- Zelaznik, H. N., Spencer, R. M. C., & Ivry, R. B. (2008). Behavioral analysis of human movement timing. In S. Grondin (Ed.), *Psychology of time* (pp. 233-260). Bingley, United Kingdom: Emerald Publishing Group.
- Huys, R., Jirsa, V. K., Studenka, B., Rheaume, N., & Zelaznik, N. N. (2008). Human trajectory formation: Taxonomy of movement based on phase flow topology. In A. Fuchs & V. K. Jirsa (Eds.), *Coordination: Neural, Behavioral and Social Dynamics (Understanding Complex Systems)* (pp. 77-92). Berlin: Springer.
- Zelaznik, H. N. (2006). Motor Learning for the Personal Trainer. In A. C. o. S. Medicine (Ed.), *ACSM's Resources for the Personal Trainer*, 2nd edition (pp. 177-186). Amsterdam, NL: Lippincott, Williams & Wilkins.
- Ivry, R., Spencer, R. M., Zelaznik, H. N., & Diedrichsen, J. (2002). The cerebellum and event timing. In S. M. Highstein & W. Thach (Eds.). *The cerebellum*. New York: New York Academy of Sciences.
- Kim, K., McMillan, M., & Zelaznik, H.N. (1996). Behavioral analysis of trajectory formation: The speed-accuracy trade-off as a tool to understand strategies of movement control. In H.N. Zelaznik (Ed.) *Advances in Motor Learning and Control* (pp. 1-12). Champaign, Il.: Human Kinetics
- Zelaznik, H.N., (1993). Necessary and sufficient conditions for the production of a linear speed accuracy trade-off in aimed hand movements. In K.M. Newell & D. Corcos (Eds.) *Variability and motor control* (pp. 91-115). Champaign, Il: Human Kinetics.
- Zelaznik, H.N. (1993). The role of motor development in infancy. Reactions to Mounoud and Bremner. In G.V. Savelsbergh (Ed.) *The Development of Coordination in Infancy* (pp. 79-88). Amsterdam: North Holland.
- Smith, A., & Zelaznik, H. (1990). Comparative investigations of speech and other neuromotor systems. In G.R. Hammond (Ed.), *Cerebral control of speech and limb movements* (pp. 575-594). Amsterdam: North-Holland.
- Stelmach, G.E., Meeuwssen, H., & Zelaznik, H. (1990). Control deficits in the elderly. In T. Brandt, W. Paulus, W. Bles, M. Dieterich, S. Krafczyk, & A. Straube (Eds.) *Disorders of Posture and Gait*, 1990 (pp. 253-256). Stuttgart, Germany: Springer-Verlag.
- Zelaznik, H.N. & Franz, E. (1990). Stimulus-response compatibility and the programming of motor activity: Pitfalls and possible new directions. In R.W Proctor & T.G. Reeve (Eds.). *Stimulus-Response compatibility* (pp 279-296). Amsterdam: North-Holland.
- Zelaznik, H.N. (1986). Issues in the study of human motor skill development: A reaction to John Fentress. In M.G. Wade & H.T.A. Whiting (Eds.) *Motor development in children: Aspects of coordination and control* (pp. 125-134). Dordrecht, The Netherlands: Nijhoff Publishers.
- Zelaznik, H.N., & Larish, D.G. (1986). Precuing methods in the study of motor programming. In H. Heuer & C. Fromm (Eds.) *Experimental Brain Research Series, 15 Generation and modulation of action patterns*, (pp. 55-63).
- Zelaznik, H.N., & Aufderheide, S.A. (1986). Attentional and reaction time analysis of performance: Implications for research with mentally handicapped individuals. In M.G. Wade (Eds.), *Motor Skill Acquisition of the Mentally Handicapped* (pp. 131-154), Amsterdam: North-Holland.

Schmidt, R.A., Sherwood, D.E., Zelaznik, H.N., & Leikind, B.J. (1985) Speed-accuracy trade-offs in motor behavior: Theories of impulse variability. In U. Kleinbeck, H. Heuer, & K.-H. Schmidt (Eds.) *Motor behavior: Programming, control and acquisition* (pp. 79-124). Berlin: Springer-Verlag.

Schmidt, R.A., Zelaznik, H.N. & Frank, J. S. (1978). Sources of inaccuracy in rapid movements. In G.E. Stelmach (Ed.), Information processing in motor control and learning. New York: Academic Press.

#### b. Journal Articles

- Zelaznik, H. N., & Forney, L. A. (2016). Action-specific judgment, not perception: Fitts' law performance is related to estimates of target width only when participants are given a performance score. *Attention, Perception, & Psychophysics*, 1-11. doi:10.3758/s13414-016-1132-5
- Lee, T. D., Wulf, G., Winstein, C. J., & Zelaznik, H. N. (2016). In Memoriam: Richard Allen Schmidt (1941-2015). *Journal of Motor Behavior*, 48(1), 1-4. doi:10.1080/00222895.2016.1124687
- Chagdes, J. R., Huber, J. E., Saletta, M., Darling-White, M., Raman, A., Rietdyk, S., . . . Haddad, J. M. (2016). The relationship between intermittent limit cycles and postural instability associated with Parkinson's disease. *Journal of Sport and Health Science*, 5(1), 14-24. doi:10.1016/j.jshs.2016.01.005
- Kim, H. E., Cai, F., Ryu, J. H., Haddad, J. M., & Zelaznik, H. N. (2015). Tennis match time Series do not exhibit long term correlations. *International Journal of Sport Psychology*, 46(6), 542-554. doi:10.7352/ijsp.2015.46.542
- Chagdes, J. R., Rietdyk, S., Haddad, J. M., Zelaznik, H. N., & Raman, A. (2013). Dynamic stability of a human standing on a balance board. *Journal of Biomechanics*, 46(15), 2593-2602. doi:10.1016/j.jbiomech.2013.08.012
- Zelaznik, H.N. (2014). The past and future of motor learning and control: What is the proper level of description and analysis? *Kinesiology Review*, 3, 38-44.
- Chagdes, J.R., Rietdyk, S., Haddad, J.M., Zelaznik, H.N., & Raman, A. (2013). Dynamic stability of a human standing on a balance board. *Journal of Biomechanics*, 2593-2602
- Studenka, B.E.\*, Balasubramaniam, R. & Zelaznik, H.N. (2012). The distinction between tapping and circle drawing with and without tactile feedback: An examination of the sources of timing variance. *Quarterly Journal of Experimental Psychology A*, 65, 1086-1100. DOI: 10.1080/17470218.2011.640404
- Zelaznik, H. N., Vaughn, A. J., Green, J. T., Smith, A. L., Hoza, B., & Linnea, K. (2012). Motor timing deficits in children with attention-deficit/hyperactivity disorder. *Human Movement Science*, 31, 255-265. <http://dx.doi.org/10.1016/j.humov.2011.05.003>
- Studenka, B.E., & Zelaznik, H.N. (2011). Circle drawing does not exhibit auditory-motor synchronization. *Journal of Motor Behavior*, 43(3), 185-191. Doi:10.1080/00222895.2011.555796
- Studenka, B. E., & Zelaznik, H. N. (2011). Synchronization in repetitive smooth movement requires perceptible events. *Acta Psychologica*, 136(3), 432-441. doi: 10.1016/actpsy.2011.01.011
- Torre, K., Balasubramaniam, R., Rheume, N., Lemoine, L., & Zelaznik, H. (2011). Long-range correlation properties in motor timing are individual and task specific. *Psychonomic Bulletin & Review*, 18(2), 339-346. doi: 10.3758/s13423-011-0049-1

- Hughes, C. M. L., Haddad, J. M., Franz, E. A., Zelaznik, H. N., & Ryu, J. H. (2011). Physically coupling two objects in a bimanual task alters kinematics but not end-state comfort. *Experimental Brain Research*, *211*(2), 219-229. doi: 10.1007/s00221-011-2673
- Kwon, O.-S., Zelaznik, H. N., Chiu, G., & Pizlo, Z. (2011). Human motor transfer is determined by the scaling of size and accuracy of movement. *Journal of Motor Behavior*, *43*(1), 15-26.
- Zelaznik, H. N., & Rosenbaum, D. A. (2010). Timing processes are correlated when tasks share a salient event. *Journal of Experimental Psychology: Human Perception and Performance*, *36*(6), 1565-1575.
- Olander, L., Smith, A., & Zelaznik, H. N. (2010). Evidence That a Motor Timing Deficit Is a Factor in the Development of Stuttering. *Journal of Speech, Language, and Hearing Research*, *53*, 876-886.
- Zelaznik, H. N., & Goffman, L. (2010). Generalized motor abilities and timing behavior in children with specific language impairment. *Journal of Speech, Language and Hearing Sciences*, *53*, 383-393.
- Huys, R., Studenka, B. E., Zelaznik, H. N., & Jirsa, V. K. (2010). Distinct timing mechanisms are implicated in distinct circle drawing tasks. *Neuroscience Letters*, *472*, 24-28.
- Chagdes, J. R., Rietdyk, S., Haddad, J. M., Zelaznik, H. N., Raman, A., Rhea, C., et al. (2009). Multiple timescales in postural dynamics associated with vision and a secondary task are revealed by wavelet analysis. *Experimental Brain Research*, *197*, 297-310.
- Huys, R., Studenka, B. E., Rheaume, N. L., Zelaznik, H. N., & Jirsa, V. K. (2008). Distinct Timing Mechanisms Produce Discrete and Continuous Movements. *PLoS Computational Biology*, *4*, e1000061.
- Studenka, B., & Zelaznik, H. N. (2008). The Influence of Dominant versus Non-Dominant Hand on Event and Emergent Motor Timing. *Human Movement Science*, *27*, 29-52.
- Schlerf, J. E., Spencer, R. M. C., Zelaznik, H. N., & Ivry, R. B. (2007). Timing of rhythmic movements in patients with cerebellar degeneration. *Cerebellum*, *6*, 221-231.
- Zelaznik, H. N., & Harper, W. A. (2007). Skill and physical activity: A central dogma for kinesiology. *Quest*, *59*, 163-169.
- Zelaznik, H. N., Spencer, R. M. C., Ivry, R. B., Baria, A., Bloom, M., Dolansky, L., et al. (2005). Timing variability in circle drawing and tapping: Probing the relationship between event and emergent timing. *Journal of Motor Behavior*, *37*, 395-404.
- Biberstine, J., Zelaznik, H. N., Kennedy, L., & Whetter, E. (2005). Timing precision in circle drawing does not depend on spatial precision of the timing target. *Journal of Motor Behavior*, *37*, 447-453.
- Spencer, R. M. C., Ivry, R. B., & Zelaznik, H. N. (2005). Role of the cerebellum in movements: control of timing or movement transitions? *Experimental Brain Research*, *161*, 383-496.
- Smith, A., & Zelaznik, H. N. (2004). Development of functional synergies for speech motor coordination in childhood and adolescence. *Developmental Psychobiology*, *45*, 22-33.
- Spencer, R.M.C. & Zelaznik, H.N. (2003). Weber (slope) analysis of timing variability in

- tapping and drawing tasks. *Journal of Motor Behavior*, 35, 371-382.
- Spencer, R.M.C., Zelaznik, H.N., Diedrichsen, J., & Ivry, R.B. (2003). Disrupted timing of discontinuous but not continuous movements by cerebellar lesions. *Science*, 300, 1437-1439. see <http://whyfiles.org/shorties/132cerebellum/>.
- Spencer, R.M.C., Zelaznik, H.N., Ivry, R.B. & Diedrichsen, J. (2002). Does the cerebellum preferentially control discrete and not continuous movements? *Annals of the New York Academy of Sciences*, 978, 542-544.
- Zelaznik, H., Spencer, R. M. C., & Ivry, R. B. (2002). Dissociation of explicit and implicit timing in repetitive tapping and drawing movements. *Journal of Experimental Psychology: Human Perception and Performance*, 28, 575-588.
- Franz, E.A., Zelaznik, H.N., Swinnen, S.P., & Walter, C.B. (2001). Spatial-topological constraints on bimanual coordination. *Journal of Motor Behavior*. 33, 103-112.
- Zelaznik, H. N., Spencer, R. M., & Doffin, J. G. (2000). Temporal precision in tapping and circle drawing movements at preferred rates is not correlated: Further evidence against timing as a general purpose ability. *Journal of Motor Behavior*, 32, 193-199.
- Roberston, S.D., Zelaznik, H.N., Lantero, D.A., Gadacz, K.E., Spencer, R.M., Doffin, J.G., & Schneidt, T. (1999). Correlations for timing consistency among tapping and drawing tasks: Evidence against a single timing process for motor control. *Journal of Experimental Psychology: Human Perception and Performance*, 25, 1316-1330.
- Zelaznik, H.N. & Proctor, R.W. (1997). Can one explanation serve two laws? *Behavioral and Brain Sciences*, 20, 325.
- Zelaznik, H.N., Smith, A., Franz, E.A. & Ho. M. (1997). Differences in bimanual coordination associated with stuttering. *Acta Psychologica*, 96, 229-243.
- Zelaznik, H.N. & Lantero, D. (1996). The role of vision in repetitive circle drawing. *Acta Psychologica*, 92, 105-118.
- Smith, A., Goffman, L., Zelaznik, H.N., Ying, G. & McGillem, C. (1995). Spatiotemporal stability and patterning of speech movement sequences. *Experimental Brain Research*, 104, 493-501.
- Zelaznik, H.N., Smith, A. & Franz, E.A. (1994). Motor performance of stutterers and nonstutterers on timing and force control tasks. *Journal of Motor Behavior*, 26, 340-347.
- Zelaznik, H.N. (1993). Ethical issues in conducting and reporting research: A reaction to Kroll, Matt, and Safrit. *Quest*, 45, 62-68.
- Franz, E.A., Zelaznik, H.N. & Smith, A.M. (1992). Evidence of common timing processes in the control of manual, orofacial and speech movements. *Journal of Motor Behavior*, 24, 281-287.
- Young, R.P., & Zelaznik, H.N. (1992). The visual control of aimed hand movements to stationary and moving targets. *Acta Psychologica*, 79, 59-78.
- Franz, E.A., Zelaznik, H.N., & McCabe, G. (1991) Spatial topological constraints in a bimanual task. *Acta Psychologica*, 77, 137-151.
- Gao, L.G., & Zelaznik, H.N. (1991). Henry and Harrison (1961) revisited: Evidence for rapid modification of a ballistic movement. *Journal of Motor Behavior*, 23, 184-186.

Zelaznik, H. (1990). Motor learning research-meaningful ways for physical educators or a waste of time- *Quest*, 42(2), 193-196.

Stelmach, G.E., Zelaznik, H.N., & Lowe, D. (1990). The influence of aging and attentional demands on recovery from postural instability. *Aging*, 2, 155-161.

Lupton, L.K., & Zelaznik, H.N. (1990). Motor learning in sign language students. *Sign Language Studies*, 67, 153-174.

- Doody, S.G., & Zelaznik, H.N. (1988). Rule formation in a rapid timing task: A test of schema theory. *Research Quarterly for Exercise and Sport*, 59, 29-34.
- Zelaznik, H.N., Mone, S., McCabe, G.P., & Thaman, C. (1988). The role of temporal and spatial precision in determining the nature of the speed accuracy trade-off in aimed hand movements. *Journal of Experimental Psychology: Human Perception and Performance*, 14, 221-230.
- Zelaznik, H.N., Hawkins, B. & Kisselburgh, L. (1987). The effects of movement distance and movement time on visual feedback processing in aimed-hand movements. *Acta Psychologica*, 65, 181- 191.
- Zelaznik, H.N., Schmidt, R.A., & Gielen, C.C.A.M. (1986). Kinematic properties of aimed hand movements. *Journal of Motor Behavior*, 18, 352-372.
- Zelaznik, H.N., & Hahn, R. (1985). Precueing methods in the study of motor programming: The specification of digit, duration, and hand. *Journal of Motor Behavior*, 17, 190 - 218.
- Langley, D.J. & Zelaznik, H.N. (1984). The acquisition of time properties associated with a sequential motor skill. *Journal of Motor Behavior*, 16, 275-301.
- Zelaznik, H.N., Hawkins, B. & Kisselburgh, L. (1983). Rapid visual feedback processing in single-aiming movements. *Journal of Motor Behavior*, 15, 217-236.
- Zelaznik, H.N., Shapiro, D.C. & Carter, M. (1982). The specification of digit and duration during response programming: A new method of precueing. *Journal of Motor Behavior*, 14, 57-68.
- Zelaznik, H.N., Shapiro, D.C. & McColsky, D. (1981). The effects of a secondary task on the accuracy of single-aiming movements. *Journal of Experimental Psychology: Human Perception and Performance*, 7, 1007-1019.
- Zelaznik, H.N. (1981). The effects of force and direction uncertainty on choice reaction time in an isometric force production task. *Journal of Motor Behavior*, 13, 18-32.
- Quinn, J.T., Schmidt, R.A., Zelaznik, H.N., Hawkins, B. & McFarquhar, R. (1980). Target-size effects on reaction time with movement time controlled. *Journal of Motor Behavior*, 12, 239-261.
- Schmidt, R.A., Zelaznik, H.N., Hawkins, B., Frank, J.S., & Quinn, J.T. (1979). Motor output variability: A theory for the accuracy of rapid motor acts. *Psychological Review*, 86, 415-451.
- Zelaznik, H. (1978). Precueing response factors in choice reaction time: A word of caution. *Journal of Motor Behavior*, 10, 77- 79.
- Zelaznik, H.N., Shapiro, D.C. & Newell, K.M. (1978). On the structure of motor recognition memory. *Journal of Motor Behavior*, 10, 313-323.
- Zelaznik, H.N. (1977). Transfer in rapid timing tasks: An examination of the role of variability in practice. *Psychology of Motor Behavior and Sport*, Vol. 1. (Eds.) D. M. Landers & R. W. Christina. Champaign, IL: Human Kinetics, 1977.
- Zelaznik, H.N. & Spring, J. (1976). Feedback in response recognition and production. *Journal of Motor Behavior*, 8, 309-312.

### c. Book Reviews

- Zelaznik, H.N. (1993). Tutorials in motor behavior II., In *Journal of Biomechanics*, 9, 329-330.
- Zelaznik, H.N. (1991). Advances in Motor Representation and Control. A review of Attention and Performance, Vol. 13: Motor Representation and Control.



Contemporary Psychology, 36, 967-968.

Zelaznik, H.N. (1990). A lexical access theory of stuttering. A review of The structure of stuttering: A psycholinguistic analysis. Contemporary Psychology, 35, 602-603.

Zelaznik, H.N. (1989). Advances in understanding skill learning. Review of The Psychology of Learning and Motivation: Advances in Research and Theory, Vol. 21. Contemporary Psychology, 34, 994-996.

Zelaznik, H.N. (1989). Perspectives on Perception and Action, American Journal of Psychology, 102, 424-428.

Zelaznik, H.N. (1982). Thinking and practicing motor skills. Contemporary Psychology, 27, 444-445. Review of Motor Learning: Concepts and Applications, by R.A. Magill a. Edited Books.

Zelaznik, H.N. (1996). Advances in Motor Learning and Control. Champaign, Il.: Human Kinetics. (308 pages).

## 2. Lectures.

### a. Invited (last few years)

Event and Emergent Timing in Movement Control. Rhythm Perception and Performance, Lili France, July 2009.

Timing in Speech, Language and Movement. Indiana University, Department of Otolaryngology, April 2008.

Event and Emergent Timing in Motor Control. McMaster University, Department of Kinnersiology, Nov. 2009.

Behavioral Analysis of Movement Timing, Mic Ostyn Lecture, Kinesiology, Katholieke Universiteit, Leuven, Dec 2007.

Event and Emergent Timing in Motor Control, R.B. Wilberg Lecture. Canadian Society for Motor Learning and Sport Psychology, Windsor, November 2007

Event and Emergent Timing in Movement Control. University of Montpellier 1, June 21, 2006.

Timing goals and discreteness in movement timing. CNRS, University of Marseille, June 23, 2006.

Timing goals and event and emergent timing, Center for Ecological Psychology and Action, University of Connecticut, March 16, 2007

Coordination of manual and speech motor systems. Paper presented at 1994 Korean Sport Psychology conference, Seoul National University, Sept. 1994 (published in Korean Proceedings).

The speed accuracy trade-off in motor behavior: An historical overview. Paper presented at 1994 International Sport Science Congress, Korean Alliance for Health, Physical Education, Recreation and Dance, Seoul, Korea, Sept. 1994.

Timing with and without a Representation of Time. North American Society for the Psychology Sport and Physical Activity, Senior Scholar Lecture, Vancouver, BC., June 2004.

Event and Emergent Timing in Motor Skills. Winer Memorial Lectures, Purdue University, October 2005.

Emergent and Event Timing: A Model that has its roots in the work of Andras Semjen. Presented at the 20<sup>th</sup> biannual ACAPS meeting, Paris, FR., October, 2005

b. – I have over 150 presentations at various national and international meetings. Traditionally, Zelaznik presents at SCAPPS, NASPSPA as well as the New England Sequencing and Timing Meeting annually. I am happy to provide details upon request.

## RESEARCH GRANTS AND AWARDS RECEIVED

### Extramural Grants.

NIH - Prosodic Elements of American Sign Language. National Institute of Health, NIDCD.  
July 1, 1992 - June 30, 1996, 1 million, direct costs. Zelaznik CO-PI

NIH - "Physiological Correlates of Stuttering", Co-Investigator, (Anne Smith, PI) 1988 –  
May 2013 . [25 years of continuous NIH funding]

NSF – ITR for National Priorities, 9/15/2004 – 9/30/2010 "Skill Learning for Humanoid  
Robots", co-PI, 2004 – 2005, PI 2005-2008 co-PI 2008-2010, \$900,000

NSF – Cognitive Neuroscience - Doctoral Dissertation Research: "The cerebellum  
and cognitive timing processes", PI, 9/2001 – 9/2002, \$15,440.

NIH - "Language Motor Relations in Children's Speech Production", Co-Investigator  
(Lisa Goffman, PI), 12/01 – present, > 1.5 million. NINCDS]

NSF - Nonlinear Dynamics and Bifurcations of Human Posture on Tunable Balance Boards, May  
2013 – April 2016, \$650K, co-PI. (A. Raman, PI)

NSF -

### Journal Appointments:

CONSULTING EDITOR – Journal of Experimental Psychology: Human Perception and  
Performance 2003 – 2009

EXECUTIVE EDITOR - Journal of Motor Behavior - Sept 1, 1989 - August 31, 1996.

EDITORIAL BOARD - Acta Psychologica - Sept 1988 - present.

EDITORIAL BOARD - Journal of Motor Behavior, Sept 1, 1996 – 2004, now considered  
an emeritus editor

SECTION EDITOR, Motor Control, Research Quarterly for Exercise and Sport, 3 year  
appointment, June 1, 1986 - May 31, 1989.reappointed, June 1, 1989. I resigned  
9/1/89 to take over Journal of Motor Behavior editorship.

ASSOCIATE EDITOR, Journal of Motor Behavior. 1979 - Aug 31, 1989

I also regularly review for journals in psychology and motor control.

Grant Reviewing.

Reviewer, National Science Foundation, Memory and Cognitive

Processes. Reviewer, Air Force Office of Scientific Research - Cognition

Section. Reviewer, Natural Sciences and Engineering Council of Canada.

Special Study Section: Small Business Initiative, NICHD.

NIH – NINCDS – Special study section for NIH predoctoral interdisciplinary projects (I did this for two rounds of grants, I believe in early 2003 and 2004)

Site Visit - NIH - Barrow Neurological Institute, Phoenix Sept, 1990. NIA - Roybal Center Program - Study Section - March 1998

Belgium Scientific Council - Reviewer - 1988

National Research Council of Canada - NSERC - regular reviewer in motor control.

Public Science

Purdue University, "The Science of Baseball", taught in Spring 2008 and Fall 2009. Featured on NPR Science Friday. 03/28/2008

<http://www.sciencefriday.com/segment/03/28/2008/science-of-baseball.html>