

CURRICULUM VITAE

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Education

1974 – 1978 Kandidaats, Biology and Chemistry, Nijmegen University, the Netherlands, 1977.
1978 – 1980 M.S., Physiology, University of California at Davis, 1980.
Advisor: Barbara A. Horwitz, Ph.D.
1980 – 1984 Ph.D., Physiology, University of California at Davis, 1984.
Advisor: Robert P. Scobey, Ph.D.

Professional Positions

1977 – 1978 Graduate research, Department of Biochemistry, Nijmegen University, the Netherlands (with Dr. Hans Bloemendal).
1978 – 1979 Research Assistant, Department of Animal Physiology University of California, Davis (with Drs. Barbara A. Horwitz and John M. Horowitz).
1979 – 1981 Teaching and Research Assistant, Department of Animal Physiology, University of California, Davis.
1980 – 1984 Staff Research Associate, Department of Neurology, University of California, Davis (with Drs. Robert P. Scobey and Andrew J. Gabor).
1984 – 1988 Research Associate, Department of Physiology, Northwestern University Medical School, Chicago (with Drs. Alan R. Gibson and James C. Houk).
1988 – 1994 Staff Associate, Div Neurobiology, Barrow Neurological Institute, Phoenix.
1995 – 2002 Assistant Professor in Motor Control and Behavior, Department of Kinesiology, University of Wisconsin, Madison.
2002 – present Associate Professor in Motor Control and Behavior with tenure, Department of Kinesiology, University of Wisconsin, Madison.

Research Funding*Fellowships and Scholarships:*

- 1978 – 1979 Jastro Shields Award, University of California, Davis
 1979 – 1980 Graduate Research Scholarship, University of California, Davis

Grant support (completed):

- National Institute of Health, NINDS Grant R01 NS2737, "Signal analysis of cerebellar cortical neurons," Budget period: 9/1/88 – 12/31/91. Direct costs: \$215,639. Principle Investigator.
- National Institute of Health, NINDS Grant R01 NS24042, "Functional organization of cerebellar output." Budget period: 12/15/93 – 11/30/97. Direct costs: \$452,436. Principle Investigator.
- National Institute of Health, NINDS Grant R01 NS38143, "Eye-hand coordination by cerebellar output neurons." Budget period: 2/12/99 – 1/31/2001, no-cost extension until 1/31/2003. Direct costs: \$175,831. Principle Investigator.
- National Institute of Health, NINDS Grant 1 R01 NS043317, "Function of Magnocellular Red Nucleus in Reach-to-grasp." Budget period: 12/1/2002 – 11/30/2006. No-cost extension: 5/31/2009. Direct costs: \$775,000. Principle Investigator.
- Graduate School Research Competition, University of Wisconsin-Madison, "Cerebellar Control of Reaching to Grasp." Budget period: 6/1/2012 – 6/30/2014. Direct costs: \$23,604. Principle Investigator.

Academic Honors and Awards

- 1978 – 1979 Fulbright Hays Fellowship
 2013 – 2014 Sabbatical Leave w/ Educational Innovation Supplement [Award](#), University of Wisconsin-Madison

Professional Affiliations

- Society for Neuroscience
 Neural Control of Movement Society

Professional service*(National service)**Review of Research Grant Applications:*

- NSPB Review Committee, National Institute of Neurological Disorders and Stroke, National Institute of Health. Ad hoc member of special study section to review program project grant, 1994.
- NSPB Review Committee, National Institute of Neurological Disorders and Stroke, National Institute of Health. Ad hoc member of special study section to review program project grant, 1995.
- NATO Collaborative Research Grant Application, 1996.
- Integrative, Functional, and Cognitive Neuroscience, IFCN1 – Study Section Member (Special Emphasis Panel CSR/ZRG1-IFCN1-03), Center for Scientific Review, National Institute of Health, 3/24/99.
- National Science Foundation, Ad hoc reviewer, 10/30/2001.

Integrative, Functional, and Cognitive Neuroscience - Sensorimotor Integration Study Section,
Temporary member, National Institute of Health, 2/21/2006.

Editorial review of manuscripts:

Brain Behavior and Evolution

Brain Research

Cognitive Systems Research

Experimental Brain Research

Journal of Neurophysiology

Journal of Neuroscience

Journal of Cognitive Neuroscience

Neuroscience

Editorial review of text books:

Elsevier, Fundamental Neuroscience (Squire et al. 2010)

Organization of Symposia, etc.:

Society for Neuroscience, Chair, Special Interest Social. Motor Systems and Sensorimotor Integration: Neural control of movement. 30th Annual Meeting of the Society for Neuroscience, New Orleans, LA, 11/7/2000.

Society for Neuroscience, Chair, Symposium: Descending Motor Pathways and the Control of Whole-Limb Movements. 31st Annual Meeting of the Society for Neuroscience, San Diego, CA, 11/12/2001.

Pat Gorman Golf Academy, LLC. Golf Symposium 2011: Understanding and Maximizing Student Potential, Teaching Effectively and Playing Better Golf! Panel member. Madison, WI, 1/4/2011.

(University service)

Invited to consult Animal Care and Use Committee regarding primate chairing, 1997.

Invited to meet with the NIH site-visit team evaluating the Neuroscience Training Grant, 1997.

Invited interviewer of candidates for tenure-track faculty position in the Department of Physiology, 1999.

Elected Faculty Senator, Department of Kinesiology, 1999 – 2000; 2002 – 2004, 2015 – present

Recruiter of underrepresented minorities for graduate study in Neuroscience at UW-Madison, NSF/HBCU Conference at Tuskegee University, Nov. 22-24, 2002.

Steering Committee, Clinical Neuroengineering Training grant (PIs: Tom Yin and Beth Meyerand)

Admissions Committee, Clinical Neuroengineering Training grant (PIs: Tom Yin and Beth Meyerand)

Reviewer, Internal competition for Brain Research Foundation Seed Grant proposals, 2012

University Committee Memberships

Campus Transportation Committee, 2014 – present

School of Education Committee Memberships

School of Education Facilities Committee, 2003-2005

ITPAC (Information Technology Policy Advisory Committee), 2006 – 2015.
Search Committee, Chief Information Technology Officer, School of Education, 2010 (Daniel Jacobsohn was hired)

Department of Kinesiology Service and Committee Memberships

Executive Committee, 2002 – present
Graduate Studies Committee, 1995 – 2015
Undergraduate Studies Committee, 2015 – 2016
Margaret Kohli Scholarship Committee, 1995 – 1996
Exercise Science Search Committee, 1996 – 1997 (Diffie was hired)
Grievance Committee, 1997 – 1998
Motor Control and Behavior Search Committee, 1997 (Mason was hired)
Merit Review Committee, 1998, 2003
Space, Facilities & Technology Committee, 1999 – 2000 (member); 2002 – present (chair)
Mentor Committee, Internal Review Committee for Assistant Professor Andrea H. Mason, 2002 – 2008 (member); 2008-2009 (chair)
Mentor Committee, Internal Review Committee for Assistant Professor Julia Willbarger, 2003 – 2012
Mentor Committee, Internal Review Committee for Assistant Professor Elizabeth Larson, 2005 – 2009
Exercise Science Search Committee, 2003-2004 (Tanaka was hired)
Exercise Science Search Committee, 2005-2006 (Schrage was hired)
Physical Environment Group. Member, 2008
Electronic Course Evaluation. Member, 2008
Salary Equity Review Committee. Member, 2008
Marsh Center Task Force, 2008 – 2012
Department Chair, summer 2011
Department Chair, summer 2012

Neuroscience Training Program Committee Memberships

Special Events Committee, 1995 – 1997
Admissions Committee, 1999
Diversity Enhancement Committee, 2001 – 2004, member; 2004 – present, chair

Invited Research Presentations

(International)

Tianjin University, P.R. China, 2010
Beijing Sport University, P.R. China, 2010

(National)

Department of Physiology and Pharmacology, University of Nebraska, Lincoln, NE, 1986.
Department of Physiology, Northwestern University, Chicago, IL, 1988.
Department of Physiology, University of Arizona, Tucson, 1989.
Neural Control of Movement Conference, Marco Island, FL, Symposium: "Cerebellar Function during Eye and Limb Movements: Adaptation and Control," 1992.

Society for Neuroscience, Chair and speaker, Symposium: Descending Motor Pathways and the Control of Whole-Limb Movements. 31st Annual Meeting of the Society for Neuroscience, San Diego, CA, 11/12/2001

(University of Wisconsin)

Department of Kinesiology, University of Wisconsin – Madison, 1994.

Neuroscience Training Program, University of Wisconsin – Madison, 9/25/95.

Biomedical Engineering Program, University of Wisconsin – Madison, 3/18/96.

Wisconsin Regional Primate Center, Neurobiology group, University of Wisconsin – Madison, 4/12/96.

Wisconsin Regional Primate Center Seminar, University of Wisconsin – Madison, 11/1/96.

Department of Mechanical Engineering Robotics Seminar, University of Wisconsin – Madison, 11/14/96.

UW Biomedical Society, University of Wisconsin – Madison, 4/5/2000.

Graduate Colloquium, Department of Kinesiology, University of Wisconsin – Madison, 4/7/2000.

Grand Rounds, Department of Neurology, University of Wisconsin – Madison, 9/20/2002.

Neuroscience Training Program (682-675), Neurobiology Seminar, University of Wisconsin – Madison, 10/9/2002 and 10/21/2003.

BME Seminar, University of Wisconsin – Madison, 2/23/2004.

Neuroscience Training Program, Neurobiology Seminar (682-500), University of Wisconsin – Madison, 5/6/2008.

Department of Physiology, Physiology 630, University of Wisconsin – Madison, 3/25/2010.

Department of Kinesiology, University of Wisconsin – Madison, 2010.

Teaching

(Class room teaching)

1979 – 1981 Department of Animal Physiology, University of California at Davis.

Teaching Assistant/Lecturer for courses in Animal Physiology, Basic Electrophysiology, Cellular and Systems Neurophysiology.

1990 – 1991 Division of Neurobiology, Barrow Neurological Institute. Organizer, Neuroscience Teaching Seminar for Graduate Students and Postdoctoral Fellows.

1994 Division of Neurobiology, Barrow Neurological Institute. Guest Lecturer, Neuroanatomy for Neurology Residents.

1995 – present Department of Kinesiology, University of Wisconsin-Madison.

Courses taught:

742-119 – Introduction in Kinesiology

742-300 – Motor Behavior Practicum

742-321 – Introduction to Neural Basis for Movement

742-361 – Introduction to Motor Learning and Performance

742-531 – Neural Control of Movement

742-618 – Biomechanics

938-713 – Neural Basis for Normal and Pathological Movement

742-721 – Neural Basis for Movement

742-861 – Principles of Motor Control and Learning

742-900 – Seminar – Kinesiology
 742-951 – Seminar – Biomechanics
 742-961 – Seminar – Motor Learning and Control
 742-963 – Seminar – Motor Behavior
 742-991 – Research in Physical Education – Theory and Design

2010 Short course in Motor Control and Behavior, Beijing Sport University, P.R. China, 2010
 2011 – 2012 Chinese Champions Program, University of Wisconsin-Madison - Seminar in Motor Control

(Mentor teaching)

M.S. Thesis and Ph.D. Preliminary Examination and Dissertation Committees:

Kristine M. Erickson (Kinesiology, M.S., Major Professor)
 Shashwati Geed (Kinesiology, Ph.D., Major Professor)
 Steve Voss (Kinesiology, M.S.)
 Pam Barrett (Kinesiology, M.S.)
 Laura Wheeler (Kinesiology, M.S.)
 Citlali Lopez-Ortiz (Kinesiology, Ph.D.)
 Victoria Moerchen (Kinesiology, Ph.D.)
 Lynn Rogers (Kinesiology, M.S.)
 Colin Grove (Kinesiology, M.S.)
 Jennifer Bruyn (Kinesiology, M.S.)
 Ankur Garg (Kinesiology, M.S.)
 Nate Oats (Kinesiology, M.S.)
 Matthew Schmidt (Kinesiology, Ph.D.)
 Robert Giachetti (Kinesiology, Ph.D.)
 Brendon Bernardin (Kinesiology, M.S.)
 David Havas (Psychology, Ph.D.)
 Kim Younghoon (Physiology, Ph.D.)
 Joel Shires (Physiology, Ph.D.)
 Julie Hunley (Kinesiology, Ph.D.)
 Patrick Grabowski (Kinesiology, M.S.)
 Drew Rutherford (Kinesiology, M.S.)
 Valerie Joers (Neuroscience Training Program, Ph.D.)
 Ruby Hui-Chun Chen (Kinesiology, Ph.D.)
 Kristin Allison (Communication Disorders, Ph.D.)
 Yeojin Choi (Kinesiology, Ph.D.)
 Carrie Francis (Mechanical Engineering, Ph.D.)
 Kieran Nichols (Kinesiology, M.S.)
 I-chen Chen (Kinesiology, Ph.D.)
 Scott Anderson (Kinesiology, Ph.D., Major Professor)
 Alex Remsik (Kinesiology, Ph.D., Major Professor)

Publications

Journal articles:

- Ramaekers, FCS, Van Kan, PLE, Bloemendal H. A comparative study of Beta-crystallins from ungulates, whale and dog. *Ophthalmic Res* 11: 143-153, 1979.
- Van Kan, PLE, Scobey, RP, Gabor, AJ. Response covariance in cat visual cortex. *Exp Brain Res* 60: 559-563, 1985.
- Houk, JC, Gibson, AR, Harvey, CF, Kennedy, PR, Van Kan, PLE. Activity of primate magnocellular red nucleus (RNm) related to hand and finger movements. *Beh Brain Res* 28: 201-206, 1988.
- Scobey, RP, and Van Kan, PLE. A horizontal stripe of displacement sensitivity in the human visual field. *Vision Res* 31: 99-109, 1991.
- Van Kan, PLE, Houk, JC, and Gibson, AR. Output organization of intermediate cerebellum of the monkey. *J Neurophysiol* 69: 57-73, 1993.
- Van Kan, PLE, Gibson, AR, and Houk, JC. Movement-related inputs to intermediate cerebellum of the monkey. *J Neurophysiol* 69: 74-94, 1993.
- Miller, LE, Van Kan, PLE, Sinkjaer, T, Andersen, T, Harris, GD, and Houk, JC. Correlation of primate red nucleus discharge with muscle activity during free-form arm movements. *J Physiol (Lond)* 469: 213-243, 1993.
- Van Kan, PLE, Horn, KM, and Gibson, AR. The importance of hand use to discharge of interpositus neurones of the monkey. *J Physiol (Lond)* 480: 171-190, 1994.
- Gibson, AR, Horn, KM, Stein, JF, and Van Kan, PLE. Activity of interpositus neurons during a visually guided reach. *J Can Physiol Pharmacol* 74: 499-512, 1996.
- Horn, KM, Van Kan, PLE, and Gibson, AR. Reduction of rostral dorsal accessory olive responses during reaching. *J Neurophysiol* 76: 4140-4151, 1996.
- Van Kan, PLE and McCurdy, ML. Role of primate magnocellular red nucleus neurons in controlling hand preshaping during reaching to grasp. *J Neurophysiol* 85: 1461-1478, 2001.
- Van Kan, PLE and McCurdy, ML. Discharge of primate magnocellular red nucleus neurons during reaching to grasp in different spatial locations. *Exp Brain Res* 42: 151-157, 2002a.
- Van Kan, PLE and McCurdy, ML. Contribution of primate magnocellular red nucleus neurons to timing of hand preshaping during reaching to grasp. *J Neurophysiol* 87: 1473-1487, 2002b.
- Ruhland, JL and Van Kan, PLE. Medial pontine hemorrhagic stroke. *Physical Therapy* 83: 552-566, 2003.
- Geed, S and Van Kan, PLE (2016). Grasp-based functional coupling between reach- and grasp-related components of forelimb muscle activity. *Journal of Motor Behavior*, 1-17. doi:10.1080/00222895.2016.1204265
- Geed, S, McCurdy, M, and Van Kan, PLE (2017). Neuronal correlates of functional coupling between reach- and grasp-related components of muscle activity. *Frontiers in Neural Circuits*, 11(7). doi:10.3389/fncir.2017.00007
- Remsik, AB, Dodd K, Williams L Jr, Thoma J, Jacobson T, Allen JD, Advani H, Mohanty R, McMillan M, Rajan S, Walczak M, Young BM, Nigogosyan Z, Rivera CA, Mazrooyisebdani M, Tellapragada N, Walton LM, Gjini K, van Kan PLE, Kang TJ, Sattin JA, Nair VA, Edwards DF, Williams JC and Prabhakaran V (2018). Behavioral Outcomes Following Brain-Computer Interface Intervention for Upper Extremity Rehabilitation in Stroke: A Randomized Controlled Trial. *Frontiers in Neuroscience*, 12, 752. doi:10.3389/fnins.2018.00752.

Remsik AB, Williams L Jr, Gjini K, Dodd K, Thoma J, Jacobson T, Walczak M, McMillian M, Rajan S, Young BM, Nigogosyan Z, Advani H, Mohanty R, Tellapragada N, Allen J, Mazrooyisebdani M, Walton LM, van Kan PLE, Kang TJ, Sattin JA, Nair VA, Edwards DF, Williams JC and Prabhakaran V (2019). Ipsilesional Mu Rhythm Desynchronization and Changes in Motor Behavior Following Post Stroke BCI Intervention for Motor Rehabilitation. *Frontiers in Neuroscience*, 13: 53. doi: 10.3389/fnins.2019.00053.

Manuscripts in preparation:

Anderson, S and Van Kan, PLE. Benign joint hypermobility syndrome, proprioceptive deficits, and anxiety: Exploring potential links.

Geed, S, Erickson, KM, and Van Kan, PLE. Kinematics of reaching to grasp in persons with compromised cerebellar function.

McCurdy, ML, and Van Kan, PLE. Emergent features in neuronal discharges of magnocellular red nucleus (RNm) compared to interpositus (NI) neurons during reaching to grasp in monkey.

Book chapters:

Gibson, AR and Van Kan, PLE. What is a movement to the cerebellum? Symposium Proceedings: "Perspectives in Motor Control. Brainstorming on the State of Affairs and Future Developments," Paphos (Cyprus), p. 31-33, 1989.

Gibson, AR, Horn, KM, and Van Kan, PLE. Grasping cerebellar function. In: Insights into the Reach to Grasp Movement. K.M.B. Bennett and U. Castiello (editors). North-Holland (Amsterdam): Elsevier Science, B.V., p. 85-108, 1994.

Gibson, AR, Horn, KM, Pong, M, and Van Kan, PLE. Construction of a reach-to-grasp. In: Sensory guidance of movement. G.R. Bock and J.A. Goode (editors). Chichester: Wiley. Novartis Foundation Symposium 218: 232-250, 1998.

Abstracts:

Van Kan, PLE, McClain, R, Gale, G, Seacord, A, Weidner, WJ, and Jones, TA. Brainstem auditory evoked potentials (BAEPs): When is wave-2 a rose and when is it a carnation? *Soc Neurosci Abstr* 5: 208, 1979.

Van Kan, PLE, Jones, TA, and Weidner, WJ. Intra-axial versus peripheral components of wave-1 in brainstem auditory evoked potentials (BAEPs). *Fed Proc* 39(3): 74, 1980.

Van Kan, PLE, Morgan, C, Horowitz, JM, and Horwitz, BA. Na⁺ dependent glucose transport in dystrophic and normal hamster ileum. Federation of American Societies of Experimental Biology, Annual Meeting, 1981.

Scobey, RP and Van Kan, PLE. Recording from cortical neurons is aided by computer: Detection of signals in noise and control of microelectrode advancement. Fifth UCD Biomedical Engineering Symposium, University of California, Davis, 1982.

Scobey, RP, Van Kan, PLE, and Toepfer, LA. Visual motion displacement sensitivity of cat X, Y, and W cells. *Physiologist* 26(4): A-111, 1983.

Van Kan, PLE and Scobey, RP. Visual motion displacement thresholds of X, Y, and W cells in the lower visual pathways of the cat at various durations of movement. *Soc Neurosci Abstr* 10(1): 296, 1984.

- Gibson, AR, Harvey, CF, Houk, JC, Kennedy, PR, and Van Kan, PLE. Significance of cortical input to the monkey red nucleus. *J Physiol (Lond)* 371: 47P, 1985.
- Van Kan, PLE, Houk, JC, and Gibson, AR. Body representation in the nucleus interpositus of the monkey. *Neurosci Lett Suppl* 26: S231, 1986.
- Van Kan, PLE, Houk, JC, and Gibson, AR. Response properties of cerebellar afferents during specific movements. *Soc Neurosci Abstr* 12(1): 578, 1986.
- Van Kan, PLE, Houk, JC, and Gibson, AR. Response characteristics of mossy fiber afferents during forelimb movements. *Neurosci Suppl* 22: S632, 1987.
- Van Kan, PLE, Kruberg, WG, and Houk, JC. Identification of granular layer units in cerebellar cortex. *Soc Neurosci Abstr* 13(1): 603, 1987.
- Miller, L, Van Kan, PLE, and Houk, JC. Task dependence of cross correlations of monkey red nucleus and forelimb EMG. *Soc Neurosci Abstr* 14(2): 954, 1988.
- Horn, KM, van Kan, PLE, and Gibson, AR. Responses of cat external cuneate neurons during passive and active movements. *Soc Neurosci Abstr* 15(1): 179, 1989.
- Horn, KM, Van Kan, PLE, and Gibson, AR. Red nucleus discharge during reaching in cats. *Soc Neurosci Abstr* 16(1): 154, 1990.
- Van Kan, PLE, Horn, KM, and Gibson, AR. The importance of combined arm and hand use for discharge of interpositus neurons. *European J Neurosci Suppl* 3: 300, 1990.
- Gibson, AR, Horn, KM, and Van Kan, PLE. Interpositus discharge during reaching. *Soc Neurosci Abstr* 16(1): 637, 1990.
- Van Kan, PLE, Horn, KM, and Gibson, AR. Effects of loading on red nucleus discharge during reaching in the cat. *European J Neurosci Suppl* 4: 317, 1991
- Smith, JJ, Gibson, AR, Horn, KM, and Van Kan, PLE. Cerebellar projections to spinal motoneurons. *Soc Neurosci Abstr* 17(2): 1573, 1991.
- Horn, KM, Van Kan, PLE, and Gibson, AR. The role of cat red nucleus during reaching. *Soc Neurosci Abstr* 18(1): 407, 1992.
- Van Kan, PLE, Van Duin, B, Gibson, AR, Horn, KM, and Voogd, J. Reticular projections of the cat lateral cerebellar nucleus. *Soc Neurosci Abstr* 18(1): 854, 1992.
- Gibson, AR, Van Kan, PLE, and Horn, KM. Nuclear cell discharge during reaching. Proceedings of the XXXII Congress of the IUPS, Glasgow, 1-6 August, 1993, Abstract 230.6.
- Porter, CM, Van Kan, PLE, Horn, KM, Bloedel, JR, and Gibson, AR. Functional divisions of cat rMAO. *Soc Neurosci Abstr* 19(2): 1216, 1993.
- Horn, KM, Van Kan, PLE, and Gibson, AR. Effects of red nucleus stimulation on forelimb EMG activity during reaching in the cat. *Soc Neurosci Abstr* 19(2): 1278, 1993.
- Horn, KM, Van Kan, PLE, and Gibson, AR. Modulation of olivary sensitivity during reaching. *Soc Neurosci Abstr* 20(1): 21, 1994.
- Horn, KM, Van Kan, PLE, Ruigrok, TGH, and Gibson, AR. Inferior olive sensitivity is reduced by increased cerebellar output. *Soc Neurosci Abstr* 22(2): 1092, 1996.
- McCurdy, ML, Kirsch, KA, Boyce, CJ, and Van Kan, PLE. Magnocellular red nucleus discharge in monkey during reaching to grasp in different directions. *Soc Neurosci Abstr* 23(1): 18, 1997.
- Van Kan, PLE and McCurdy, ML. Primate magnocellular red nucleus discharge during reaching with different types of grasp. *Soc Neurosci Abstr* 24(2): 1407, 1998.
- Van Kan, PLE, Jacobson, DR, Boyce, CJ, and McCurdy, ML. Interpositus and red nucleus discharge in monkey during reaching to grasp. *Soc Neurosci Abstr* 25(2): 1653, 1999.

- Van Kan, PLE, Ruhland, JL, and McCurdy, ML. Primate magnocellular red nucleus discharge during reaching with different types of grasp. *Soc Neurosci Abstr* 26(2): 688, 2000.
- Van Kan, PLE and McCurdy, ML. Cerebellar output neurons control the timing of hand preshaping within reach-to-grasp movements in monkeys. *Soc Neurosci Abstr* 27, Program No. 293.6, 2001.
- Van Kan, PLE, Cheney, PD, Drew, T, and Lemon RN. Symposium. Descending motor pathways and the control of whole-limb movements. *Soc Neurosci Abstr* 27, Program No. 339, 2001.
- Pong, MP, Horn, KM, Van Kan, PLE, and Gibson, AR. Discharge differences between red nucleus cells during the reach to grasp. *Soc Neurosci Abstr* 28, Program No. 462.7, 2002.
- Erickson, KM and Van Kan, PLE. Kinematics of reach-to-grasp movements in subjects with cerebellar deficits. *Soc Neurosci Abstr* 29, Program No. 597.20, 2003.
- Erickson, K. and Van Kan, P.L.E. Kinematics of reach-to-grasp movements in subjects with cerebellar deficits. American Physical Therapy Association – Combined Sections Meeting, San Diego, CA. Feb. 3, 2006.
- Van Kan, PLE and McCurdy, ML Emergent features of signal processing from cerebellar output to magnocellular red nucleus (RNm). *Soc Neurosci Abstr* 33, Program No. 512.11, 2007.
- Geed, S, McCurdy, ML, and Van Kan, PLE. Relative importance of intended hand use versus target location for muscle synergies that transport the hand during reaching to grasp. *Soc Neurosci Abstr* 36, Program No. 492, 2010.
- Geed, S, McCurdy, ML, and Van Kan, PLE. Primate magnocellular red nucleus (RNm) encodes muscle synergies during reaching to grasp. *Soc Neurosci Abstr* 37, Program No. 82, 2011.
- Geed, S, McCurdy, ML, and Van Kan, PLE. Contribution of Interposito-rubrospinal Pathway to Muscle Synergies Underlying Reaching to Grasp. *Soc Neurosci Abstr* 39, Program No. 650.13, 2013.
- Van Kan, PLE, McCurdy, ML, and Geed, S. Primate magnocellular red nucleus neurons (RNm) encode muscle synergies during reaching to grasp. International Congress on NeuroRehabilitation and Neural Repair, Maastricht, the Netherlands, May 21-22, 2015.
- Schreiner, Rodney, Van Kan, Peter, and Shakhashiri, Bassam. Demonstrations and Perception: Visual, Auditory, Somatosensory, and Proprioceptive Aspects. 42nd Annual UW System Chemistry Faculties Meeting, University of Wisconsin-Madison, Oct. 23-24, 2015,
- Remsik AB, Dodd K, Gjini K, van Kan PLE, Nair V, Farrar Edwards D, Prabhakaran V. Ipsilesional Mu Changes Track with Behavioral Changes in UE BCI Intervention in Stroke Survivors. International Stroke Conference, Honolulu, Hawaii, Feb. 6–8, 2019.