

V I T A

ARTHUR F. KRAMER

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Education and Degrees:

- Ph.D. 1984 University of Illinois
Major: Cognitive Psychology
Minors: Statistics, Neuroscience
- B.A. 1975 State University of New York at Stony Brook
Stony Brook, New York.
Major: Psychology

Professional History:

2016-present, Senior Vice Provost for Research and Graduate Education, Professor of Psychology and Mechanical and Industrial Engineering, Northeastern University, Boston, MA.

2010-2016, Director, Beckman Institute for Advanced Science & Technology, University of Illinois at Urbana-Champaign. An interdisciplinary research institute with approximately 1500 researchers (see: <http://www.beckman.illinois.edu/index.aspx>).

2008-2011, Zukunftskolleg Senior Fellow, University of Konstanz.

2007-2016, Swanlund Endowed Chair in Neuroscience and Psychology, University of Illinois.

2005-2008, Richard and Margaret Romano Professional Scholar, University of Illinois.

2004-2010, Director, Biomedical Imaging Center, University of Illinois at Urbana-Champaign (see: <http://bic.beckman.illinois.edu/>).

2003-2008, Co-Director, NIH Center for Healthy Minds, University of Illinois at Urbana-Champaign.

1998-2010 Co-Chair, Intelligent Human-Computer Interaction Main Research Theme, Beckman Institute for Advanced Science and Technology, University of Illinois.

1994-present Professor, Department of Psychology, Beckman Institute, Institute of Aviation, Campus Neuroscience Program, University of Illinois at Urbana-Champaign.

1989-1994 Associate Professor, Department of Psychology, Beckman Institute, Department of Mechanical and Industrial Engineering, Institute of Aviation, University of Illinois, Champaign, Illinois.

1989-2010 Group Coordinator. Human Perception and Performance Unit. Beckman Institute, University of Illinois.

1984-1989 Assistant Professor, Department of Psychology, Department of Mechanical and Industrial Engineering, and Institute of Aviation, University of Illinois, Champaign, Illinois.

1983-1984 Research Associate, Cognitive Psychophysiology Laboratory, University of Illinois, Champaign, Illinois.

1982 Teaching Associate, University of Illinois, Champaign, Illinois.

1979-1983 Research Assistant, Cognitive Psychophysiology Laboratory, University of Illinois, Champaign, Illinois.

1978-1979 Staff specialist, Operations Research Division, Southern New England Telephone Company, New Haven, CT.

Research Interests:

Cognition and aging, selective and divided attention, acquisition and utilization of cognitive skills, cognitive neuroscience, and human-computer interaction.

Professional Societies and Appointments:

Member, Scientific Advisory Council, Beckman Foundation
Fellow, American Psychological Association (Divisions 3, 20 & 21)
Fellow, American Psychological Society
Member of the Executive Committee (& treasurer), International Association for the Study of Attention and Performance (2002-2010)
Member of the Scientific Advisory Board, Institute for the Study of Aging (2001 to present)
Human Factors Society
Society for Psychophysiological Research
Psychonomic Society
Cognitive Neuroscience Society
Association for Research on Vision and Ophthalmology

Editorial Duties:

Associate Editor: Perception and Psychophysics (1993-1999)

Editorial Boards: Human Factors (1984-present), Acta Psychologica (1995-present), Perception & Psychophysics (1999-present), Psychology and Aging (1999-present), Visual Cognition (2005-present), Journal of Experimental Psychology: Applied (2000-2005, 2007-2010), Journal of Experimental Psychology: Human Performance and Perception (2000 – 2006), Psychonomic Bulletin and Review (2000 – 2009).

Ad Hoc Reviewer for: Psychophysiology, Journals of Experimental Psychology, Biological Psychology, Memory and Cognition, IEEE Transactions on Systems, Man and Cybernetics, The Journal of Neuroscience, Psychological Science, Journal of Cognitive Neuroscience, Psychological Review, Experimental Aging Research, Cognitive Psychology, Journals of Gerontology, Brain Research, Neurobiology of Aging, Cerebral Cortex, Neuroimage, Journal of Cognitive Neuroscience, Journal of Neuroscience, PNAS.

External Research Support:

Canadian Institutes of Health, “Reshaping the path of mild cognitive impairment by refining exercise prescription: Understanding training type and exploring mechanisms” (Liu-Ambrose et al), 2015-2020, \$ 900,150.

Abbott Nutrition, “Retrospectively studying the effects of early life lutein intake on cognitive function and brain health in preadolescent children: The RETLU study” (with N. Khan et al), 2015-2017, \$ 179,433.

Abbott Nutrition, “Longitudinally dynamic biomarkers of healthy brain aging in the Illinois elderly adult cohort” (with A. Barbey et al), 2015-2017, \$ 732,819.

Abbott Nutrition, “Optimizing assessment tools for determining nutritional enhancement of learning and memory” (with N. Cohen et al), 2015-2017, \$ 179,433.

Australian Research Council, Discovery award, “Optimal strategies for collaborative visual search” (PI: J. McCarley), 2015-2019, 502,789 Australian dollars.

Abbott Nutrition, “Nutritional Enhancement of Cognitive and Physical Performance in Active Duty Air Force Personnel: A Randomized Controlled Trial” (PI: A. Barbey), 2014-2017, \$ 1,008,068.

Intelligence Advanced Projects Agency (IARPA), “An integrative system for enhancing fluid intelligence (*Gf*) through human cognitive, fitness, HD-tDCS, and nutritional intervention (INSIGHT)”, (PI: A. Barbey), 2013-2017, \$ 12,919,000.

CIHR, Institute of Aging (Canada), “Gaining Insight to Brain-Behavior Relationships: Developing a Neuroepidemiology Study Using the Canadian Longitudinal Study on Aging” (PI: Teresa Liu-Ambrose), 2013-2014, \$ 24,620.

Keck Futures Initiative, “Nature and cognitive restoration: How does the brain behave in a non-digital world?”, 2013-2014, \$ 50,000.

Office of Naval Research, “Portable adaptive cognitive training” (with Alexandra Geyer), 2012-2014, \$ 750,000.

Swedish Research Council, “Be smart, Exercise your heart: Using PET/CT to study physical exercise effects on the dopaminergic system in relation to aging and cognition”, Carl-Johan Olsson (PI), 2012-2016, 3,000,000 kronor.

National Institute of Health, “Cognitive regulation and training”, S. Mullen (PI), 2012-2014, \$ 434,891.

National Institute of Child Health and Human Development, “Enhancing children’s cognitive and brain health through physical activity training”, 2012-2018, \$ 3,075,701.

Abbott Nutrition, “Synergistic effects of exercise and nutrition on cognitive and brain health of older adults: A randomized controlled trial”, 2012-2017, \$ 2,495,272.

Abbott Nutrition, Nutrient biomarker patterns, cognitive function, and MRI measures of brain aging”, A. Barbey (PI), 2012-2016, \$ 845,301.

Abbott Nutrition, “Optimizing assessment tools for determining nutritional enhancement of learning and memory”, 2012-2016, N. Cohen (PI), \$ 715,909.

Abbott Nutrition, “The effects of fortified nutritional supplementation on cognition, memory, and achievement”, 2012-2016, C. Hillman (PI), \$ 1,547,371.

National Institute on Aging, “Acting out: Influence of an acting intervention on cognition and brain function”, 2011-2017, \$ 1,408,500.

Office of Naval Research, “The gaze contingent multi-resolutional display blur detection as a measure of the useful field of view”, 2011-2014, \$ 1,049,799.

Abbott Nutrition, “Grand Challenge, Administrative Core” (with Neal Cohen- PI and Gene Robinson) 2011-2017, \$ 1,782,625.

National Institute on Aging, “Aging, fitness and neurocognitive function”, NIH merit award, 2005-2017, \$ 6,987,000.

National Institutes of Health, “Controlling sensitivity bias in functional MRI studies due to field inhomogeneity” (with Brad Sutton – PI), 2010-2012, \$ 404,995.

American Federation for Aging, “Age-related demyelination in motor pathways predicts reduction in fine motor control” (with Brad Sutton – PI), 2010-2011, \$ 75,000.

National Institutes of Health, “Brain & behavioral correlates of fitness, cerebrovascular function and aging” (with M. Fabiani – PI, G. Gratton & B. Sutton), 2009-2011, \$ 944,526.

Office of Naval Research, “Capitalizing on animal and human research on brain plasticity to enhance training and performance” MURI award, 2007-2013, \$ 6,750,000.

National Institute on Aging, The senior odyssey: A test of the engagement hypothesis of cognitive aging (with E. Stine-Morrow - PI, D. Morrow, & D. Park), 2007-2012, \$ 2,903,000.

National Institute on Aging, “Aging and multi-task training”, 2005-2010, \$ 1,499,600.

Qualcom Inc, “Annoying cell phone research”, 2006-2007, \$ 158,951 (with Charissa Lansing, Jason McCarley, Jont Allen & Mark Hasagawa-Johnson).

Institute for the Study of Aging, “Enhancing cognitive and brain function of older adults, 2005-2007, \$ 250,000.

Office of Naval Research, “A cognitive neuroscience approach for enhancing training and performance”, 2005-2007, \$ 625,780.

DARPA, “Assessing mental workload in single and dual-tasks with event-related functional magnetic resonance imaging”, 2004, \$ 80,000.

Office of Naval Research, “Experiments to address display interface and training issues for the Navy’s DCL system”, 2004-2007, \$ 282,347.

Riken Brain Science Institute, “Enhancing cognitive and brain plasticity of older adults”, 2003-2006, \$81,000 (with Stan Colcombe).

National Institute on Aging, “Roybal Center for Healthy Minds”, 2003-2008, \$ 1,806,844 (with Denise Park).

National Institute on Aging, "Exercise, Executive Processes, and the Aging Brain", 2003-2006, \$ 936,148 (with Charles Hillman & Edward McAuley).

General Motors Corporation, "Towards an understanding of the influence of speaking and speech comprehension on the management of distraction and automotive workload", 2004-2005, \$ 160,000 (with Gary Dell, Kay Bock & Susan Garnsey).

National Institute on Aging, "Studying neurovascular coupling in aging with optical methods", 2002-2007, \$ 3,424,091 (with Monica Fabiani, Gabrielle Gratton et al).

Defense Advanced Research Projects Agency, "Optical imaging analysis of the frontal lobes and executive function", 2002-2005, \$ 1,204,000 (with Monica Fabiani, Gabrielle Gratton et al).

General Motors Corporation, "Human factors research for the next generation vehicle: Reducing driver distraction", 2001-2005, \$ 775,000 (gift).

General Motors Corporation, "Evaluation of the efficacy of proximity warning devices", 2001-2002, \$ 364,875 (with Hank Kaczmarski).

National Institute on Aging, "Aging, Fitness, and Neurocognitive Function", 2001-2005, \$ 1,659,423.

National Institutes of Health, "Memory during visual search", 2002-2005, \$ 446,623 (With M. Peterson & J. McCarley)

Institute for the Study of Aging, "Influence of fitness on the neurocognitive function of older adults", 2001-2004, \$ 433,054.

Federal Aviation Administration, "Visual search for complex shapes", 2001-2002, \$ 88,000 (with J. McCarley & C. Wickens)

National Science Foundation, "Electrostatic Haptic Displays for the Visually Impaired, 2000–2002, \$395,497 (with D. Beebe).

Army Research Laboratory, "Multimodal display augmentation", 1999-2002, \$ 992,000 (with R. Bargar & D. Beebe).

National Institute on Aging, "Aging and dual-task performance: Training interventions", 1998-2002, \$ 613,409.

Federated Army Research Laboratory, "Advanced interactive displays", 1996-2001, \$ 9,359,460 (with T. Huang, G. McConkie).

National Institute of Health, "Exercise, Aging and Psychological Function", 1995-2000, \$ 971,546 (with E. McAuley, M. Banich & N. Cohen).

Office of Naval Research, "Pilot Skill Development and Visual Scanning", 1996-1999, \$ 396,663 (with S. Doane & C. Wickens).

National Institute of Health, "Cognitive plasticity and aging: Dual-task training effects", 1994-1998, \$ 426,182.

Federal Aviation Administration, "Helicopter Flight into Obstacle Rich Environments", 1996-1997, \$ 423,455 (with C. Wickens).

Office of Naval Research, "Functional imaging studies of cognitive processing", 1993-1996, \$ 77,421.

Office of Naval Research, "Visual scanning as an index of pilot skill acquisition", 1992-1995, \$ 476,125 (with C. Wickens).

Office of Naval Research, "Interaction of top-down and bottom-up processes in the control of attention in the visual field", 1992-1996, \$ 187,445.

National Institute of Health, "Development of skilled performance in the elderly", 1991-1994, \$237,799.

Office of Naval Technology, "Biopsychometric assessment of workload and performance decrements", 1992-1993, \$ 35,000.

Office of Naval Research, "Control of the mind's eye: The dynamics of the distribution of visual attention", 1989-1992, \$162,346.

Office of Naval Research, "Effects of fatigue on skilled performance", 1990-1992, \$65,000.

Office of Naval Technology, "Closed loop adaptive aiding", 1989-1992, \$127,800.

NASA Ames Research Center, "The assessment and use of workload measurement techniques in the acquisition and performance of complex skills", 1990-1992, \$90,000.

Boeing-Vertol, "Workload assessment in the LHX helicopter", 1989-1990, \$286,000 (with C. Wickens).

NASA Ames Research Center, "The assessment and prediction of mental metrics", 1987-1990, \$191,452.

National Institute of Health, "Aging and the Development of Automatic Processing", 1989-1990, \$38,050.

National Institute of Health, "Event-related brain potentials and memory", 1988-1991, \$322,177 (with E. Donchin).

Honeywell Inc., "Focused attention in depth", 1988-1989, \$30,000 (with G. Andersen).

NASA Ames Research Center, "Event-related brain potential indices of cognitive workload and automaticity", 1985-1988, \$60,090.

Northern Telecom, Inc., "Large scale technological innovation: An assessment of training effectiveness", 1986-1988, \$101,759 (with C. Hulin).

NIH Biomedical Research Support Grant, "The allocation of spatial attention in a dynamic visual environment", 1985-1987, \$11,470.

Air Force Office of Scientific Research, "The event-related brain potential as an index of information processing, cognitive activity, and skill acquisition", 1984-1988, \$508,647 (with M. Coles & E. Donchin).

Equipment, Conference, and Training Grants:

NIMH, "Training in cognitive psychophysiology", 2008-2013, \$ 1,173,455 (PI: G Miller, Co-PI with Fabiani, Garnsey, Cohen, Heller, Verona & Gratton).

NIMH, "Training in cognitive psychophysiology", 2003-2008, \$ 1,094,520 (PI: G Miller, Co-PI with Fabiani, Garnsey, Cohen, Heller & Gratton).

National Science Foundation, "LIVE, Laboratory for Immersive Virtual Experimentation", 2000 – 2003, \$ 753,000 (PI: T. Huang, Co-PI with R. Brady).

Department of Defense University Infrastructure grant, "Functional Magnetic Resonance Imaging of Perception, Cognition and Action", 1999-2000, \$ 80,000.

NIMH, "Training in cognitive psychophysiology", 1996-2001, \$ 1,207,015 (PI: E. Donchin, Co-PI with Coles, Garnsey, Heller & Miller).

IBM University Research Initiative, "Computational analysis of the neurological underpinnings of cognitive function", 1994, \$26,500.

American Psychological Association Competitive Conference Award Program, "Converging operations in the study of visual selective attention", 1993-1994, \$ 17,500 (with M. Coles & G. Logan).

IBM University Research Initiative, "High performance graphical computing for functional magnetic resonance imaging data", 1993, \$ 52,890.

NIMH, "Training in cognitive psychophysiology", 1992-1996, \$438,839 (PI: E. Donchin, Co-PI with Coles, Garnsey, Harper & Miller).

National Science Foundation, "Laboratory course in Human-Computer Interface Design", 1992-1994, \$47,992.

International Business Machines, "Multimedia laboratory for Human-Computer Interaction", 1992, \$ 31,200.

Apple Computer Company, "Scientific visualization", 1990, \$ 26,860.

International Business Machines, "Interdisciplinary laboratory in Human-Computer Interaction, 1985-1986, \$ 43,400 (with B. Ross).

Teaching:

Graduate Courses:

- Methods in Human Factors and Ergonomics
- Human Performance and Engineering Psychology
- Human-Computer Interaction
- Seminar in Psychophysiology
- Seminar in Attention
- Behavioral Science for Medical Students
- Seminar in Cognition and Aging

Undergraduate courses:

- Human-Computer Interaction Laboratory
- Engineering Psychology
- Cognition and Aging
- Visual Attention
- Honors Seminar

Journal Articles:

Voss, M.W., Weng, T.B., Burzynska, A.Z., Wong, C.N., Clark, R., Fanning, J., Awick, R., Olson, E.O., McAuley, E. & Kramer, A.F. (in press). Fitness, but not physical activity, is related to functional integrity of brain networks associated with aging. Neuroimage.

Noice, T., Helga, N. & Kramer, A.F. (in press). Theatre Arts for Improving Cognitive and Affective Health. Activities, Adaptation and Aging.

Pindus, D.M., Drollette, E.S., Scudder, M.R., Khan, N.A., Raine, L.B., Sherar, L.B., Esliger, D.W., Kramer, A.F. & Hillman, C.H. (in press). Associations among moderate to vigorous physical activity, indices of cognitive control, and academic achievement in preadolescents. The Journal of Pediatrics.

Verstynen, T.D., Burzynska, A. Z., Voss, M.W., Prakash, R.S., Chaddock-Heyman, L., Wong, C.N., Fanning, J., Awick, E., Gothe, N., Phillips, S.M., Mailey, E., Ehlers, D., Olson, E.A., Wojcicki, T., McAuley, E., Kramer, A.F. & Erickson, K.I. (in press). White matter microstructure mediates the relationship between cardiorespiratory fitness and spatial working memory in older adults. Neuroimage.

Mullen, S.P., Olson, E.A., White, S.A., Szabo, A.N., Wojcicki, T.R., Mailey, E.L., Gothe, N.P., Fanning, J.T., Kramer, A.F. & McAuley, E. (in press). Measuring enjoyment of physical activity in older adults: Invariance of the physical activity enjoyment scale (PACES) across groups and time. International Journal of Behavioral Nutrition and Physical Activity.

Mackenzie, M.J., Zuniga, K.E., Raine, L.B., Awick, E.A., Hillman, C.H., Kramer, A.F. & McAuley, E. (2016). Associations between physical fitness indices and working memory in breast cancer survivors and age-matched controls. Journal of Women's Health, 25(1), 99-108.

Ringer, R.V., Throneburg, Z., Johnson, A.P., Kramer, A.F. & Loschky, L.C. (2016). Impairing the useful field of view in natural scenes: Tunnel vision versus general interference. Journal of Vision, 16(2) 7, 1-25.

Zuniga, K.E., Mackenzie, M.J., Kramer, A.F. & McAuley, E. (2016). Subjective memory impairment and well-being in community dwelling older adults. Psychogeriatrics, 16, 20-26.

Banducci, S., Ward, N., Gaspar, J., Schab, K., Crowell, J., Kaczmarek, H. & Kramer, A.F. (2016). The effects of cell phone and text message conversations on simulated street crossing. Human Factors, 58(1), 150-162.

Raine, L.B., Scudder, M.R., Saliba, B.J., Kramer, A.F. & Hillman, C. (2016). Aerobic fitness and context processing in preadolescent children. Journal of Physical Activity and Health, 13, 94-101.

Watson, P., Paul, E.J., Cooke, G.C., Ward, N., Monti, J.M., Horecka, K.M., Allen, C.M., Hillman, C.H., Cohen, N.J., Kramer, A.F. & Barbey, A.K. (2016). Underlying sources of cognitive-anatomical variation in multi-modal neuroimaging and cognitive testing. Neuroimage, 129, 439-449.

Nagamatsu, L.S., Weinstein, A.M., Erickson, K.I., Fanning, J., Awick, E.A., Kramer, A.F. & McAuley, E. (2016). Exercise mode moderates the relationship between mobility and basal ganglia volume in healthy older adults. Journal of the American Geriatric Society, 64, 102-108.

Schwarb, H., Watson, P.D., Campbell, K., Shandler, C.L., Monti, J.M., Cooke, G.E., Wang, J.X., Kramer, A.F. & Cohen, N.J. (2015). Competition and cooperation among relational memory representations. PLOS One, 10(11), e0143832.

Barcelos, N., Shah, N., Cohen, K., Mulkerrin, E., Arciero, P.J., Cohen, B.D., Kramer, A.F. & Anderson-Hanley, C. (2015). Aerobic and Cognitive Exercise (ACE) Pilot Study for Older Adults: Executive

Function Improves with Cognitive Challenge while Exergaming. Journal of the International Neuropsychological Society, 21, 768-779.

Burzynska, A., Wong, C., Voss, M., Gothe, N., Fanning, J., McAuley, E. & Kramer, A.F. (2015). Physical activity is linked to greater moment-to-moment variability in spontaneous brain activity in older adults. PLOS One, DOI: 10.1371/journal.pone.0134819, 1-18.

Zuniga, K., Mackenzie, M., Roberts, S.A., Raine, L.B., Hillman, C.H. Kramer, A.F. & McAuley, E. (2015). Relationship between fruit and vegetable intake and interference control in breast cancer survivors. European Journal of Nutrition, DOI 10.1007/s00394-015-0973-3, 1-8.

Hussey, E.K., Ward, N., Christianson, K. & Kramer, A.F. (2015). Language and memory improvements following tDCS of the left prefrontal cortex. PLOS One, DOI:10.1371/journal.pone.0141417, 1-31.

Carlson, M.C., Kuo, J.H., Chuang, Y.F., Harris, G., Albert, M., Erickson, K.I., Kramer, A.F., Parisi, J.M., Xue, Q.L., Tan, E., Tanner, E.K., Gross, A., Seeman, T.E., Gruenwald, T., McGill, S., Rebok, G.W. & Fried, L.P. (2015). Impact of the Baltimore Experience Corps trial on cortical and hippocampal volumes. Alzheimer's & Dementia, 11, 1340-1348.

Baniqued, P., Allen, C.M., Kranz, M.B., Johnson, K., Sipolins, A., Dickens, C., Ward, N., Geyer, A. & Kramer, A.F. (2015). Working memory, reasoning, and task switching training: Transfer effects, limitations, and great expectations? PLOS One, DOI:10.1371/journal.pone.0142169, 1-29.

Chaddock-Heyman, L. Erickson, K.I., Kienzler, C., King, M., Pontifex, M.B., Raine, L.B. Hillman, C.H. & Kramer, A.F. (2015). The role of aerobic fitness in cortical thickness and mathematics achievement in preadolescent children. PLOS One, DOI:10.1371/journal.pone.0134115, 1-11.

Chaddock-Heyman, L., Mackenzie, M.J., Zuniga, K., Cooke, G.E., Awixk, E., Roberts, S., Erickson, K.I., McAuley, E. & Kramer, A.F. (2015). Higher cardiorespiratory fitness levels are associated with greater hippocampal volume in breast cancer survivors. Frontiers in Human Neuroscience, 9(465), doi: 10.3389/fnhum.2015.00465, 1-8.

Zuniga, K., Mackenzie, M., Kramer, A.F. & McAuley, E. (2015). Subjective Memory Impairment and Well-Being in Community-Dwelling Older Adults. Psychogeriatrics, doi:10.1111/psyg.12112, 1-7.

Wong, C.N., Chaddock-Heyman, L., Voss, M., Burzynska, A., Erickson, K.I., Prakash, R.S., Szabo-Reed, A., Phillips, S.M., Wojciki, T., Mailey, E., McAuley, E. & Kramer, A.F. (2015). Brain activation during dual-task processing is associated with cardiorespiratory fitness and performance in older adults. Frontiers in Aging Neuroscience, August, doi: 10.3389/fnagi.2015.00154, 1-10.

Yamani, Y., McCarley, J.S. & Kramer, A.F. (2015). Workload capacity across the visual field in young and old adults. Archives of Scientific Psychology, 3, 62-73.

Lee, H., Boot, W.R., Baniqued, P.L., Voss, M.W., Prakash, R.S., Basak, C. & Kramer, A.F. (2015). The Relationship between Intelligence and Training Gains is Moderated by Training Strategy. PLOS One, 10(4), e0123259.

Burzynska, A., Wong, C., Chaddock-Heyman, L., Olson, E.A., Gothe, N., Knecht, A., Voss, M., McAuley, E. & Kramer, A.F. (2015). White matter integrity, hippocampal volume, and cognitive performance of a world-famous nonagenarian track and field athlete. Neurocase. On-line – August 3, 2015, <http://dx.doi.org/10.1080/13554794.2015.1074709>.

Erickson, K.I., Hillman, C. & Kramer, A.F. (2015). Physical Activity, Brain, and Cognition. Current Opinion in Behavioral Sciences, 4, 27-32.

Khan, N.A., Raine, L.B., Drollette, E.S., Scudder, M.R., Kramer, A.F. & Hillman, C.H. (2015). Dietary Fiber is Positively Associated with Cognitive Control among Prepubertal Children. Journal of Nutrition, 145(1), 143-149.

Erickson, K.I., Leckie, R.L., Weinstein, A.M., Radchenkova, P., Sutton, B.J., Prakash, R.S., Chaddock-Heyman, L., McAuley, E. & Kramer, A.F. (2015). Education mitigates age-related decline in N-Acetylaspartate levels. Brain & Behavior, 5(3), e00311.

Burzynska, A., Wong, C., Voss, M.W., Cooke, G.E., McAuley, E. & Kramer, A.F. (2015). White matter integrity supports BOLD signal variability and cognitive performance in the aging human brain. PLoS One, 1-17, April, DOI:10.1371/journal.pone.0120315.

Awick, E.A., Wojciki, T.R., Olson, E.A., Fanning, J., Chung, H.D., Zuniga, K., Mackenzie, M., Kramer, A.F. & McAuley, E. (2015). Differential exercise effects on quality of life and health-related quality of life in older adults: A randomized controlled trial. Quality of Life Research, 24(2), 455-462.

Monti, J., Cooke, G., Watson, P., Voss, M., Kramer, A.F. & Cohen, N.J. (2015). Relating hippocampus to relational memory processing across domains and delays. Journal of Cognitive Neuroscience, 27(2), 234-245.

Prakash, R.S., Voss, M.W., Erickson, K.I. & Kramer, A.F. (2015). Moving towards a healthier brain and mind. Annual Review of Psychology, 66, 769-797.

Sahakian, B.J. & Kramer, A.F. (2015). Cognitive enhancement. Current Opinion in Behavioral Sciences, 4, v-vii.

Khan, N.A., Baym, C.L., Monti, J.M., Raine, L., Drollette, E., Scudder, M., Moore, R.D., Kramer, A.F., Hillman, C.H. & Cohen, N.J. (2015). Central Adiposity is Negatively Associated with Hippocampal-Dependent Relational Memory among Overweight and Obese Children. Journal of Pediatrics, 166(2), 302-308.

Noice, T., Helga, N. & Kramer, A.F. (2014). Participatory arts for older adults: A review of benefits and challenges. The Gerontologist, 54(5), 741-753.

Leckie, R.L., Oberlin, L.E., Voss, M.W., Prakash, R.S., Szabo, A., Chaddock-Hetman, L., White, S.M., Wojciki, T.R., Mailey, E., Vieira, V.J., Martin, S.A., Pence, B.D., Lin, M., Parasuraman, R., Greenwood, P.M., Fryxell, K.J., Woods, J.A., McAuley, E., Kramer, A.F. & Erickson, K.I. (2014). BDNF mediates improvements in executive function following a 1-year exercise intervention. Frontiers in Human Neuroscience, December 11, doi: 10.3389/fnhum.2014.00985, 1-12.

Gaspar, J.G., Street, W.N., Windsor, M.B., Carbonari, R., Kaczmariski, H., Kramer, A.F. & Mathewson, K.E. (2014). Ameliorating the distracting effects of cell phone driving. Psychological Science, 25(12), 2136-2146.

Buckley, J., Cohen, J., Kramer, A.F., McAuley, E., & Mullen, S.P., (2014). Cognitive Control in the Self-Regulation of Physical Activity and Sedentary Behavior. Frontiers in Human Neuroscience, September, 8 (747), 1-15.

Scherder, E., Scherder, R., Verburch, L., Konigs, M., Blom, M., Kramer, A.F., & Eggermont, L. (2014). Executive functions of sedentary elderly may benefit from walking: A systematic review and meta analysis. American Journal of Geriatric Psychiatry, 22(8), 413-425.

Stine-Morrow, E.A.L., Payne, B.R., Roberts, B.W., Kramer, A.F., Morrow, D.G., Payne, L., Hill, P.L., Jackson, J.J., Gao, X., Noh, S.R., Janke, M.C. & Parisi, J.M. (2014). Training versus engagement to cognitive enrichment with aging. Psychology & Aging, 29(4), 891-906.

Stothart, C.R., Simons, D.J., Boot, W.R. & Kramer, A.F. (2014). Is the effect of aerobic exercise on cognition a placebo effect? *PLOS One*, 9(1), e109557, 1-7.

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Lucas, H.D., Watson, P.D., Monti, J.M., McAuley, E., Kramer, A.F., & Cohen, N.J. (2015). Subjective memory complaints in older adults are associated with relational memory errors in spatial reconstruction. Program of the Cognitive Neuroscience Society Conference, March, San Francisco, California.

Burzynska, A., McAuley, E. & Kramer, A.F. (2015).. Role of cardiovascular fitness and physical activity in age-related cortical atrophy. Program of the Cognitive Neuroscience Society Conference, March, San Francisco, California.

Weng, T.B., Wong, C.N., Burzynska, A., Chaddock-Heyman, L., Coole, G., Monti, J., McAuley, E., Kramer, A.F. & Voss, M.V. (2015). Age-related de-differentiation of functional brain networks at rest is associated with the instability of executive function. Program of the Cognitive Neuroscience Society Conference, March, San Francisco, California.

Banducci, S., Burzynska, A., Crowell, J., Kaczmarski, H., McAuley, E. & Kramer, A.F. (2015). Linking virtual street crossing performance to spatial working memory and cortical thickness in a healthy aging population. Program of the Cognitive Neuroscience Society Conference, March, San Francisco, California.

Clark, R., Chaddock-Heyman, L., Hillman, C.H., Kramer, A.F. & Voss, M.W. (2015). Differential relationships of fitness, executive function and brain function in male and female preadolescents. Program of the Cognitive Neuroscience Society Conference, March, San Francisco, California.

Duffy, K. & Kramer, A.F. (2015). Physical activity, motivation, and memory in healthy aging adults. Program of the Cognitive Neuroscience Society Conference, March, San Francisco, California.

Loschky, L., Ringer, R.C., Throneburg, Z.W., Kramer, A.F. & Johnson, A.P. (2015). The useful field of view in real-world scene viewing: Tunnel vision versus general interference. 18th European Conference on Eye Movements. August, University of Vienna, Austria.

Ehlers, D.K., Banducci, S., Kramer, A.F., McAuley, E. (2015). Can increased mobility predict complex task performance in older adults? Society of Behavioral Medicine, April, San Antonio, Texas.

Mackenzie, M.J., Zunigam K.E., Raine, L.B., Awick, E.A., Hillman, C., Kramer, A.F. & McAuley, E. (2015). Cardiorespiratory fitness, physical activity, and working memory in breast cancer survivors. Society of Behavioral Medicine, *Annals of Behavioral Medicine*, 49 (Supplement), S174. April, San Antonio, Texas.

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Johnson, A., Neider, M., Kramer, A.F. Loschky, L. (2014). Blur detection is unaffected by cognitive load, but eye movements and scene recognition are. *Proceedings of the 14th Annual Meeting of the Visual Sciences Society*, May, St. Pete Beach, Florida.

He, J., Ang, C.W., Miller, A.J., Maddali, V., Gaspar, J., Carbonari, R., Kaczmarski, H., Kramer, A.F. & Mathewson, K. (2014). Keep your mind on the road: Predicting mind-wandering while driving using classification of pre-probe oscillatory brain activity and driving performance. *Proceedings of the 14th Annual Meeting of the Visual Sciences Society*, May, St. Pete Beach, Florida.

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Lynch, B.T., Verstynen, T.T., Weinstein, A.M., Khan, N.A., Raine, L.A., Scudder, M.R., Drollette, E.S. Kramer, A.F., Hillman, C.H. & Erickson, K.I. (2014). Dissociable effects of fat mass and non-fat mass on neuromorphology in children. 72nd Annual Meeting of the American Psychosomatic Society. *Psychosomatic Medicine*, 76(3), A86.

Gothe, N.P., McAuley, E. & Kramer, A.F. (2014). The effects of an 8 week Hatha Yoga intervention on executive function in older adults. *Annals of Behavioral Medicine*, 47. Supplement 1. S179.

Zuniga, K., Mackenzie, M., Kramer, A.F., & McAuley, E. (2014). Subjective memory impairment and well being in community dwelling older adults. *Annals of Behavioral Medicine*, 47. Supplement 1. S37.

Watson, P., Schwarb, H., Shander, C., Monti, J., Kramer, A.F., & Cohen, N. (2014). Spatial integrity influences rule-driven, but not relational memory in older adults. Program of the Cognitive Neuroscience Society Conference, April, Boston, MA.

Schwarb, H., Watson, P., Shander, C., Monti, J., Cooke, G., Kramer, A.F. & Cohen, N. (2014). Hippocampal integrity influences relational, but not rule-driven memory in older adults. Program of the Cognitive Neuroscience Society Conference, April, Boston, MA.

Cooke, G., Monti, J., Wong, C., Cohen, N. & Kramer, A.F. (2014). The role of sleep on next day cognition. Program of the Cognitive Neuroscience Society Conference, April, Boston, MA.

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Cooke, G., Monti, J., Cohen, N. & Kramer, A.F. (2014). The role of sleep on next day relational memory performance. Program of the Cognitive Aging Conference, April, Atlanta, GA.

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Burzynska AZ, Chaddock-Heyman L, Wong CN, Voss MW, Olson E, Gothe N, Lewis A, Wojcicki T, Fanning J, Chung HD, Awick E, McAuley E, & Kramer AF. (2013). "Positive effects of physical exercise and aerobic activity on white matter in old age", Program of the Organization for Human Brain Mapping Conference, June, Seattle, WA.

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Yamani, Y., McCarley, J.S. & Kramer, A.F. (2012). Age-related increases in workload capacity across the attentional visual field. Program of the 2012 Cognitive Aging Conference. Atlanta, Georgia.

Voss, M., Wong, C., Baniqued, P., Burdette, J., Erickson, K., Prakash, R., McAuley, E., Laurienti, P. & Kramer, A.F. (2012). Brain and cognitive aging: A network science perspective. Program of the 2012 Cognitive Aging Conference. Atlanta, Georgia.

Basak, C., Kim, J., Voss, M., Prakash, R., Erickson, K., Szabo, A., McAuley, E. & Kramer, A.F. (2012), Determining a casual relationship between fitness and cognition in late adulthood. Program of the 2012 Cognitive Aging Conference. Atlanta, Georgia.

Gasper, J., Neider, M. & Kramer, A.F. (2012). Falls risk and older driver performance. Program of the 2012 Cognitive Aging Conference. Atlanta, Georgia.

Baniqued, P., Lee, H., Cosman, J., Mullen, S., McAuley, E., Severson, J. & Kramer, A.F. (2012). CrossFit: Forging mental and physical fitness for optimal cognitive function across the lifespan. Program of the 2012 Cognitive Aging Conference. Atlanta, Georgia.

Lee, H., Baniqued, P., Cosman, J., Severson, J. & Kramer, A.F. (2012). Video game play and healthy cognitive function across the lifespan. Program of the 2012 Cognitive Aging Conference. Atlanta, Georgia.

Alvarez, T., Turney, I., Leckie, R., Voss, M., Prakash, R., Chaddock, L., Szabo, A., Mailey, E., Kramer, A.F. & Erickson, K.I. (2012). Aerobic fitness moderates and age-related decline in BDNF. Program of the 2012 Cognitive Aging Conference. Atlanta, Georgia.

Chaddock, L., Erickson, K., Prakash, R., Voss, M., vanPatter, M., Pontifex, M., Hillman, C. & Kramer, A.F. (2012). A functional fMRI investigation of the association between childhood aerobic fitness and neurocognitive control. Cognitive Neuroscience Society 2012 Annual Meeting program. Chicago, Illinois.

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Monti JM, Voss MV, Wong CN, Szabo AN, Cooke G, Chaddock L, Baniqued PL, Wójcicki TR, Gothe NP, Olson EA, Fanning J, McAuley E, Cohen NJ, & Kramer AF. (2012). "Physical activity and aerobic fitness are associated with greater relational memory and hippocampal function in older adults", Society for Neuroscience Conference, October, New Orleans, LA.

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Chaddock, L., Neider, M., Lutz, A., Hillman, C. & Kramer, A.F. (2011). Childhood aerobic fitness and successful street crossing. Program of American College of Sports Medicine (ACSM) Conference on Physical activity, cognitive function, and academic achievement: Moving students to better performance. Washington, DC.

Wong, C., Voss, M., Basak, C., Prakash, R., Erickson, K., Chaddock, L., Kim, J., White, S., Wojcicki, T., Mailey, E., Gothe, N., Olson, E., McAuley, E. & Kramer, A.F. (2011). A profile of brain activation as a function of fitness in the dual-task. Program of the Annual Meeting of the Neuroscience Society. Washington, D.C.

Lee, H., Prakash, R., Voss, M., Kramer, A.F. (2011). Functional activation changes in complex motor control training: Influence of strategy and gender. Cognitive Neuroscience Society 2011 Annual Meeting program. San Francisco, California.

Mourany, L., Prakash, R., Lee, H., Voss, M., Erickson, K., Boot., W., Basak, C., Neider, M., Simons, D., Fabiana, M., Gratton, G., Kramer, A.F. (2011). Video game training and cortical recruitment of the attentional and default mode networks. Cognitive Neuroscience Society 2011 Annual Meeting program. San Francisco, California.

Parks, N. & Kramer, N. (2011). ERP correlates of overt and covert orienting. Cognitive Neuroscience Society 2011 Annual Meeting program. San Francisco, California.

Snider, D., Kramer, A.F., & Prakash, R. (2011). Mindfulness disposition is associated with increased cortical thickness in older adults. Cognitive Neuroscience Society 2011 Annual Meeting program. San Francisco, California.

Lee, H., Vecera, S., Mozer, M. & Kramer, A.F. (2010). Priming of object-based attentional control. Program of the 50th Annual Meeting of the Psychonomics Society, St Louis, Missouri.

Barnes, D.E., Poelke, G., Santos-Modesitt, W., Kramer, A.F., Castro, C. & Yaffe, K. (2010). The mental activity and exercise (Max) trial: A randomized controlled trial to enhance cognitive function in older adults with cognitive complaints. Program of the Alzheimer's Association International Conference on Alzheimer's Disease 2010. Honolulu, Hawaii.

Wang, Y., Moon, J.M., Fu, W.T., Boot, W., Erickson, K. & Kramer, A.F. (2010). Effects of Varied Priority Training on Complex Perceptual-Motor Learning. CogSci 2010: 32nd Annual Meeting of the Cognitive Science Society, Oregon.

Chaddock, L., Erickson, K., Prakash, R., Kim, J., Voss, M., VanPatter, M., Pontifex, M., Konkel, A., Hillman, C., Cohen, N. & Kramer, A. (2010). A neuroimaging investigation of the association between aerobic fitness, hippocampal volume and memory performance in preadolescent children. Program of the 2010 Annual Meeting of the Cognitive Neuroscience Society. Montreal, Canada.

Voss, M., Prakash, R., Erickson, K., Boot, W., Basak, C., Neider, M., Fabiani, M., Gratton, G., & Kramer, A.F. (2010). Training induced plasticity in large scale brain networks from the acquisition of skilled Space Fortress performance. Program of the 2010 Annual Meeting of the Cognitive Neuroscience Society. Montreal, Canada.

Prakash, R., Erickson, K. & Kramer, A.F. (2010). Investigating effects of parametric manipulation and white matter integrity on age-related neural differences. Program of the 2010 Cognitive Aging Conference. Atlanta, Georgia.

Voss, M., Erickson, K.I., Basak, C., White, S., Wojcicki, T., Klamm, E., McAuley, E. & Kramer, A.F. (2010). Plasticity of brain networks in a randomized intervention trial of exercise training in older adults. Program of the 2010 Cognitive Aging Conference. Atlanta, Georgia.

Kim, J., Basak, C., Clarke, E., Erickson, K.I., Prakash, R., Voss, M., Fryxell, K., Parasuraman, R., Greenwood, P. & Kramer, A.F. (2010). The effect of DBH genotype on executive control in healthy older adults. Program of the 2010 Cognitive Aging Conference. Atlanta, Georgia.

Basak, C. & Kramer, A.F. (2010). Contributions of working memory capacity in age-related differences in focus switching. Program of the 2010 Cognitive Aging Conference. Atlanta, Georgia.

Basak, C., Boot, W.R., Neider, M., Simons, D.J., Fabiani, M., Gratton, G. & Kramer, A.F. (2009). Prioritizing subcomponents of the Space Fortress game enhances learning and engenders transfer. Program of the 50th Annual Meeting of the Psychonomics Society, Boston, MA.

Vo, L.T.K., Walther, D.B., Wang, Y.M., Erickson, K.I., Boot, W.R., Voss, M.W., Prakash, R.S., Kramer, A.F. (2009). Predicting training success from pre-training brain activity. Program of the 15th Annual Meeting of the Organization for Human Brain Mapping (NeuroImage, 47(1) supplement). San Francisco, California.

Voss, M.W., Prakash, R.S., Erickson, K.I., Malkowski, E., Alves, H., Kim, J.S., Morris, K.S., White, S.M., Wojcicki, T.R., Hu, L., Szabo, A., Klam, E., McAuley, A. & Kramer, A. (2009). Exercise effects on functional brain connectivity and cognition in elderly adults. Program of the 15th Annual Meeting of the Organization for Human Brain Mapping (NeuroImage, 47(1) supplement). San Francisco, California.

Prakash, R., Snook, E., Motl, R. & Kramer, A.F. (2009). Physical activity and cognitive functioning in multiple sclerosis: The subjective connection. Program of the 23rd Annual Meeting of Multiple Sclerosis Centers. Atlanta, Georgia.

Prakash, R., Snook, E., Motl, R. & Kramer, A.F. (2009). Cardiorespiratory fitness is inversely associated with brain atrophy in multiple sclerosis. Program of the 23rd Annual Meeting of Multiple Sclerosis Centers. Atlanta, Georgia.

Basak, C., Boot, W.R. & Kramer, A.F. (2008). On the relationship between working memory and attentional disengagement. Program of the 49th Annual Meeting of the Psychonomics Society, Chicago, Illinois.

Basak, C. & Kramer, A.F. (2008). Contribution of working memory capacity in age-related differences in focusing switching. Program of the 49th Annual Meeting of the Psychonomics Society, Chicago, Illinois.

Becic, E., McCarley, J.S., Mounts, J.R.W. & Kramer, A.F. (2008). Age-related changes in visual-spatial attention: Independent effects of localized interference and retinal eccentricity. Proceedings of the 2008 Cognitive Aging Conference. Atlanta, Georgia.

Boot, W.R., Neider, M.B. & Kramer, A.F. (2008). Training younger and older adults to find camouflaged targets. Proceedings of the 2008 Cognitive Aging Conference. Atlanta, Georgia.

Basak, C., Alvarado, M., Erickson, K., Voss, M., Prakash, R., Chaddock, L., McAuley, E. & Kramer, A.F. (2008). Fitness, multi-tasking and your brain? Proceedings of the 2008 Cognitive Aging Conference. Atlanta, Georgia.

Prakash, R.S., Voss, M.W., Erickson, K.I., Lewis, J.M. & Kramer, A.F. (2008). Cardiorespiratory fitness predicts top-down modulation in older adults. Proceedings of the 2008 Cognitive Aging Conference. Atlanta, Georgia.

Voss, M.W., Erickson, K.I., Chaddock, L., Prakash, R.S. & Kramer, A.F. (2008). Age-related neural dedifferentiation and functional connectivity. Proceedings of the 2008 Cognitive Aging Conference. Atlanta, Georgia.

Chu, H., McCarley, J.S. & Kramer, A.F. (2008). Image salience and attentional scanning in real-world scenes: A comparison of older and younger adults. Proceedings of the 2008 Cognitive Aging Conference. Atlanta, Georgia.

Becic, E., Kubose, T., Bock, K., Dell, G., Garnsey, S. & Kramer, A.F. (2008). Age-related effects of conversation with a passenger or a caller on driving performance. Proceedings of the 2008 Cognitive Aging Conference. Atlanta, Georgia.

Voss, M.W., Erickson, K.I., McAuley, E. & Kramer, A.F. (2008). Functional connectivity and the aging brain. Proceedings of the 2008 Cognitive Aging Conference. Atlanta, Georgia.

Uc, E., Doerchuug, K., Mehta, S., Dawson, J., Rizzo, M., Erickson, K., Darling, W., Anderson, S., Rodnitzky, R., Kline, J., Kramer, A. & Grabowski, T. (2008). Cardiovascular fitness and cognition in mild-moderate Parkinson's disease. Program of the American Academy of Neurology Annual Meeting.

Erickson, K.I. & Kramer, A.F. (2007). Aging and training induced plasticity. Program of the Conference on Aging and Speech Communication, Bloomington, Indiana.

Gordon, B.A., Rykhlevskaia, Brumback-Peltz, C., McAuley, E., Kramer, A., Colcombe, S., Gratton, G., & Fabiani, M. (2007). The effects of physical fitness and years of education on brain anatomy. Program of the Conference on Aging and Speech Communication, Bloomington, Indiana.

Endo, N., Boot, W., Lleras, A. & Kramer, A.F. (2007). Interactions between spatial context learning and learning strategy. Program of the 48th Annual Meeting of the Psychonomics Society, Long Beach, California.

Godijn, R. & Kramer, A.F. (2007). The STOP signal than makes the eyes GO: Evidence for an exogenous effect on countermanding saccades. Program of the 48th Annual Meeting of the Psychonomics Society, Long Beach, California.

Basak, C., Voss, M.W., Boot, W., Erickson, K.I. & Kramer, A.F. (2007). Can older adults benefit from videogame training?: Relationship among cognition, game performance and brain structure. Proceedings of the 20th Anniversary Cognitive Aging Conference. Adelaide, Australia.

Wheatley, D., Scialfa, C., Boot, W. & Kramer, A. (2007). Age differences in attentional capture with two concurrent tasks. Proceedings of the 20th Anniversary Cognitive Aging Conference. Adelaide, Australia.

Alvarado, M., Erickson, K.I., Kim, J.S.D., Voss, M.W., Colcombe, S. & Kramer, A. (2007). Higher physical fitness levels are associated with greater cortical activation in a dual-task paradigm. Proceedings of the 20th Anniversary Cognitive Aging Conference. Adelaide, Australia.

Erickson, K., Kim, J., Suever, B. & Kramer, A. (2007). COMT val158met polymorphism is associated with working memory and executive function in community dwelling older adults. Proceedings of the 20th Anniversary Cognitive Aging Conference. Adelaide, Australia.

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Erickson, K., Malkowski, E., Voss, M., Colcombe, S., & Kramer, A. (2007). Physical fitness alters the locus of activity in the right prefrontal cortex of older adults during the encoding of non-famous faces. Proceedings of the 20th Anniversary Cognitive Aging Conference. Adelaide, Australia.

Becic, E., Kubose, T., Kramer, A.F., Dell, G.S., Garnsey, S.M. & Bock, K. (2007). Aging and the effects of a passenger or a caller on simulated driving performance. Proceedings of the 4th International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design. July 9-12, Stevenson, Washington.

Boot, W., Neider, M. & Kramer, A.F. (2007). Training and transfer in search for camouflaged real-world targets. Proceedings of the 7th Annual Meeting of the Visual Sciences Society, May, Sarasota, Florida.

Torralbo, A., Beck, D. & Kramer, A.F. (2007). Perceptual-load induced selection as a result of neural competition in early visual cortex. Proceedings of the 7th Annual Meeting of the Visual Sciences Society, May, Sarasota, Florida.

Torralbo, A., Scalf, P., Beck, D. & Kramer, A. (2007). Sensory and response competition: How these processes influence the filtering of irrelevant information. Proceedings of the 2007 Annual Meeting of the Cognitive Neuroscience Society, May, New York, New York.

Kennedy, K.M., Erickson, K.I., Rodrigue, K.M., Voss, M., Kramer, A.F. & Raz, N. (2007). Age-related differences in regional brain volumes: Manual volumetry vs. voxel-based morphometry. Proceedings of the 2007 Annual Meeting of the Cognitive Neuroscience Society, May, New York, New York.

Prakash, R.S., Snook, E.M., Erickson, K.I., Colcombe, S.J., Voss, M.W., Motl, R.W. & Kramer, A.F. (2007). Altered patterns of cerebral activation during response inhibition in multiple sclerosis: An fMRI investigation. Proceedings of the 35th Annual Meeting of the International Neuropsychological Society, February, Portland, Oregon.

Kennedy, K., Erickson, K.I., Rodrigue, K., Webb, M., Colcombe, S.J., Kramer, A.F. & Raz, N. (2006). Age-Related Differences in Regional Brain Volumes: A Manual Volumetric vs Voxel Based Morphometry Comparison. Proceedings of the 12th Annual Meeting of Human Brain Mapping. June. Florence, Italy.

Scalf, P., Alvarado, M., Colcombe, S.J., Kim, J., Erickson, K.I., Wadhwa, R. & Kramer, A.F. (2006). Double Take: Visual field asymmetries in the neural regions that support dividing attention between the visual fields. Proceedings of the 12th Annual Meeting of Human Brain Mapping. June. Florence, Italy.

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Mestre, J., Feil, A., Boot, W., and Kramer, A.F. (2006). Tracking eye-movements in students' judgments of realistic motion. *AAPT Announcer*, 36, #2, 117. Presented at the Summer Meeting of the American Association of Physics Teachers, Syracuse, NY, July 24-26, 2006.

Boot, W.R., Kramer, A.F., Fabiani, M., Gratton, G., Simons, D.S., Wan, X.I., Ambinber, M.S., Thomas, L.E., Colcombe, S.J., Agran, J., Low, K., & Lee, Y. (2006). The effects of video game playing on perceptual and cognitive abilities. Proceedings of the Sixth Annual Meeting of the Vision Sciences Society, Sarasota, FL.

Scalf, P., Banich, M. & Kramer, A.F. (2006). Can't see for looking: The potential difficulty target discrimination drives pseudo-extinction. Proceedings of the Cognitive Neuroscience Society. San Francisco, California.

Kramer, A.F., Colcombe, S.J., Erickson, K.I. & Paige, P. (2006). Fitness training and the brain: From molecules to minds. Proceedings of the 2006 Cognitive Aging Conference. Atlanta, Georgia.

Basak, C., Kramer, A.F. & Verhaeghen, P. (2006). Aging, focus switching, and working memory span: Exploring the role of pointer predictability. Proceedings of the 2006 Cognitive Aging Conference. Atlanta, Georgia.

Nunes, A., Kramer, A.F. & Simons, D.J. (2006). Quantifying performance differences in the aging air traffic controller population. Proceedings of the 2006 Cognitive Aging Conference. Atlanta, Georgia.

Bherer, L., Kramer, A.F., Peterson, M.S., Colcombe, S.J., Erickson, K. & Bécic, E. (2006). Training effects on dual-task performance in older adults: Further evidence for cognitive plasticity in attentional control. Proceedings of the 2006 Cognitive Aging Conference. Atlanta, Georgia.

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Invited Conference Presentations, Workshops, and Lectures

Invited speaker, Global Brain Health and Performance Summit, Ohio State University, Columbus, Ohio, May, 2016.

Invited speaker, Wellness in MS Symposium: Why Exercise Matters and the Science Behind It, Oregon Health & Science University, Portland, Oregon, May, 2016.

Invited Speaker, Advanced Judicial Academy, The Aging Population: A Proactive Approach. Lombard, Illinois, February, 2016

Invited Speaker, Tracing brain and behavioral changes across the lifespan: Influence of intrinsic and extrinsic factors. Danish Research Centre for Magnetic Resonance, Copenhagen, Denmark, January, 2016.

Keynote speaker, Australasian Cognitive Neuroscience Society (ACNS), Auckland, New Zealand, November, 2015.

Invited speaker, Brain Health: From Genes to Behavior, Improving our Life. B-Debate, International Center for Scientific Debate, Barcelona, Spain, October, 2015.

Invited speaker, 2015 Annual Meeting of the North American Menopause Society, Presidential symposium on the Female Brain: Menopause & Aging, Las Vegas, Nevada, October, 2015.

Invited speaker, American Psychological Association annual meeting, Toronto, Canada, August, 2015.

Invited speaker, 14th European Congress of Psychology, Milan, Italy, July, 2015.

Invited speaker, Advanced Judicial Academy: Science in the Courtroom Urbana, Illinois, June, 2015.

Invited speaker, 2015 International congress of physical activity and human movement sciences (IX-CIEFMH-XV SPEF), Rio Claro, Brazil, June 2015.

Invited speaker, International symposium on aviation psychology, Dayton, Ohio, May 2015.

Invited speaker, 4th Israeli Conference on Exercise is Medicine for the Brain, Tel Aviv, Israel, May, 2015.

Invited speaker, Ageing and degeneration: A physiological perspective, The Physiological Society, Royal College of Physicians, Edinburgh, U.K., April, 2015.

Invited speaker, Charles River Association for Memory, 19th Annual Meeting, Boston, Massachusetts, March, 2015.

Invited speaker, Illinois Science Council, Chicago, Illinois, February, 2015.

Invited speaker, Feinberg School of Medicine, Chicago, Illinois, February, 2015

Invited speaker, Department of Psychology, Villanova University, Villanova, PA, February, 2015

Spivack Neuroscience Visiting Professor, Boston University Medical School, Boston, MA, January, 2015.

Invited speaker, Andrus Gerontology Center, University of Southern California, Los Angeles, CA, November, 2014.

Keynote speaker, Forum on Wellness, International Council on Active Aging, Orlando, Florida, November, 2014.

Invited participant, Wellness strategy meeting, National Multiple Sclerosis Society, Fort Worth Texas, November, 2014.

Keynote speaker, Exercise and Brain symposium, Department of Psychiatry, UCLA, Los Angeles, CA, October, 2014.

Invited speaker, 2014 Society for Psychophysiological Research Annual Meeting, Atlanta, Georgia, September, 2014.

Keynote speaker, International Academy on Nutrition and Aging, Albuquerque, New Mexico, July, 2014.

Invited speaker, Institute of Cognitive Neuroscience of National Central University, Jhongli, Taiwan, June, 2014.

Keynote speaker, 17th Conference on Attention and Perception, National Chung Ching University, Chiayi, Taiwan, June, 2014

Invited speaker, Physiological effects of exercise, Department of Physiology and Neurobiology Seminar Series, Dartmouth University, Lebanon, NH, May, 2014.

Keynote speaker, Perform Center Research Conference: Physical Activity and Brain Functions, Concordia University, Montreal, May, 2014.

Invited participant, Cognition in the Wild, Moab, Utah, May, 2014.

Invited speaker, Department of Psychology, University of Massachusetts, Amherst, MA, April, 2014.

Invited speaker, Stony Brook University, Stony Brook, NY, April, 2014.

Invited speaker, Department of Psychology, University of British Columbia, Vancouver, Canada, March, 2014.

Invited speaker, Institute for Successful Longevity, Florida State University, Tallahassee, FL, February, 2014.

Invited speaker, Department of Psychology, University of Utah, Salt Lake City, Utah, February, 2014.

Invited speaker, Center for Vital Longevity, UT Dallas, Dallas, Texas, January, 2014.

Invited speaker, Seattle Study Club, Phoenix, AZ, January, 2014.

Keynote speaker, John Sutton Memorial lecture, Canadian Society for Exercise Physiology Annual Meeting and Conference, Extreme Human Physiology: Pathology to Performance, Toronto, Canada, October, 2013.

Keynote speaker, 7th Annual Alzheimer's Disease Symposium. Indiana Alzheimer's Disease Center. Indiana University School of Medicine. Indianapolis, Indiana, September, 2103.

Keynote speaker, Institute for Engineering in Medicine Annual Conference and retreat. University of Minnesota, Minneapolis, Minn., September 2013.

Invited speaker, University of Miami, Miami, Florida, September, 2013.

Invited speaker, European Congress of Psychology, Life style factors and brain function, Stockholm, Sweden, July, 2013.

Invited grand rounds speaker, Department of Neurology, Stanford Medical School, Stanford, California, July, 2013.

Invited speaker, Healthy Brain Aging: Alzheimer's Disease Risk and Protective Factors, Southern Illinois University School of Medicine, Springfield, Illinois, May, 2013.

Fitts lecture, Department of Psychology, University of Michigan, Ann Arbor, Michigan, May, 2013.

Invited Speaker, 114th Abbott Nutrition Research Conference: Cognition and Nutrition, Columbus, Ohio, April, 2013.

Hogan Memorial lecture, University of Missouri, Columbia, Missouri, April, 2013.

Invited speaker, NIH Workshop to Advance Basic Behavioral Science in Obesity Research, Bethesda, Maryland, April, 2013.

Invited Speaker, Annual Experimental Biology Conference, Nutrition and Physical Activity: Impacts on Cognitive Function Across the Lifespan, Boston, Massachusetts, April, 2013.

Invited speaker, Workshop on Positive Psychobiology. Sponsored by Princeton's Center for Research on Experience & Wellbeing, Miami, Florida, March, 2013.

Invited speaker, American Psychosomatic Society Annual meeting, Miami, Florida, March, 2013.

Keynote address, Society of Behavioral Medicine Annual meeting, San Francisco, California, March, 2013.

Invited speaker, Symposium entitled Old Dogs, New Tricks: How Plastic is the Adult Human Brain? American Association for the Advancement of Science Annual meeting, Boston, Massachusetts, February, 2013.

Gregory Kimble lecture, Duke University, Durham, North Carolina, January, 2013.

Invited speaker and committee member, Gaps and opportunities in the field of cognitive aging. Sponsored by the Institute of Medicine, National Academy of Sciences, Washington, D.C., November 2012.

Invited participant, The Informed Brain in a Digital World, The National Academies Keck Future Initiative, Irvine, California, November, 2012.

Invited keynote speaker, Trinity College Annual Neuroscience Symposium, Dublin, Ireland, November, 2012.

Invited speaker, Mary Morris Leighton Lecture, Beacon Health System, South Bend, Indiana, October, 2012.

Invited speaker and participant, New Directions in Brain Training: Effectiveness, Methodology, and Application of Cognitive Interventions, Humboldt University, Berlin, Germany, October, 2012.

Invited speaker and participant, National Academy of Sciences, Workshop on Research Gaps and Opportunities for Exploring the Relationship of the Arts to Health and Well-Being in Older Adults, Washington, D.C., September, 2012.

Invited speaker, Exercise is Medicine, 2012 Vice-Chancellor's lecture series, University of Auckland, Auckland, New Zealand, August, 2012.

Invited speaker, Cold Spring Harbor Laboratory Workshop in Cognitive Aging, Cold Spring Harbor, New York, June, 2012.

Invited speaker, 12th International conference on the long-term complications of treatment of children and adolescents for cancer, Williamsburg, Virginia, June, 2012.

Invited speaker, Workshop on cognition and performance, Technion University, Haifa, Israel, May, 2012.

Invited speaker, American Psychological Society Annual Meeting, Symposium on Training improves performance and neuroplasticity: Mechanism and application May, 2012.

Invited speaker, National Advisory Council meeting for the National Institute on Aging, Bethesda, Maryland, May, 2012.

Invited Speaker, Honor's speaker series, Union College, Schenectady, New York, May, 2012.

Invited speaker, Overview on Aging Interventions, 2012 Cognitive Aging Conference. Atlanta, Georgia, April, 2012.

Invited speaker, Symposium on Future Directions on Aging Research using the Canadian Longitudinal Study on Aging, Canadian Institutes of Health, Vancouver, Canada, April, 2012.

Invited speaker, New York Neuropsychology Groups Annual Conference, New York, New York, April, 2012.

Invited speaker, Reprogramming the Human Brain, Center for Brain Health, University of Texas at Dallas, Dallas, Texas, April, 2012.

Keynote speaker, The Brainy Side of Exercise: benefits to Neurons, Mind, and Behavior, sponsored by the MacMillian Family Trust, University of Vermont, Burlington, Vermont, March, 2012.

Invited speaker, LIFE Study symposium, Arlington, Virginia, March, 2012.

Invited speaker, Spring 2012 Lecture Series on Successful Longevity, Florida State University, Tallahassee, Florida, March, 2012.

Invited speaker and symposium participant, Aging: Cells to Society, 2012 AAAS Annual meeting in Vancouver, Canada, February, 2012.

Invited speaker, 2012 Neuroscience Seminar Series, National Institutes of Health, Bethesda, Maryland, February, 2012.

Keynote speaker, American College of Sports Medicine (ACSM) Conference on Physical activity, cognitive function, and academic achievement: Moving students to better performance. Washington, DC, November 2011.

Keynote speaker, From New Frontiers in Research to Better Patient Care, Annual Parkinson Disease Patient-Family symposium, Northwestern University Parkinson's Disease and Movement Disorders Center, Chicago, Illinois, October, 2011.

Invited speaker, 11th International Conference on Cognitive Neuroscience (ICON), Palma, Mallorca, Spain, September, 2011.

Invited speaker, 81st Annual Meeting of the National Academy of Kinesiology, Minneapolis, MN, September, 2011.

Invited speaker, Boosting the Brain: Neuroplasticity and Cognition across the Lifespan, Nobel Forum, Karolinski Institutet, Stockholm, Sweden, September, 2011.

Invited speaker, Alzheimer's Association International Conference on Alzheimer's Disease (AAICAD), Paris, France, July, 2011.

Invited speaker, The 21st International Puijo Symposium: Physical Exercise, Ageing and Disability. Kuopio, Finland, July, 2011.

Invited speaker, 29th Conference on Learning and the Brain, The science of student success: Optimizing achievement and reducing failure. Chicago, Illinois, May 2011.

Invited speaker, Conference on neural correlates of extraordinary multi-tasking, Brain Institute, University of Utah, Salt Lake City, Utah, April 2011.

Invited speaker, Louis E. Alley Lecture, University of Iowa, Iowa City, Iowa, April 2011.

Invited speaker, American Speech Language Hearing Association Health Care Business Institute, Brain Institute, Washington, D.C., April 2011.

Invited speaker, International Neuropsychological Society meeting, Boston, Massachusetts, February, 2011.

Invited speaker, Conference on the Psychology of Health, Immunity & Disease, National Institute for the Clinical Application of Behavioral Medicine, South Carolina, December, 2010.

Invited speaker and participant, National Transportation Safety Board (NTSB) Public Forum on Safety, Mobility, and Aging Drivers, Washington, DC, November 2010.

Invited speaker, 4th National Symposium on Complementary & Alternative Geriatric Health Care, St. Louis, Missouri, October 2010.

Keynote speaker, Healthy Aging Conference, Life Sciences Institute, National University of Singapore, Singapore, October 2010.

Invited speaker, Koshland Science Museum, National Academy of Sciences, Washington, D.C., October 2010.

Invited speaker, Netherlands Consortium for Health Aging, Spark meeting on Vitality, Healthy Ageing, and Cognition, Leiden, Netherlands, September, 2010.

Invited speaker, Effects of exercise and nutrients on brain functions. Ellass Center, Copenhagen, Denmark, August, 2010.

Invited speaker, RAND Summer Institute on Demography, Economics, and Epidemiology of Aging. Santa Monica, California, July, 2010.

Invited speaker, American Physical Therapy Association meeting on Exercise and Physical Activity in Aging Conference: Blending Research and Practice. Indianapolis, Indiana, July, 2010.

Invited speaker, 24th Annual International Conference on Practical Approaches to the Treatment of Obesity, Harvard medical School, Boston, June, 2010.

Keynote speaker, Clinical Aphasiology Conference, Charleston, South Carolina, May 2010.

Invited speaker, International symposium on exercise to promote cognitive health and functional independence. University of British Columbia, Vancouver, Canada, May 2010.

Invited speaker, Kendon Smith Lecture on Maintaining Mental Fitness: Influences & Interventions. Greensboro, North Carolina April, 2010

Invited speaker, NIH State of the Art Conference: Preventing Alzheimer's Disease and Cognitive Decline. Washington, D.C. April, 2010.

Invited speaker, Changing People, Changing Brains: Challenges for Interdisciplinary Research on Human Learning and Development across the Life-Span, Konstanz, Germany, April, 2010.

Invited speaker, 20th Annual Rotman Research Institute Conference: The Frontal Lobes, Toronto, Canada, March, 2010.

Invited speaker, Innovative Sports Science Forum, University of Tsukuba, Tsukuba, Japan, March, 2010.

Invited speaker, 3rd International Conference on Gait and Mental Function, Washington, D.C., February, 2010.

Invited speaker, North Carolina Cognition Conference, Wake Forest University, Winston-Salem, North Carolina, February, 2010.

Keynote speaker, Movement Science Symposium, University of Groningen, Groningen, Netherlands, January 2010.

Invited speaker, American Association for Physical Medicine and Rehabilitation Annual Conference, Exercise is Medicine for the Brain, Austin, Texas, October, 2009.

Invited speaker, U.S. National Press Club, Enrichment effects on adult cognitive development, Washington, DC., June, 2009.

Invited symposium speaker and participant, 15th Annual Meeting of the Organization for Human Brain Mapping. San Francisco, CA, June 2009.

Invited speaker, American Psychological Society, 21st Annual Convention, New interventions for productive aging. San Francisco, CA, May 2009.

Invited speaker, National Academy of Sciences, The Grand Challenges of our Aging Society: A Symposium, Washington, DC, May, 2009.

Invited speaker, American Academy of Neurology 61st Annual Meeting, Promoting successful cognitive aging: Factors, facts, and fairy tales. Seattle, April, 2009.

Invited participant, Workshop on Harnessing Neuroplasticity for Human Application, National Institutes of Health Blueprint for Neuroscience Research, Rockville, Maryland, April, 2009.

Invited speaker, Annual Conference of the American Society of Aging and the National Council on Aging, Las Vegas, Nevada, March, 2009.

Invited speaker, Alzheimer Disease: Environmental Risk, Prevention and Early Intervention. Southern Illinois University School of Medicine, Springfield, Illinois, May 2008.

Invited speaker, American Psychological Society workshop on Advances in Cognitive Aging Research, Chicago, Illinois, May 2008.

Invited speaker, 2008 Annual Scientific Meeting of the American Geriatrics Society, NIA/NIH Symposium on Cognitive Aging, Washington, D.C., May, 2008.

Invited speaker, Neurobiology and Cognition Mini-Symposium on Aging: My Better Mind, Department of Epidemiology, Michigan State University, Lansing, MI, May 2008.

Invited participant, Workshop on empirical evidence of cognitive interventions. Sponsored by the Stanford Center on Longevity and Max Planck Institute for Human Development. Palo Alto, CA, April, 2008.

Invited speaker, 6th Annual MCI Symposium: The Basis for Disease Modifying Treatment of Prodromal Alzheimer's Disease. Miami Beach, Florida, March 2008.

Conference Co-Organizer and speaker, Healthy Mind's Conference, sponsored by the NIA Center on Healthy Mind's, Sarasota, Florida, February, 2008.

Invited speaker, Mental Health and the Brain: Implications for Lifelong Learning, sponsored by the Foundation for Human Potential and the Northwestern University Feinberg School of Medicine, Chicago, Nov 15-16, 2007.

Invited speaker, 11th Biennial Graylyn Conference on Women's Cognitive Health, Graylyn Conference Center, Winston-Salem, North Carolina, Oct 24-26, 2007.

Keynote speaker, 7th Annual Kunin-Lunenfeld Applied Research Unit Conference: Enhancing Cognition in Older Adults: Connecting Research and Clinical Care, Baycrest Joseph E. and Minnie Wagon Centre, Toronto, Canada, Oct 19, 2007,

Invited speaker, Aging and Speech Communication: An International & Interdisciplinary Research Conference, Bloomington, Indiana, Oct 7-10, 2007.

Invited speaker and participant, Cognitive Aging Summit, Sponsored by the National Institutes on Aging & the McKnight Brain Research Foundation, Washington, D.C. October 10-11, 2007.

Invited dinner speaker, Physics education research conference: Cognitive science and physics education research. Greensboro, NC, Aug 1-2, 2007.

Keynote speaker, Advances in Basic and Clinical Neuropsychology, Annual meeting of the International Neuropsychological Society, Bilbao, Spain, July 4-7, 2007.

Keynote speaker, Psychology and the Brain, German Society for Psychophysiology, Dortmund, Germany, June 2007.

Invited witness and speaker, U.S. Senate Committee on Health, Education, Labor, and Pensions, Subcommittee on Retirement and Aging. Hearing: Alzheimer's Disease: Current and Future Breakthrough Research, Dirksen Senate Office Building, May 15, 2007.

Invited speaker and participant, Spark Workshop: The healthy Aging Phenotype. Amsterdam, Netherlands, May 2007.

Keynote speaker, 7th Kognitionsforschung. March 2007. University of Saarland. Sarbrucken, Germany.

Invited speaker and participant, 5th Annual Dementia Congress. November 2006. Orlando, Florida.

Invited speaker and participant, APA Symposium on Optimal Aging and Cognition: Moderators of Cognitive Change and Decline. August 2006. New Orleans, LA.

Keynote speaker and participant, Workshop on Cognitive Systems: Bridging Cellular to Social. Sandia National Labs. June 2006. Santa Fe, New Mexico.

Invited speaker and participant, Workshop on Body, Mind, Health & Brain. Deutsche Akademie der Naturforscher Leopoldina. May 2006. Marbach Castle, Ohningen, Germany.

Invited speaker and participant, Cognitive activity from bedside to bench. American Geriatrics Society 2006 Annual Scientific Meeting. May 2006, Chicago, Illinois.

Invited speaker and participant, National public action plan to promote and protect brain health: Research meeting on Cognition and translation, sponsored by the Centers for Disease Control and the national Institute on Aging, May 2006, Atlanta, Georgia.

Invited speaker and participant, Milken Institute Global Conference on Healthy Aging. April 2006, Santa Monica, California.

Invited speaker and participant, Workshop on Cognitive Vitality in Later Life, sponsored by the American Geriatric Society and the National Institute on Aging, March 2006, Philadelphia, PA.

Invited speaker and participant, MaxNetAging Conference II, November, 2005, Malaga, Spain.

Invited symposium speaker and participant, Society for Neuroscience symposium on Diet and Lifestyle in Brain Plasticity and Disease, November 2005, Washington, D.C.

Invited speaker and participant, North Dakota State University Mini Conference on Visual Neuroscience, September 2005, Fargo, North Dakota.

Invited speaker, National Alzheimer's Coordinating Centers Directors Meeting, September 2005, San Diego, California.

Invited speaker, American Psychological Association Annual Meeting, Applying Psychology: Walking, Driving and Flying, August 2005, Washington, D.C.

Invited speaker, American Psychological Association Annual Meeting, Enhancing Cognitive Plasticity: Fitness and Cognitive Training, August 2005, Washington, D.C.

Invited speaker and participant, Workshop on Cognitive Vitality and Aging, Institute for the Study of Aging, July, 2005, Bridgehampton, N.Y.

Invited speaker, Symposium on Integrating Mechanisms Linking Mind, Brain, and Periphery: Applications in Asthma and Atherosclerosis, National Center for Complementary & Alternative Medicine, National Institutes of Health, July 2005, Arlie House, Virginia.

Invited speaker, Exercise, Sport Performance and the Human Brain. 52nd Annual Meeting of the American College of Sports Medicine, June 2005, Nashville, TN.

Invited speaker, Affordable Human Behavior Modeling Workshop. Office of Naval Research, June 2005, Arlington, VA.

Keynote speaker, The center of attention: Theoretical advances and implications for rehabilitation, The 15th Annual Rotman Research Institute Conference, March 2005, Toronto, Canada.

Invited speaker, Third Annual research Symposium on Communication and Social Interaction in Healthy Aging, sponsored by CIHR, February 2005, Ottawa, Canada.

Invited speaker and participant, Symposium on Lifelong Learning, sponsored by the Organization of Economic and Cooperative Development (OECD), January 2005, Tokyo, Japan.

Invited speaker, Enhancing mobility in older adults: Cognitive training and Health, sponsored by the Transportation Research Board, January 2005, Washington, D.C.

Invited speaker, Neurobiology of Exercise, sponsored by U.S. Army Research Institute of Environmental Medicine (USARIEM), December, 2004, Pennington Biomedical Research Center, Baton Rouge, Louisiana.

Invited speaker, Frontiers of Biomedical Imaging Symposium: The MRI Nobel Celebration and Future Directions, November, 2004, University of Illinois, Champaign, Illinois.

Keynote speaker, From mental workload to stress: Insights from psychological and psychological research, sponsored by Bundesanstalt für Arbeitsschutz und Arbeitsmedizin, November, 2004, Berlin, Germany.

Conference organizer and speaker, Aging, Exercise and Cognition: Enhancing Cognitive and Brain Plasticity of Older Adults, sponsored by UIUC Initiative on Aging and NIA Roybal Center on Healthy Aging, October 2004, Champaign, Illinois.

Invited speaker and participant, Learning and Multimodal Communication, sponsored by the American Psychological Association, October, 2004, Chicago, Illinois (and web broadcast).

Invited speaker and participant, Nathan W. Shock Symposium – Aging and Disease: How to Exercise your Options – sponsored by the National Institute on Aging, September 2004, Towson, Maryland.

Invited speaker and participant, Does obesity and diabetes affect mood and cognition? SPARK Workshop sponsored by the MacArthur Network and Unilever Corporate Research, July 2004, Bar Harbor, Maine.

Invited speaker and participant, Putting the Brain Back into Medicine, Symposium sponsored by the International Longevity Center, the Institute for the Study of Aging, and the Canyon Ranch Foundation, May 2004, Tucson, Arizona.

Invited speaker and participant, DARPA symposium on Quantifying Human Performance, April 2004, Arlington, Virginia.

Invited speaker and participant, National Institute on Aging Symposium on Cognitive Training for Older Adults, March 2004, Bethesda, Maryland.

Invited speaker and participant, Experimentell Psychologische Onderzoekschool Workshop on Exogenous and Endogenous Control of Eye Movements, Royal Dutch Academy of Sciences, Het Trippenhuis, Amsterdam, October 2003.

Invited speaker and participant, Physical, Mental and Social Activities Affecting Cognitive Health, sponsored by the Institute for the Study of Aging and the International Longevity Center, N.Y., N.Y., October 2003.

Keynote speaker, Annual Alzheimer's Disease Research and Education Conference. Behavior: Measurement, Intervention and Consequences. Newport Beach, CA, May 2003.

Invited speaker, Chicago land symposium on functional MRI of the brain in health and disease. Chicago, March, 2003.

Invited speaker, Second Symposium on Neuroscience, Aging & Cognition (SNAC II). N.Y., N.Y., March 2003.

Invited speaker and participant, National Institute on Aging Workshop on Environment and Genetics, Washington, D.C., February, 2003.

Invited speaker and participant, National Research Council Workshop on Technology for Adaptive Aging, Washington, D.C., January, 2003.

Keynote speaker, Third AIST Forum on Gerontechnology, sponsored by the National Institute of Advanced Industrial Science and Technology, Tokyo, Japan, December 2002.

Keynote speaker, Workshop on Space, Attention and Performance, co-sponsored by the Japanese Psychological Association (JPA) and the Institute for Human Science and Biomedical Engineering, Tsukuba, Japan, December, 2002.

Invited speaker and participant, Summer Institute in Cognitive Neuroscience, Dartmouth College, Hanover, New Hampshire, June-July, 2002.

Invited speaker and participant, Annual meeting of the International Society for Behavioral Nutrition and Physical Activity, Seattle, Washington, July, 2002.

Invited speaker and participant, Influence of Distraction on Human Performance, Interactive Technology session, Society of Automotive Engineers: Digital Car Conference and Exhibition. Detroit, March, 2002.

Invited speaker and participant, The Future of Research on Aging, Centre De Recherche, Institut Universitaire De Geriatrie De Montreal. Montreal, April, 2002.

Invited speaker and participant, Council on Aging and Adult Development, Annual Symposium on Research on Aging (AAHPRED). San Diego, April, 2002. Co-recipient of the Herbert A. deVires Distinguished Research Award.

Invited speaker and participant, Healthy Minds: Mental Vitality Across the Lifespan, Invited symposium by the American Psychological Association's Presidential Task Force on Science, APA Annual Meeting, San Francisco, California, August, 2001.

Invited speaker and participant. Third Annual Meeting of the Positive Psychology Network, Washington, D.C., October 2001.

Invited speaker and participant. 7th Annual Graylyn Conference on Women's Health (Women's Cognitive Health), Wake Forest University, Winston-Salem, North Carolina, October, 2001.

Keynote speaker, International Conference on Affective Human Factors Design, Singapore, June, 2001.

Keynote speaker, Annual conference of the North American Society for the Psychology of Sport and Physical Activity (NASPSPA), St Louis, MO, June, 2001.

Invited speaker and participant, The Control of Cognitive Processing, Sponsored by the Royal Netherlands Academy of Arts and Sciences, Amsterdam, Netherlands, May 2001.

Invited speaker and participant, Brain Mechanisms and Learning in Ageing, Organization for Economic Cooperation and Development, Tokyo, Japan, April 2001.

Invited speaker and participant, Cognitive Aging: Neurobiological perspectives and interventions, Sponsored by the National Institute on Aging and the Society for Neuroscience, New Orleans, Louisiana, November, 2000.

Foundation Day Gianturco Lecturer, Healthy body, healthy mind?: Aging, fitness and cognition, Carle Foundation Hospital, Urbana, Illinois, November, 2000.

Invited participant, White House Forum on Aging and Technology, Washington, D.C., October, 2000

Invited speaker and participant, Experimentell Psychologische Onderzoekschool Workshop on Exogenous and Endogenous Control of Visual Selection, Amsterdam, Netherlands, June 2000.

Invited speaker and participant, Attraction, Distraction and Action: An Interdisciplinary Conference and Workshop on Attentional Capture. Villanova University Conference Center, Pennsylvania. June 2000.

Invited speaker and participant, Interdisciplinary Workshop on Achieving Cognitive Vitality with Aging. Sponsored by the Institute for the Study of Aging. Tucson, Arizona. May, 2000.

Invited speaker and participant, Human Factors Interventions for the Health Care of Older Adults, Destin, Florida, March, 2000.

Invited speaker, 15th National Motorcycle Safety Conference, Aging of America. Milwaukee, Wisconsin, August, 1999.

Invited speaker, 5th World Congress on Physical Activity, Aging and Sports, Physical and mental training: Implications for cognitive functioning in old age. Orlando, Florida, August, 1999.

Invited speaker and participant, 7th meeting of the International Conference on Neuroscience (ICON), Symposium on Inhibition: Neural Mechanisms and psychophysiological manifestations. Budapest, Hungary, June 1999.

Invited speaker and participant, Seventy First Annual Meeting of the Midwestern Psychological Association, Symposium on Spatial Attention and the Visual World. May. Chicago, Illinois, 1999.

Invited speaker, 9th World Congress of the International Organization of Psychophysiology, Symposium on Psychophysiology and Ergonomics. Taormina, Sicily, Italy, September, 1998.

Invited participant, Attention and Performance XVIII – Control of Cognitive Processes. Great Park, Windsor, England, July, 1998.

Invited speaker, International Symposium on Cognitive Changes Due to Aging and Fatigue as Revealed by Electrical Brain Activity. Institut fur Arbeitsphysiologie. Dortmund, Germany, May, 1998.

Invited speaker, Symposium on Attentional Control and Aging, 1998 Cognitive Aging Conference. Atlanta, Georgia, April.

Invited speaker and participant, Workshop on Molecular, Cellular and Cognitive Effects of Exercise on the Brain, Thirty-First Annual Winter Conference on Brain Research, Snowbird, Utah, January, 1998.

Invited speaker, Aging and executive control, Annual American Psychological Association Conference, Chicago, August, 1997.

Invited speaker and participant, Workshop on Applied Psychophysiology sponsored by McDonnell-Douglas, Helsinki, Finland, June, 1997.

Invited speaker and participant, Experimentell Psychologische Onderzoekschool Workshop on the Varieties of Inhibitory Control: Neural Mechanisms and Behavioral Manifestations, Amsterdam, Netherlands, May, 1997.

Invited speaker and participant, Workshop on the physiological assessment of mental workload, Bundesanstalt fur Arbeitsschutz und Arbeitsmedizin, Berlin, December, 1996.

Invited speaker and participant, Attention and Performance XVII, Beit Oren, Israel, August, 1996.

Invited speaker, Max Planck Institute for Cognitive Neuroscience, Conference on Facilitatory and Inhibitory Components of Visual Selective Attention, Leipzig, Germany, November, 1995.

Invited speaker, Brooks Conference on Human Perceptual and Motor Abilities, "Attentional Control and Piloting Expertise", Brooks AFB, Texas, March, 1995.

Invited speaker, Southeastern Center for Applied Aging Research, Conference on Aging and Skill, "Aging and Multi-Task Performance", Destin, Florida, February, 1995.

Invited speaker, American Psychological Association Conference: Science Weekend, "Attentional Flexibility and Aging: Theory, Data & Applications", N.Y., N.Y., August 1995.

Invited Speaker, Experimentell Psychologische Onderzoekschool Workshop on the Psychophysiology of Mental Resources, "ERPs & Mental Workload Assessment: From Theory to Practice", Amsterdam, Netherlands, September, 1995.

Invited speaker, International Society for Brain Electromagnetic Topography, 5th International Conference, Munster, Germany, August, 1994.

Invited speaker, Annual American Psychological Society Meeting, Skill Acquisition and Automaticity: Beyond the Laboratory Door. Washington, D.C.: July, 1994.

Invited speaker, First Automation Technology and Human Performance Conference, Catholic University, Washington, D.C., April, 1994.

Invited speaker, Conference on EEG Measures in Basic and Applied Settings, Wright Patterson AFB, Dayton, Ohio, November, 1993.

Invited address, National Academy of Science Workshop on Virtual Reality Research and Development, "Utility of psychophysiological measures of cognitive function in virtual reality systems", February, 1993, Washington, D.C.

Invited address, International Organization of Psychophysiology, Sixth International Congress, "Psychophysiological Measurement of Mental Workload", September, 1992. Berlin, Germany.

Invited address, European Space Agency (ESA) Conference on Astronaut Selection and Training, "Human performance in extreme environments", March, 1992. Nice, France.

Invited address, American Psychological Association Annual Meeting, "Cognition, Judgment and Performance above 20,000 feet". August, 1991. San Francisco, California.

Invited participant, Annual Meeting of the Society for Psychophysiological Research. Symposium on the psychophysiology of automatic and controlled processing. October, 1991.

Invited participant and tutorial speaker, University of Stockholm conference on Network Analysis. Stockholm, Sweden, August, 1990.

Invited participant and tutorial speaker, Commission of the European Communities Symposium on "Psychophysiological measures in transport operations". Cologne, West Germany. December, 1990.

Invited presentation as a member of a symposium entitled, "Automatic Information Processing: Theory and Applications", APA Annual Conference, Boston, 1990.

Invited presentation as a member of a symposium entitled, "Aging and Skill Acquisition", APA Annual Conference, New Orleans, 1989.

Invited speaker, APA Division of Applied Experimental and Engineering Psychologists, Annual Meeting, Washington, D.C., March, 1989.

Invited participant and tutorial speaker, Carmel Conference on Control Processes and Metacognition. Carmel California, January, 1989. Colloquium speaker, Navy Personnel Research and Development Center, Neuroscience Group. San Diego, California. February, 1988.

Invited speaker, DOD Conference on Sustained Operations. Walter Reed Medical Center, Washington, D.C. September, 1987.

Invited speaker, DOD Conference on Adaptive Mediation in User-Computer Interaction. Oxnard, California. November, 1987.

Invited participant, NATO AGARD Conference on Electrical and Magnetic Activity of the Central Nervous System: Research and Clinical Applications in Aerospace Medicine. Trondheim, Norway, May, 1987.

Invited speaker, FAA/AFOSR Workshop on Operator Workload Certification in Transport Aircraft. Long Beach, California, February, 1987.

Invited participant and tutorial speaker, Carmel Conference on Individual Differences in Training and Workload. Carmel, California, January, 1987.

Invited presentation as a member of a symposium entitled, "The Interaction of Workload and Training". Human Factors Society, 30th Annual Meeting, Dayton, Ohio, September, 1986.

Invited participant, Carmel Conference on the Interaction of Training and Workload. Carmel, California, January, 1986.

Invited participant, Symposium on Operator Capacity Limits in Complex Systems: The Theory-Applications Interface, American Psychological Association, 93rd Annual Convention, Los Angeles, California, 1985.

Invited participant, Seventh Carmel Conference on Cognitive Psychophysiology: Magnetic and Electrical Event-Related Brain Activity as a Tool in the Study of Cognitive Function. Carmel, California, January 1985.

Workshop entitled "Event Related Brain Potentials and Human Engineering", Human Factors Society, 26th Annual Meeting, Norfolk, Virginia, 1983.

Invited participant, Workshop on Neurotoxicity Testing in Human Populations. Co-sponsored by the U.S. Environmental Protection Agency, University of North Carolina at Chapel Hill, and Albert Einstein College of Medicine. Rougemont, North Carolina, October, 1983.

Invited presentation as a member of a symposium entitled, "The Event-Related Brain Potential as a Metric for the Study of Human Information Processing". Eastern Psychological Association, 52nd Annual Meeting, New York, New York, April, 1981.

Invited participant, Fourth Carmel Conference on Cognitive Psychophysiology. Carmel, California, January, 1981.