#### **CURRICULUM VITAE**

Bradley D. Hatfield PhD, FACSM, FNAK
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## The following is an accurate statement of my professional record:

Bradley R. Hatfuth

July 15, 2020

# **Educational Background**

Ph.D. 1982 Kinesiology, The Pennsylvania State University, University Park, Pennsylvania
M.S.A.1983 Sport Administration, College of Business, Ohio University, Athens, Ohio
M.S. 1976 Kinesiology, The Pennsylvania State University, University Park, Pennsylvania
B.A. 1975 Psychology, University of New Brunswick, Canada
B.P.E. 1974 Physical Education, University of New Brunswick, Canada

## **Academic and Administrative Appointments**

- 2014 Ongoing, Professor (secondary faculty appointment), Department of Epidemiology and Public Health, School of Medicine, University of Maryland, Baltimore
- 2012 2020 Associate Dean for Faculty Affairs, School of Public Health
- 2010 Ongoing, Chair, Department of Kinesiology, School of Public Health, University of Maryland, College Park
- 2008 Ongoing, Research Associate, Center for the Advanced Study of Language (CASL)/ Applied Research lab for Intelligence and Security
- 2003 Professor, Department of Kinesiology, School of Public Health, University of Maryland,
- 1997 Ongoing, Regular Faculty, Center on Aging, University of Maryland, College Park
- 1992 Ongoing, Regular Faculty, Neuroscience and Cognitive Science (NACS) Program, University of Maryland, College Park
- 1988 2003, Associate Professor, Department of Kinesiology, University of Maryland, College Park
- 1986 1989, Research Associate, Naval Medical Research Institute, U.S. Naval Hospital, Naval Medical Command of National Capitol Region, Bethesda, Maryland
- 1982 1988, Assistant Professor, Department of Kinesiology, University of Maryland, College Park (appointed regular member of Graduate Faculty September 1987)

#### **Other Employment**

1982 - Intern, Baltimore Colts Football Club of the National Football League1981-1982, Graduate Assistant football coach, Ohio University, Department of Intercollegiate Athletics

- 1980 Instructor, College of Health and Human Development, The Pennsylvania State University
- 1980 Research Assistant, College of Health and Human Development), Penn State University
- 1980-1981 Doctoral Fellow, Penn State University, sponsored by the National Research Council of Canada (Social Sciences and Humanities Division)
- 1979 Assistant Camp Director for Junior Olympic Development Program, United States Olympic Training Center, Colorado Springs, CO.
- 1978-1980, Teaching Assistant, College of Health and Human Development, Penn State University
- 1976 Instructor, College of Health and Human Development, Penn State University
- 1976-1978 Director of Athletics, Teacher of Biology, Athletics Coach Rothesay Collegiate School for Boys (now Rothesay Netherwood School), St. John, New Brunswick, Canada 1975-1976 - Teaching Assistant, College of Health and Human Development, Penn State University

## **Awards, Honors and Recognition**

- 2017 President, National Academy of Kinesiology
- 2018 Ramsey Lecture, University of Georgia
- 2013 Honor Award, The Mid-Atlantic chapter of the American College of Sports Medicine (ACSM)
- 2011 Pease Family Lecture Scholar, Iowa State University
- 2011 Dorothy Harris lecture in Sport Psychology, The Pennsylvania State University
- 2007 Research and Development Award, University of Maryland, College Park School of Public Health, Recipient
- 2004 Fellow, National Academy of Kinesiology, (Fellow #452)
- 2002 Jerry P. Wrenn Outstanding Service Award, College of Health and Human Performance, University of Maryland, College Park
- 2001 George F. Kramer Practitioner Award, College of Health and Human Performance, University of Maryland, College Park
- 2000 Elected President, Mid-Atlantic Regional Chapter of the American College of Sports Medicine
- 1999 Elected President, North American Society for the Psychology of Sport and Physical Activity (NASPSPA)
- 1999 Fellow, American College of Sports Medicine
- 1990 Nominated for Mabel Lee Award, American Alliance of Health, Physical Education, Recreation, and Dance (now Society for Health and Physical Education)
- 1987 Fellow, Research Consortium of the American Alliance of Health, Physical Education, Recreation and Dance (now Society for Health and Physical Education)
- 1986 Fellow (charter), Association for the Advancement of Applied Sport Psychology (currently inactive)
- 1984 Outstanding Young Men of America
- 1983 Outstanding Dissertation Award, American Alliance of Health, Physical Education, Recreation and Dance (Sport Psychology Academy of National Association of Sport and Physical Education)
- 1982 Academic Scholarship, Department of Sports Administration, College of Business, Ohio University, Athens, Ohio, 1981-82
- 1981 Phi Kappa Phi (scholastic honorary)

#### RESEARCH, SCHOLARLY AND CREATIVE ACTIVITIES

## **Books**

Iso-Ahola, S.E. & Hatfield, B. D. (1986). Psychology of Sports: A Social Psychological Perspective. William C. Brown Co. (original edition) Dubuque, Iowa.

## Chapters in Books (18 published)

- **Hatfield, B.D,** Jaquess, K., Lo, L. & Oh, H. (2020). The cognitive and affective neuroscience of superior athletic performance —Chapter 23. In G. Tenenbaum & R. C. Eklund (Eds.) Handbook of Sport Psychology (Volume 1, Part 5 Cognition and Expertise) 4th edition. John Wiley & Sons, Inc. Publishers. 487-512.
- Kayes, M. K. & **Hatfield, B. D.** (2019). The influence of physical activity on brain aging and cognition: The role of cognitive reserve, thresholds for decline, genetic influence, and the investment hypothesis. In J. M. Rippe (Ed.) Lifestyle Medicine (3rd edition), CRC Press, Taylor & Francis Books, Inc., Boca Raton, FL. 1251-1270.
- Oldham, J., Zimmerman, J. & **Hatfield, B. D.** (2016) Dementia & Alzheimer's Disease. In G. Moore, J. L. Durstine, P. Painter (Eds.) <u>ACSM'S Exercise Management for Persons with Chronic Diseases and Disabilities</u>, 4<sup>th</sup> Ed. Human Kinetics Publishers, Champaign, IL. 287-292.
- Oldham, J., Zimmerman, J. & **Hatfield, B. D.** (2016) Depression & Anxiety Disorders. In G. Moore, J. L. Durstine, P. Painter (Eds.) ACSM'S Exercise Management for Persons with Chronic Diseases and Disabilities, 4<sup>th</sup> Ed. Human Kinetics Publishers, Champaign, IL. 293-300.
- Kayes, M. K. & **Hatfield, B. D.** (2013). The influence of physical activity on brain aging and cognition: The role of cognitive reserve, thresholds for decline, genetic influence, and the investment hypothesis. In J. M. Rippe (Ed.) Lifestyle Medicine (2<sup>nd</sup> edition), Taylor & Francis Books, Inc., Oxfordshire, England. 1379-1395.
- **Hatfield, B. D.** & Kaplan, P. (2012). Exercise psychology for the personal trainer. In J.W. Coburn & M.H. Malek (Eds.), NSCA's Essentials of Personal Training (2nd edition). Human Kinetics Publishers, Champaign, IL. 125-144.
- **Hatfield, B. D.** & Haufler, A. (2010). Brain processes during expert cognitive-motor performance: The impact of mental stress and emotion regulation. In S. Kornguth, R. Steinberg and M.D. Matthews (Eds.) Neurocognitive and Physiological Factors During High-Tempo Operations. Ashgate Publishing Company. Burlington, VT, 167-194. (ISBN: 978-0-7546-7923-3).
- Gentili, R.J., Oh, H., Bradberry, T.J., **Hatfield, B. D.** & Contreras-Vidal, J.L. (2010). Signal processing for non-invasive brain biomarkers of sensorimotor performance and brain monitoring (pp. 461-502). In S. Miron (Ed.) Signal Processing. In-Tech Publishing: Vienna, Austria, pp. 461-502. (ISBN: 978-953-7619-91-6) (www.intechopen.com/articles/show/title/signal-processing-fornon-invasive-brain-biomarders-of-sensorimotor-performance-and-brain-monitoring).

- **Hatfield, B.D**. & Brody, E.B. (2008). Psychology of athletic preparation and performance: The mental management of physical resources. In National Strength and Conditioning Association (Ed.). Essentials of Strength Training and Conditioning, Third Edition. Human Kinetics Publishers: Champaign, IL. Chapter8, 159-178.
- **Hatfield, B.D**. & Kerick, S.E. (2007). The psychology of superior sport performance: A cognitive and affective neuroscience perspective. In G. Tenenbaum & R. C. Eklund (Eds.) Handbook of Sport Psychology 3rd edition. J.C. Wiley Publishers, 84-109.
- **Hatfield, B.D**. (2007). Cognitive neuroscience aspects of sport psychology: Brain mechanisms underlying performance. In T. Morris, P. Terry, & S. Gordon (Eds.). Sport and Exercise Psychology: International Perspectives. Fitness Information Technology Press: Morgantown, West Virginia, 121-137.
- **Hatfield, B.D**. Haufler, A. J. & Spalding, T.W. (2006). A cognitive neuroscience perspective on sport performance. In E.O. Acevedo & P. Ekkekakis (Eds.), Psychobiology of Physical Activity. Human Kinetics Publishers, Champaign, IL: 221-240.
- **Hatfield, B.D**. & Kaplan, P. (2004). Exercise psychology. In T. Baechle & R. Earle (Eds.), The Essentials of Personal Training. Human Kinetics Publishers, Champaign, IL: 141-158.
- **Hatfield, B.D**. & Hillman, C.H. (2001). The psychophysiology of sport: A mechanistic understanding of the psychology of superior performance. In R.N. Singer, H. A. Hausenblas, & C. M. Janelle (Eds.), Handbook of Sport Psychology (2<sup>nd</sup> ed.). John Wiley & Sons, New York: 362-388.
- **Hatfield, B.D**. & Brody, E.B. (2000). The psychology of athletic preparation and performance: The mental management of physical resources. In T. Baechle (Ed.), Essentials of Strength Training Principles. Human Kinetics Publishers (Second edition), Champaign, IL. 187-208.
- **Hatfield, B.D**. & Brody, E.B. (1994). The psychology of athletic preparation and performance: The mental management of physical resources. In T. Baechle (Ed.), Essentials of Strength Training Principles. Human Kinetics Publishers, Champaign, IL. 163-187.
- **Hatfield, B.D**. (1991). Exercise and mental health: The mechanisms of exercise-induced psychological states. In L. Diamant (Ed.) Psychology of Sports, Exercise and Fitness: Social and Personal Issues. Hemisphere Publishing Co., Washington, D.C. 17-50.
- **Hatfield, B.D.** & Sullivan, K.T. (1987). The business of sport and the athlete. In J.R. May and M.J. Asken (Eds.), Sport Psychology: The Psychological Health of the Athlete. PMA Publishing Corporation, Great Neck, New York. 231-253.

# Articles in Refereed Journals (103 published)

- Lu, C., Lu, Y., Oh, H., Jaquess, K., Ginsberg, A., Gentili, R., Ranadive, S. & **Hatfield, B.** (submitted). The acute impact of slow-paced ventilation induced changes on cortical dynamics and autonomic balance. *European Journal of Neuroscience*.
- Jaquess, K., Domingues, C.A., Lo, L-C., Lu, C., Oh, H., Zhang, J. & **Hatfield, B.D**. (submitted). The effect of expertise on the relationship between mental workload and attentional reserve. *International Journal of Psychophysiology*.
- Costanzo, M., VanMeter, J., Janelle, C., Braun, A., Miller, M., Oldham, J., Russell, B. & **Hatfield, B**. (submitted). The specificity of neural regulatory processes during emotional challenge in a stress resilient population. *Frontiers in Psychology*.
- Jin, X., Lu, Y., **Hatfield, B.D.,** Wang, X., Wang, B. & Zhou, C. (in press). Ballroom dancers exhibit a dispositional need for arousal and elevated cerebral cortical activity during finger tapping to the rhythm of preferred melodic recall. *PeerJ*.
- Jaquess, K., Lu, Y., Ginsberg, A., Kahl, S., Lu, C., Ritland, B., Gentili, R. & **Hatfield, B**. (in press). Effect of self-controlled practice on neuro-cortical dynamics during the processing of visual performance feedback. *Journal of Motor Behavior*.
- **Hatfield, B.D.**, Lu, C.M. & Zimmerman, J.B. (2020). Optimization of human performance. Kinesiology Review, 9(1): 1-3.
- Lu, Y., Yang, T., **Hatfield, B.D.**, Cong, F., & Zhou, C. (2020). Influence of cognitive-motor expertise on brain dynamics of anticipatory-based outcome processing. *Psychophysiology*, 57(2):e13477. doi: 10.1111/psyp.13477.
- Jaquess, K., Lu, Y., Iso-Ahola, S., Zhang, J., & **Hatfield, B.D.** (2019). Self-controlled practice to achieve neuro-cognitive engagement: Underlying brain processes to enhance cognitive-motor learning and performance. *Journal of Motor Behavior*. Oct 14:1-14. doi: 10.1080/00222895.2019.1651245. [Epub ahead of print]
- Lo, L.-C., **Hatfield, B.D.**, Wu, C.-T., & Hung, T.-M. (2019). Elevated state anxiety alters cerebral cortical dynamics and degrades precision cognitive-motor performance. *Sport, Exercise, and Performance Psychology*, 8(1), 21-37. http://dx.doi.org/10.1037/spy0000155
- Shaw, E.P., Rietschel, J.C., Hendershot, B.D., Pruziner, A.L., Wolf, E.J., Dearth, C.L., Miller, M.W., **Hatfield, B.D.**, & Gentili, R.J. (2019). A comparison of mental workload in individuals with transfibial and transfemoral lower limb loss during dual-task walking under varying demand. *Journal International Neuropsychological Society*, 25(9), 985-997. doi: 10.1017/S1355617719000602 Epub 2019 Aug 29. PMID: 31462338
- Shaw, E.P., Rietschel, J.C., Shuggi, I.M., Xu, Y., Chen, S., Miller, M.W., **Hatfield, B.D.**, & Gentili, R.J. (2019). Cerebral cortical networking for mental workload assessment under various demands

- during dual-task walking. *Experimental Brain Research*, 237(9), 2279-2295. doi: 10.1007/s00221-019-05550-x. Epub PMID: 31267218
- Ritland, B.M., Simonelli, G., Gentili, R.J., Smith J.C., He, X., Oh, H., Balkin, T.J., & **Hatfield, B.D**. (2019). Sleep health and its association with performance and motivation in tactical athletes enrolled in the Reserve Officers' Training Corps. *Sleep Health*. 5(3), 309-314. doi: 10.1016/j.sleh.2019.01.004. Epub 2019 Feb 12 PMID: 31208712
- Ritland, B.M., Simonelli, G., Gentili, R.J., Smith, J.C., He, X., Mantua, J., Balkin, T.J., & **Hatfield, B.D**. (2019). Effects of sleep extension on cognitive/motor performance and motivation in military tactical athletes. *Sleep Medicine*, 58:48-55. doi: 10.1016/j.sleep. 03.013. Epub 2019 Mar 28. PMID: 31096123
- Pruziner, A.L., Shaw, E.P., Rietschel, J.C., Hendershot, B.D., Miller, M.W., Wolf, E.J., **Hatfield B.D.**, Dearth, C.L., & Gentili, R.J. (2019). Biomechanical and neurocognitive performance outcomes of walking with transtibial limb loss while challenged by a concurrent task. *Experimental Brain Research*, 237(2), 477-491. doi: 10.1007/s00221-018-5419-8. Epub 2018 Nov 20. PMID: 30460393
- Martin, P.E., Rudisill, M.E., **Hatfield, B.D.**, Russell, J., & Reeve, T.E. (2019). Evaluating Kinesiology faculty: Best practices, challenges, and innovative approaches. *Kinesiology Review*, 8(4), 296-304. doi: https://doi.org/10.1123/kr.2019-0044
- **Hatfield, B.D.** (2018). Brain dynamics and motor behavior: A case for efficiency and refinement for superior performance. *Kinesiology Review*, 7(1), 42-50. https://doi.org/10.1123/kr.2017-0056
- Clark, J.E. & **Hatfield, B.D.** (2018). Cathy Ennis, A colleague and friend. *Kinesiology Review*, 7(3), 266. doi: https://doi.org/10.1123/kr.2018-0022
- Jaquess, K.J., Lo, L.-C., Oh, H., Lu, C., Ginsberg, A., Tan, Y.Y., Lohse, K.R., Miller, M.W., **Hatfield, B.D.**, & Gentili, R.J. (2018). Changes in mental workload and motor performance throughout multiple practice sessions under various levels of task difficulty. *Neuroscience*, 393, 305-318. doi: 10.1016/j.neuroscience.2018.09.019. Epub 2018 Sep 26 PMID: 30266685
- Gentili, R.J., Jaquess, K.J., Shuggi, I.M., Shaw, E.P., Oh, H., Lo, L.-C., Tan, Y.Y., Domingues, C.A., Blanco, J.A., Rietschel, J.C., Miller, M.W., & **Hatfield B.D**. (2018). Combined assessment of attentional reserve and cognitive-motor effort under various levels of challenge with a dry EEG system. *Psychophysiology*, 55(6), e13059. doi: 10.1111/psyp.13059. Epub 2018 Feb 9. PMID: 29424021
- Shaw, E.P., Rietschel, J.C., Hendershot, B.D., Pruziner, A.L, Miller, M.W., **Hatfield, B.D.**, & Gentili, R.J. (2018). Measurement of attentional reserve and mental effort for cognitive workload assessment under various task demands during dual-task walking. *Biological Psychology*, 134, 39-51. doi: 10.1016/j.biopsycho.2018.01.009. Epub 2018 Jan 31. PMID: 29378284

- Blanco, J. A., Johnson, M. K., Jaquess, K. J., Oh, H., Lo, L., Gentili, R. J. & **Hatfield, B. D.** (2018). Quantifying cognitive workload in simulated flight using passive, dry EEG measurements. *IEEE Transactions on Cognitive and Developmental Systems*, 10(2), 373-383. doi:10.1109/TCDS.2016.2628702.
- Hillman, C. H., Erickson, K. I. & **Hatfield, B. D.** (2017). Run for your life! Childhood physical activity effects on brain and cognition. *Kinesiology Review*, 6(1), 12-21.
- Jaquess, K.J., Gentili, R.J., Lo, L.-C., Oh, H., Zhang, J., Rietschel, J.C., Miller, M.W., Tan, Y.Y., & **Hatfield, B.D**. (2017). Empirical evidence for the relationship between cognitive workload and attentional reserve. *International Journal of Psychophysiology*, 121, 46-55. doi: 10.1016/j.ijpsycho.2017.09.007. Epub 2017 Sep 18. PMID: 28927724
- Lu, Y., Jaquess, K.J., **Hatfield, B.D.**, Zhou, C., & Li, H. (2017). Valence and arousal of emotional stimuli impact cognitive-motor performance in an oddball task. *Biological Psychology*, 125, 105-114. doi: 10.1016/j.biopsycho.2017.02.010. Epub 2017 Mar 2. PMID: 28263878
- Costanzo, M.E., VanMeter, J.W., Janelle, C.M., Braun, A, Miller, M.W., Oldham, J., Russell, B.A., & **Hatfield B.D**. (2016). Neural efficiency in expert cognitive-motor performers during affective challenge. *Journal of Motor Behavior*, 48(6), 573-588. doi: 10.1080/00222895.2016.1161591 Epub. 2016 Aug 11 PMID: 27715496
- Gentili, R.J., Bradberry, T.J., Oh, H., Costanzo, M.E., Kerick, S.E., Contreras-Vidal, J.L., & **Hatfield, B.D**. (2015). Evolution of cerebral cortico-cortical communication during visuomotor adaptation to a cognitive-motor executive challenge. *Biological Psychology*, 105, 51-65. doi: 10.1016/j.biopsycho. 2014.12.003 Epub 2014 Dec 18. PMID: 25530479
- Freedson, P., Buchner, D. M., Pate, R., **Hatfield, B. D.**, DiPietro, L., Dzewaltowski, D. A. Gavin, T., & Nessler, J. (2015). Integrating public health in Kinesiology: Instruction, academic programs, research, and outreach. *Kinesiology Review*, 4, 355-369.
- Gentili, R.J., Rietschel, J.C., Jaquess, K.J., Lo, L.C., Prevost, M., Miller, M.W., Mohler, J.M., Oh, H., Tan, Y.Y., & **Hatfield, B.D**. (2014). Brain biomarkers based assessment of cognitive workload in pilots under various task demands. *Conference Proceedings IEEE Eng Med Biol Soc.* 2014, 2014, 5860-5863. doi: 10.1109/EMBC.2014.6944961. PMID: 25571329
- Rietschel, J.C., McDonald, C.G., Goodman, R.N., Miller, M.W., Jones-Lush, L.M., Wittenberg, G.F., & **Hatfield, B.D**. (2014). Psychophysiological support of increasing attentional reserve during the development of a motor skill. *Biological Psychology*, 103, 349-56. doi: 10.1016/j.biopsycho.2014.10.008. Epub. PMID: 25457640
- Miller, M. W., Pressaco, A., Groman, L. J., Bur, S., Rietschel, J. C., Gentili, R. J., McDonald, C. G., Iso-Ahola, S. E., & **Hatfield, B. D.** (2014). The effects of team environment on cerebral cortical processes and attentional reserve. *Sport, Exercise, and Performance Psychology*, 3, 61-74. doi: 10.1037/spy0000001.
- Outstanding Paper of the year in Sport, Exercise, and Performance Psychology

- Chang, Y.K., Hung, C.L., Huang, C.J., **Hatfield, B.D.**, & Hung, T.M. (2014). Effects of an aquatic exercise program on inhibitory control in children with ADHD: a preliminary study. *Archives of Clinical Neuropsychology*. 29(3), 217-223. doi: 10.1093/arclin/acu003. PMID: 24695590
- Miller, M. W., Groman, L. J.\*, Rietschel, J. C., McDonald, C. G., Iso-Ahola, S. E., & **Hatfield, B. D.** (2013). The effects of team environment on attentional resource allocation and cognitive workload. *Sport, Exercise, and Performance Psychology, 2 (2), 77-89.* doi: 10.1037/a0030586.
- Hunt, C.J., Rietschel, J., Iso-Ahola, S.E. & **Hatfield, B.D.** (2013). A psychophysiological profile of winners and losers in sport competition. *Sport, Exercise, and Performance Psychoogy*, 2 (3), 220-231.
- **Hatfield, B.D.**, Costanzo, M.E., Goodman, R.N., Lo, L.-C., Oh, H., Rietschel, J.C., Saffer, M., Bradberry, T., Contreras-Vidal, J., & Haufler A. (2013). The influence of social evaluation on cerebral cortical activity and motor performance: a study of "Real-Life" competition. *International Journal of Psychophysiology*, 90(2), 240-249. doi: 10.1016/j.ijpsycho.2013.08.002. Epub 2013 Aug 14 PMID: 23954302
- Pangelinan, M.M., **Hatfield, B.D.**, & Clark JE. (2013). Differences in movement-related cortical activation patterns underlying motor performance in children with and without developmental coordination disorder. *Journal of Neurophysiology*, 109(12), 3041-3050. doi: 10.1152/jn.00532.2012. Epub 2013 Mar 27. PMID: 23536712
- Goodman, R.N., Rietschel, J.C., Lo, L.-C., Costanzo, M.E., & **Hatfield, B.D.** (2013). Stress, emotion regulation and cognitive performance: the predictive contributions of trait and state relative frontal EEG alpha asymmetry. *International Journal of Psychophysiology*. 87(2), 115-123. doi: 10.1016/j.ijpsycho.2012.09.008. Epub 2012 Sep 25. PMID: 23022494
- **Hatfield. B. D.** (2012). Kinesiology and mental health: The promise of exercise neuroscience research for diseases and disorders of the brain The Academy Papers. *Kinesiology Review*, 1(1), 46-58.
- Rietschel, J.C., Miller, M.W., Gentili, R.J., Goodman, R.N., McDonald, C.G., & **Hatfield, B.D.** (2012). Cerebral-cortical networking and activation increase as a function of cognitive-motor task difficulty. *Biological Psychology*. 90(2), 127-133. doi: 10.1016/j.biopsycho.2012.02.022. Epub 2012 Mar 3. PMID: 22410264
- Miller, M.W., Rietschel, J.C., McDonald, C.G., & **Hatfield, B.D**. (2011). A novel approach to the physiological measurement of mental workload. *International Journal of Psychophysiology*. 80 (1), 75-78. doi: 10.1016/j.ijpsycho.2011.02.003. Epub 2011 Feb 20. PMID: 21320552
- Pangelinan, M.M., Zhang, G., VanMeter, J.W., Clark, J.E., **Hatfield, B.D.**, & Haufler AJ. (2011). Beyond age and gender: relationships between cortical and subcortical brain volume and cognitive-motor abilities in school-age children. *Neuroimage*. 54(4):3093-100. doi: 10.1016/j.neuroimage.2010.11.021. Epub 2010 Nov 13. PMID: 21078402

- Gentili, R.J., Bradberry, T.J., Oh, H., **Hatfield, B.D.,** Contreras-Vidal, J.L. (2011). Cerebral cortical dynamics during visuomotor transformation: adaptation to a cognitive-motor executive challenge. *Psychophysiology*, 48(6), 813-824. doi 10.1111/j.1469-8986.2010.01143.x. Epub 2010 Oct 21
- Rietschel, J.C., Goodman, R.N., King, B.R., Lo, L.-C., Contreras-Vidal, J. L. & **Hatfield, B. D.** (2011). Cerebral cortical dynamics and the quality of motor behavior during social evaluative challenge. *Psychophysiology*, 48(4), 479-487.
- Pangelinan, M. M., Kagerer, F. A., Momen, B., **Hatfield, B. D.** & Clark, J. E. (2011). Electrocortical dynamics reflect age-related differences in movement kinematics among children and adults. *Cerebral Cortex*, 21(4), 737-747. doi: 10.1093/cercor/bhq162. Epub 2010 Aug 30.PMID: 20805237
- Tomporowski, P. & **Hatfield, B. D.** (2011). Effects of exercise on neurocognitive functions. *International Journal of Sport and Exercise Psychology*, 3, 263-279.
- Miller, M. W., Rietschel, J. C., McDonald, C. G. & **Hatfield, B. D.** (2011). A novel approach to the physiological measurement of mental workload. *International Journal of Psychophysiology*, 80 (1), 75-78. doi: 10.1016/j.ijpsycho.2011.02.003.
- Bixby, W. R. & **Hatfield, B. D.** (2011). A dimensional investigation of the State Anxiety Inventory (SAI) in an exercise setting: Cognitive vs. Somatic. *Journal of Sport Behavior*, 34 (4), 307-324.
- Pangelinan, M. M., Zhang, G., VanMeter, J. W., Clark, J. E., **Hatfield, B. D.** & Haufler, A. J. (2010). Beyond age and gender: relationships between cortical and subcortical brain volume and cognitive-motor abilities in school-age children. *Neuroimage*, 54 (4), 3093-3100. doi: 10.1016/j.neuroimage.2010.11.021.
- Woo, M., Kim, S., Kim, J., Petruzzello, S.J. & **Hatfield, B.D.** (2010). The influence of exercise intensity on frontal electroencephalographic asymmetry and self-reported affect. *Research Quarterly for Exercise and Sport*, 81 (3), 349-359.
- Gentili, R.J., Bradberry, T.J., **Hatfield, B.D.**, & Contreras-Vidal, J.L. (2009). Brain biomarkers of motor adaptation using phase synchronization. Proceedings of the 31st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS '09), September 2-6, p. 5930-5933, Minneapolis, USA. doi: 10.1109/IEMBS.2009.5334743.PMID: 19965060
- Woo, M., Kim, S., Kim, J., Petruzzello, S. J. & **Hatfield, B. D.** (2009). Examining the exercise-affect dose-response relationship: does duration influence frontal EEG asymmetry? *International Journal of Psychophysiology*, 72(2), 166-172. doi: 10.1016/j.ijpsycho.2008.12.003. Epub 2008 Dec 10.PMID: 19110012
- Deeny, S., Haufler, A. J., Saffer, M. & **Hatfield, B. D.** (2009). Electroencephalographic coherence during visuomotor performance: a comparison of cortico-cortical communication in experts and novices. *Journal of Motor Behavior*, 41 (2), 106-116.

- Tenenbaum, G., **Hatfield, B.D.**, Eklund, R.C., Land, W.M., Calmeiro, L., Razon, S., & Schack, T. (2009). A conceptual framework for studying emotions-cognitions-performance linkage under conditions that vary in perceived pressure. *Progress in Brain Research* (special issue: Mind and Motion: The Bidirectional Link between Thought and Action), 174, 159-178. doi: 10.1016/S0079-6123(09)01314-4.
- Goodman, S., Haufler, A. J., Shim, J. & **Hatfield, B. D.** (2009). Regular and random components in aiming-point trajectory during rifle aiming and shooting. *Journal of Motor Behavior*, 41, 367-382. http://www.eurasip.org/Proceedings/Eusipco/Eusipco2008/papers/1569105504.pdf
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## **Book Reviews, Notes and Other Contributions**

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## **Manuscripts in Preparation**

- Kahl, S., Oh, H., Lo, L.-C., Lu, C., Russel, B. A., & **Hatfield, B. D.** (In preparation). The impact of augmented autonomy on operators' mental workload and task performance in multi-task environments.
- Ginsberg, A. & **Hatfield, B. D.** The role of mental preparation in brain dynamics, muscle activation and force production in a maximal exertion of knee extension; A study of intercollegiate football players.
- Shaw EP, Rietschel JC, Shuggi IM, Miller MW, **Hatfield BD**, Gentili RJ. Functional connectivity correlates of mental workload in lower-limb amputees during dual-task walking under various cognitive-motor demands.
- Lo, L., **Hatfield, B.**, Wang, Y., Fong, D. &Hung. T. The influence of left temporal EEG neurofeedback training on cerebral cortical activity and cognitive-motor performance during marksmanship. Psychology of Sport and Exercise.
- Woo, M., Roth, S., Rietschel, J.C., Zimmerman, J., Ludlow, A., Polich, J. & **Hatfield, B. D.** Cardiovascular fitness modifies the relationship between APOE genotype and P300 measures during executive and non-executive challenge. Psychophysiology.

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- Pangelinan, M.M., Woytowicz, E.J., King, B.R., Bush, L.M., Clark, J.E. & **Hatfield, B. D.** Crossing the midline with the left and right hands: Differential effects on movement kinematics and cortical dynamics.
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- Russell, B.A.H., Presacco, A. & **Hatfield, B. D.** Top-down attention control and bottom-up attention capture during threat of shock: An electroencephalographic investigation. Biological Psychology.
- McAllister, L.D., Rietschel, J.C. & **Hatfield, B. D.** Attentional processes and psychomotor expertise: An event-related potential study. International Journal of Psychophysiology.

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- Domingues, C. A., Domingues, E.C.P., Nascimento, O. J., Filho, N.J.R., Annunziato, J. T., Tan, Y. Y., Jaquess, J.j., Gentili, R. J. & **Hatfield, B. D**. Prolonged fatigue and stress affect cognitive processes during special forces training.
- Lo, L. C. & **Hatfield**, **B. D.** The influence of conscious control of movement on brain processes and the quality of cognitive-motor performance.
- Walters, R. S., Haufler, A. J., Lockwood, P. & **Hatfield, B. D.** Exercise-induced exhaustion and the brain: a study of elite cyclists.
- Tan, Y. Y. & **Hatfield, B. D**. The influence of motivation on emotion regulation and motor performance: Examination of a neuro-affective model.

#### Conferences, Workshops and Talks

## **Invited Talks**

- **Hatfield, B. D.** The future of intercollegiate athletics partnerships between sport, medicine and the academic community. Address to be given at Michigan State University (March, 2021).
- **Hatfield, B. D.** The mind of the superior athlete: A case for neural efficiency. Mid Atlantic Chapter of the American College of Sports Medicine (November, 2018).
- **Hatfield, B. D.** (September, 2017). Brain dynamics during skilled motor performance: A case for efficiency and refinement. National Academy of Kinesiology, Washington, D.C.
- **Hatfield, B. D. Oh, H., Casebeer, W.** (March 2017) Human Performance Sensing, Lockheed Martin CTO Keoki Jackson Briefinig, University of Maryland, College Park, MD.
- **Hatfield, B. D.** (June 2016) The Mind of the Elite Performer A Neurobiological Perspective, University of Texas, Dallas, Texas Center for Brain Health Lecture Series, Dallas, TX.
- **Hatfield, B. D.** (April 2014) The role of exercise in brain health, Army Surgeon General's Conference on Brain Health Defense Health Headquarters (DHHQ), Fairfax, VA.
- **Hatfield, B. D.** (June 2014) The assessment of cognitive load in military flight tasks, Lockheed Martin Corporation and the United States Naval Academy, Annapolis, MD.
- **Hatfield, B. D.** (November 2014) Human performance optimization, Office of the Chief of Staff of the Army, Strategic Studies Group Zachary Taylor Building, Arlington VA.

- **Hatfield, B. D.** (November 2013) Brain processes underlying elite sport performance, Mid Atlantic chapter of the American College of Sports Medicine, Harrisburg, PA.
- **Hatfield, B. D.** (2012) The assessment of cognitive load in human performance, Lockheed Martin Corporation
- Hatfield, B. D. (2012) The role of exercise in the aging brain, Washington Skeptical Society
- **Hatfield, B. D.** (2011) Brain processes and motor performance under mental stress: Choking vs resilience, Dorothy V. Harris Lecture Series, The Pennsylvania State University, University Park, PA
- **Hatfield, B. D.** (2011) The role of exercise in brain aging and dementia, Collington Retirement Community, Prince George's County, MD
- Hatfield, B. D. (2011) Maryland Neuroimaging Center, University of Maryland, College Park, MD
- **Hatfield, B. D.** (2011) Physical activity, health, and neuropsychological behavior: Connecting Basic Research with important social issues, National Academy of Kinesiology, Minneapolis, MN
- **Hatfield, B. D.** (2011) Physical fitness and mental health Understanding exercise and sport psychology through the study of brain processes, The Pease Family lecture series, Iowa State University, Ames, IA
- **Hatfield, B. D.** (2011) Brain processes underlying skilled motor performance, NACS 641 lecture, U Maryland
- Hatfield, B. D. (2011) Career session, MARC, Harrisburg, PA, (November 11, 2011)
- **Hatfield, B. D.** (2010) Exercise and the Brain The Role of Genetic Influence, University of Maryland Department of Physical Therapy and Rehabilitation Science, School of Medicine, University of Maryland, Baltimore, Paper presented
- **Hatfield, B. D.** (2010) The Dose-Response Relationship in the Exercise and Mood Relationship, University of Massachusetts, Amherst, MA, Paper to be presented to the graduate faculty
- **Hatfield, B. D.** (2010) Mental Stress, Brain Processes, and the Quality of Human Performance, Bioscience Research and Technology Review Day, University of Maryland, College Park, (November 9, 2010), Paper presented, A Mini Symposium Immune, Endocrine and Central Nervous System Processes in the Context of Stress (Jude Cassidy, Professor of Psychology and Katherine Ehrlich, Doctoral candidate- Dept of Psychology; organizers), University of Maryland, College Park
- **Hatfield, B. D.** (2010) The assessment of brain processes during expert performance a case for psychomotor efficiency, National Intrepid Center of Excellence (NICoE), Bethesda, MD

- **Hatfield, B. D.** (2010) Brain processes underlying emotion regulation in expert human performance, Lockheed-Martin Corporation
- **Hatfield, B. D.**, Haufler, A., & Contreras-Vidal, J., (2009) Brain Processes During Expert Cognitive-Motor Performance: The Impact of Mental Stress and Emotion Regulation, 2nd Annual Sustaining Performance Under Stress Symposium, Adelphi, MD, sponsored by the Center for Strategic and Innovative Technologies, University of Texas at Austin, TX
- **Hatfield, B. D.** (2009) Importance of early life exercise on growth factors and inflammation in the brain and cognitive performance later in life, American College of Sports Medicine, Seattle, WA, Symposium paper presented. Abstract: (Hatfield, B. D. (2009) Importance of Early Life Exercise on Growth Factors and Inflammation in the Brain and Cognitive Performance Later in Life: 364. Medicine & Science in Sports & Exercise 41 (Supplement 1). DOI: 10.1249/01.MSS.0000353087.59318.3e)
- **Hatfield, B. D.**, Haufler, A. J., & Contreras-Vidal, J., (2009) Brain processes and neurofeedback for performance enhancement of precision motor behavior, 13th International Conference on Human-Computer Interaction (HCI) International, San Diego, CA.
- **Hatfield, B. D.** (2009) Exercise and the aging brain the dementias, GROWS, Holiday Park Senior Center, Wheaton, MD, (point of contact Susan Blum)
- **Hatfield, B. D.**, Haufler, A. J., & Contreras-Vidal, J., 2008, Effects of psychological stress and neurofeedback on brain dynamics and cognitive motor performance, Workshop on Research Efforts and Future Directions in Neuroergonomics and Neuromorphics, sponsored by the Army Research Office, Adelphi, MD
- Gentili, R. J., Bradberry, T. J., **Hatfield, B. D.** & Contreras-Vidal, J. L. (2008) A new generation of non-invasive biomarkers of cognitive-motor states with application to smart Brain Computer Interfaces. EUSIPCO 2008, 16<sup>th</sup> European Signal Processing Conference.
- **Hatfield, B. D.** (2008) Keynote Physical Activity Modifies Genetic Susceptibility to Age-Related Neurocognitive Decline: 465. Medicine & Science in Sports & Exercise 40 (Supplement). DOI: 10.1249/01.mss.0000321391.45626.6f
- **Hatfield, B. D.** (2008) Performance under challenge: a multi-level approach, U.S. Army Research Laboratory (ARL) Collaborative Technology Alliances Workshop (ACTA), Reston, VA
- **Hatfield, B. D.** (2008) Physical activity modifies genetic susceptibility to age-related neurocognitive decline, American College of Sports Medicine meeting Indianapolis, IN as part of Featured Science Session Physical Activity as a Modifier of the Genetic Susceptibility to Dementia, Keynote address, Paper presented, Participants: C.W. Cotman –U C, Irvine, S. Rovio Karolinska Institute, Stockholm, S Deeny and K Nichol U C, Irvine. Abstract: (Hatfield, B. D. (2008) Keynote Physical Activity Modifies Genetic Susceptibility to Age-Related Neurocognitive Decline: 465. Medicine & Science in Sports & Exercise 40 (Supplement). DOI: 10.1249/01.mss.0000321391.45626.6f).

- **Hatfield, B.D.** (2008) Exercise and the Aging Brain New Directions, annual meeting of the North American Society for the Psychology of Sport and Physical Activity, Niagara Falls, Canada, Participant in a symposium to honor the career retirement of Dr. Daniel M. Landers of Arizona State University
- **Hatfield, B.D.** (2008) Exercise and the aging brain, Alzheimer's Association: 2nd annual Billie Showers Alzheimer's Symposium. Virginia Hospital Center, Arlington VA
- **Hatfield, B.D.** (2008) Exercise and the brain: Essential medicine for those at genetic risk for dementia, University of Illinois, Urbana-Champaign
- **Hatfield, B. D.** (2008) Exercise, cognitive reserve, and resilience to dementia, faculty/staff of the Memory Disorders Clinic, Georgetown University Medical Center.
- **Hatfield B. D.** (2007) Exercise and the aging brain, Testimony provided to subcommittee of the Maryland State Legislature, Annapolis, MD
- **Hatfield, B. D.** (2007) Exercise and the Aging Brain A Case for Task, Population, and Measurement Specificity, faculty and students of the University of Florida, Gainesville, Presented
- **Hatfield, B. D.** (2007) The role of brain processes in superior sport performers, Lecture given to visiting Chinese delegation of sport scientists and national coaches, University of Maryland, College Park
- **Hatfield, B. D.** (2007) E Pluribus Unum From DNA to Social Systems: Understanding physical activity through an integrated perspective, American Academy for Kinesiology and Physical Education (AAKPE), Savannah, GA, Presented
- **Hatfield, B. D.**, & Haufler, A., (2007) Brain processes and emotional regulation for superior human performance, faculty and students of the Uniformed Services University of Health Sciences USUHS), Bethesda, MD, Paper presented
- **Hatfield, B. D.** (2006) Physical activity and cognitive function evidence and brain mechanisms, International Congress on Physical Activity and Public Health (sponsored by the Centers for Disease Control), Atlanta, GA
- **Hatfield, B. D.** (2006) The neurobiology of fear and courage: Emotional regulation and superior sport performance, annual meeting of the North American Society of for the Psychology of Sport and Physical Activity, Denver, CO, Senior Lecture presented
- **Hatfield, B. D.** (2006) Featured Science Session The Psychophysiology of Emotion; Applications to Physical Activity, annual meeting of the American College of Sports Medicine, Denver, CO, Keynote Speaker, Lecture presented

- **Hatfield, B. D.** (2006) Special session on Adequacy of Evidence for Physical Activity Guidelines, National Academies of Science, Institute of Medicine (IOM). Washington, DC, Invited speaker
- **Hatfield, B. D.** (2006) Exercise and Sport Psychology: From Neuroscience to Professional Practice What Happens in the Brain of the Elite Performer?, annual meeting of the Mid-Atlantic Regional Chapter of the American College of Sports Medicine, Harrisburg, PA, Chair of invited symposium, Presented
- **Hatfield, B. D.** (2006) Exercise and Sport Psychology: From Neuroscience to Professional Practice Exercise and the Aging Brain, annual meeting of the Mid-Atlantic Regional Chapter of the American College of Sports Medicine, Harrisburg, PA, Chair of invited symposium, Presented
- **Hatfield, B. D.** (2005) Management of Stress-related neurobiological processes during stress, United States Department of Defense Army Research Office (ARO) sponsored meeting, Cashiers, North Carolina
- **Hatfield, B. D.** (2005) Neurobiological processes associated with performance under stress, Department of Defense Army Research Laboratory Human Research and Engineering Directorate Professional Development Seminar and Lecture Series, Aberdeen Proving Ground, Aberdeen, MD
- **Hatfield, B. D.** (2005) Introduction and Overview: 2139 9:00 AM 9:05 AM, Medicine & Science in Sports & Exercise 37(Supplement).
- **Hatfield, B. D.** (2005) The psychology of elite athletic performance- A cognitive neuroscience perspective, International Society for Sport Psychology, Sydney, Australia
- **Hatfield, B. D.** (2005) Brain processes associated with elite performance in soldiers, provided to Brain Plasticity Workshop, Defense Advanced Research Projects Agency (DARPA), Arlington, VA, Presentation
- **Hatfield, B. D.** (2005) Brain processes underlying superior athletic performance, 2005 International Sport Psychology Conference, Taipei, Taiwan Taipei College of Physical Education, Keynote speaker
- **Hatfield, B. D.** (2005) Physical activity and the brain: The impact of exercise across the lifespan, 2005 International Sport Psychology Conference, Taipei, Taiwan Taipei College of Physical Education, Keynote speaker
- **Hatfield, B. D.** (2005) Exercise and the aging brain a neurobiological perspective, provided to Graduate School of Physical Education, Taipei Municipal University of Education, Keynote address
- **Hatfield, B. D.** (2005) The importance of physical activity: From Genes to Behavior to Social Policy, Children's National Medical Center Symposium, University of Maryland

- **Hatfield, B. D.** (2004) Exercise and the aging brain: A case for specificity, Department of Medical and Clinical Psychology, Uniformed Services University of the Health Sciences (USUHS), (February 9, 2004), Paper presented
- **Hatfield, B. D.** (2004) Cerebral cortical activity during expert psychomotor performance, United States Department of Defense Army Research Office (ARO) sponsored meeting, Cashiers, North Carolina, (April 27, 2004)
- **Hatfield, B. D.** (2003) The psychology of superior sport performance: A cortical dynamics perspective, German society of sport sciences: Deutsche Vereinigung fuer Sportwissenschaft, Muenster, Germany, Keynote lecture
- **Hatfield, B. D.** (2003) Psychophysiology of Exercise and Sport, 7th International Olympic Committee World Congress, Athens, Greece, Invited symposium participant
- **Hatfield, B. D.** (2003) Physical activity and cognition biological plausibility and mechanisms, The Cooper Institute Conference Series: Physical activity and mental health: A multidisciplinary approach From molecular biology to clinical practice, Dallas, Texas
- **Hatfield, B. D.** (2002) The psychology of superior psychomotor performance, Mid-Atlantic Chapter of the American College of Sports Medicine, Fernwood, Pennsylvania, Paper presented
- **Hatfield, B. D.** (2002) Exercise and the successfully aging brain: From neuroscience to mental health (Knuttgen Lecture), New England Chapter of the American College of Sports Medicine, Providence, Rhode Island, Paper presented
- **Hatfield, B. D.** (2001) The psychology of superior performance From brain activity to cognition, annual meeting of the American College of Sports Medicine, Baltimore, Maryland, Tutorial lecture presented
- **Hatfield, B. D.**, & Kerick, S.E., (2001) Sport psychology Understanding elite athletic performance, First Annual Sports Medicine Conference, United States Naval Academy, Annapolis, MD, Paper presented, (conference organizer Dr. John Wilckens, director of sports medicine)
- **Hatfield B. D.** (2000) The psychology of superior athletic performance: The concept of psychomotor efficiency, Southeast Sport Psychology Conference, University of Virginia, Charlottesville, Virginia.
- **Hatfield, B. D.** (2000) A neuroscience perspective on exercise and the aging brain, Mid-Atlantic Chapter of the American College of Sports Medicine, Split Rock, Pennsylvania.
- **Hatfield, B. D.** (1998) The psychology of skilled psychomotor performance: Electrocortical activity patterns. Brain electrical activity during psychomotor performance: Clues about the psychological processes of experts, Department of Kinesiology, The Pennsylvania State University, State College, Pennsylvania.

- **Hatfield, B. D.** (1996) The psychology of elite athletic performance, Second Coaches' College, U.S.A. Shooting, United States Olympic Training Center, Colorado Springs, Colorado.
- **Hatfield, B. D.** (1996) Toward a model of optimal performance in athletes: A proposal of efficient brain processes, I Forum Internacional de Educacao Fisica, Ribeirao Preto, BRAZIL, Paper presented
- **Hatfield**, **B. D.** (1996) Aerobic activity history and its effects upon neurocognitive efficiency in older individuals, I Forum Internacional Educação Fisica, Ribeirao Preto, BRAZIL, Paper presented
- **Hatfield, B. D.** (1990) The role of sport science within sport management, Future Directions in Sport Management Conference, Tulane University, New Orleans, LA, Paper presented
- **Hatfield, B. D.** (1989) Neuropsychology and exercise performance, eleventh annual meeting of the Mid-Atlantic Regional Chapter of the American College of Sports Medicine. Geisinger Medical Center, Danville, Danville, PA, Paper presented
- **Hatfield, B. D.**, Rejeski, J.W., Hardy, C.J., & Boutcher, S.H., (1988) Social psychophysiology in sport psychology, North American Society for the Psychology of Sport and Physical Activity, Knoxville, Tennessee, Invited symposium presented
- **Hatfield, B. D.** (1988) Psychology of rehabilitation of the injured athlete, National Athletic Trainers' Association Clinical Symposium and Workshop, Baltimore, Maryland, Paper presented
- **Hatfield, B. D.** (1988) Overview of sports psychology in athletic training, National Athletic Trainers Association Clinical Symposium and Workshop, Baltimore, Maryland, Paper presented
- **Hatfield, B. D.** (1987) Slumps, staleness and burnout in competitive athletes: The opposite state of mental and physical economy, American Alliance for Health, Physical Education, Recreation and Dance, Las Vegas, Nevada, (Sport Psychology Academy), Paper presented
- **Hatfield, B. D.** (1987) Motivation in the weight room, National Strength and Conditioning Association, Las Vegas, Nevada, Paper presented
- **Hatfield, B. D.** (1985), Electrocortical activity during skilled motor performance, Department of Physical Education, York University, Toronto, CANADA, Invited paper presented
- **Hatfield, B. D.** (1984) The role of cardiovascular exercise stress in promoting mental relaxation, Department of Health Science and Physical Education, Arizona State University, Tempe, Arizona, Invited paper presented
- **Hatfield, B. D.** (1983) The importance of mental state and consistency to marksmanship performance as demonstrated by electroencephalographic activity, Sport Medicine Symposium on Elite Shooter Training, Columbus, Georgia, Paper presented

**Hatfield, B. D.** (1982) Central and autonomic nervous system involvement during marksmanship performance, Department of Kinesiology, University of California, Los Angeles, California, Invited paper presented

**Hatfield, B. D.** (1981) Programmatic psychophysiological research at the Motor Behavior Laboratory of The Pennsylvania State University, Department of Kinesiology, Simon Fraser University, Vancouver, British Columbia, CANADA, Invited paper presented

## **Refereed Presentations**

## **National and International Meetings/Conferences**

Shaw EP, Rietschel JC, Kahl S, Hendershot BD, Pruziner AL, Wolf EJ, Dearth CL, Miller MW, **Hatfield BD**, Gentili RJ. (2019). Mental workload assessment under varied levels of cognitive and motor demand during dual-task walking. 59<sup>th</sup> Annual Meeting of the Society for Psychophysiological Research, September 25-29, Washington DC, USA. (Poster presentation).

Ginsberg, A., Lu, C., Gallicchio, G., Elue, E., Teso, J., Bah, M., **Hatfield, B. D.** (2019, June 8). The effect of mental preparation on brain dynamics and muscular force during maximal voluntary movement. Poster presented at North American Society for the Psychology of Sport and Physical Activity (NASPSPA) Conference, Hyatt Regency Baltimore Inner Harbor, Baltimore, MD.

Jaquess, K.J., Lo, L.C., Oh, H., Domingues, C.A., Zhang, J., & **Hatfield, B.D.** (2019). The effects of expertise on the relationship between mental workload and attentional reserve. Poster presented at the Society for Psychophysiological Research, Washington, DC.

Lu, C., Oh, H., Jaquess, K., Ginsberg, A., Kahl, S., Gentili, R., & **Hatfield, B**. (2019, June). Assessment of cognitive workload in rotorcraft piloting tasks. Oral presentation at the 52nd annual meeting of the North American Society for the Psychology of Sport and Physical Activity, Baltimore, MD.

Jaquess, K.J., Lu, Y., Ginsberg, A., Lu, C., Ritland, B., Oh, H., Kahl, S., Gentili, R.J., & **Hatfield**, **B.D.** (2019). Effective processing of performance feedback during self-controlled practice. Presentation given at the North American Society for the Psychology of Sport and Physical Activity, Baltimore, MD.

Kahl, S., Gentili, R.J., & **Hatfield, B.D.,** & Jaquess, K.J. (2019). Greater left hemisphere EEG alpha coherence observed during self-controlled practice compared to externally-controlled practice. Poster presented at the North American Society for the Psychology of Sport and Physical Activity, Baltimore, MD.

Shaw EP, Rietschel JC, Shuggi IM, Xing Y, Chen S, Miller MW, **Hatfield BD**, Gentili RJ. (2019). Cerebral cortical networking for mental workload assessment under various demands during dual-task

- walking in individuals with transtibial limb loss. North American Society for the Psychology of Sport and Physical Activity (NASPSPA) Conference, June 5-8, Baltimore, MD, USA. (Verbal presentation).
- Jaquess KJ, Lu YZ, Ginsberg A, Lu C, Ritland B, Oh H, Lo LC, Kahl S Jr, **Hatfield BD**, Gentili RJ. (2018). Working Memory Engagement during Self-Controlled Practice: An EEG Study. *Accepted.* 19th NASPSPA Conference, 21-23 June 2018, Denver, CO, USA.
- Shaw EP, Rietschel JC, Shuggi IM, Xing Y, Hendershot BD, Pruziner AL, Chen S, Miller MW, **Hatfield BD**, Gentili RJ. (2018). Evaluation of cerebral cortical networking as a measure of cognitive workload during dual-task walking under various levels of challenge. *NASPSPA Conference*, 21-23 June 2018, Denver, CO, USA.
- Jaquess KJ, Lo LC, Oh H, Lu C, Ginsberg A, Tan YY, Lohse KR, Miller MW, **Hatfield BD**, Gentili RJ. (2018). Cortical correlates underlying changes in mental workload and motor performance during multiple training sessions under various levels of challenge. *Accepted.* 19th NASPSPA Conference, 21-23 June 2018, Denver, CO, USA.
- Shaw EP, Rietschel JC, Hendershot BD, Pruziner AL, Wolf EJ, Dearth CL, Miller MW, **Hatfield BD**, Gentili RJ. A combined biomechanical and neurocognitive examination for cognitive workload assessment in individuals with lower-limb loss during dual-task walking. *Society for Psychophysiological Research Annual Meeting, Quebec City, Quebec, Canada 2018*
- Shaw EP, Rietschel JC, Hendershot BD, Pruziner AL, Miller MW, **Hatfield BD**, Gentili RJ. (2017). Examination of cerebral cortico-cortical communication for cognitive workload assessment during dual-task walking. 47<sup>th</sup>Annual Meeting of the Society for Neuroscience Meeting, November 11-15, Washington DC, DC, USA.
- Jaquess, K. J., Lu, Y., Ginsberg, A., Lu, C., Ritland, B., Oh, H., Lo, L., Kahl, S., Hatfield, B. D., & Gentili, R. J. (2017). Memory system engagement as a potential neurocognitive mechanism underlying the effectiveness of self-regulated practice. University of Maryland, College Park, MD, Shanghai University of Sport, Shanghai, China, Neuroscience and Cognitive Science Program, University of Maryland, College Park, MD. Maryland Robotics Center, College Park, MD
- Jaquess, K.J., Gentili, R.J.m Lo, L.C., Oh, H., Zhang, J., Rietschel, J.C., Miller, M.W., Tan, Y.Y., & **Hatfield, B.D.** (2017). The relationship between cognitive workload and attentional reserve: An empirical investigation. Presentation to given at the Society for Neuroscience, Washington, D. C.
- Pruziner AL, Wolf EJ, Rietschel JC, Hendershot BD, Shaw EP, Miller MW, Dearth CL, **Hatfield BD**, Gentili RJ. (2017). Cognitive, biomechanical, and task performance outcomes of walking with transtibial limb loss while challenged by a secondary task. *The Military Health System Research Symposium*, 27-30 August 2017, Kissimmee, FL, USA.
- Shaw, E.P., Rietschel, J.C., Hendershot, B.D., Pruziner, A.L., Miller, M.W., **Hatfield, B.D.**, Gentili, R.J. (2017). Combined assessment of cognitive workload under various levels of challenge during dual-task walking. NASPSPA Conference, 4-7 June 2017, San Diego, CA, USA.

- Pruziner, A.L., Wolf, E.J., Rietschel, J.C., Hendershot, B.D., Shaw, E.P., Miller, M.W., Dearth, C.L., **Hatfield, B.D.**, Gentili, R.J. (2017) Cognitive, biomechanical, and task performance outcomes of walking with transtibial limb loss while challenged by a secondary task. NASPSPA Conference, 4-7 June 2017, San Diego, CA, USA.
- Jaquess, K.J., Lo, L.C., Oh, H., Lu, C., Ginsberg, A., Tan, Y.Y., **Hatfield, B.D.,** Gentili, R.J. (2017). Changes in mental workload and motor performance during the learning of a novel cognitive-motor task over multiple practice sessions. NASPSPA Conference, 4-7 June 2017, San Diego, CA, USA.
- Ginsberg, A., Lu, C., Dumm, M., Vega, B., Johnson, N., & **Hatfield, B. D.** (2016). The effect of mental preparation in muscular movements. Mid-Atlantic Regional Chapter of the American College of Sports Medicine (MARC-ACSM).
- Jaquess, K.J., Lo, L.C., Oh, H., Tan, Y.Y., Rietschel, J.C., Miller, M.W., Gentili, R.J., **Hatfield, B.D.** (2016). Objective assessment of mental demand in expert pilots during varying degrees of task difficulty. 46<sup>th</sup>Annual Meeting of the Society for Neuroscience Meeting, November 12-16, San Diego, CA, USA.
- Jaquess, K.J., Lo, L.C., Oh, H., Tan, Y.Y., Rietschel, J.C., Miller, M.W., Gentili, R.J., **Hatfield, B.D.** (2016). Objective assessment of mental demand in expert pilots during varying degrees of task difficulty. 46<sup>th</sup>Annual Meeting of the Society for Neuroscience Meeting, November 12-16, San Diego, CA, USA.
- Jaquess, K.J., Lo, L.C., Oh, H., Domingues, C.A., Neiman, S.R., Rietschel, J.C., Miller, M.W., Tan, Y.Y., Gentili, R.J. & **Hatfield, B.D.** (2016). Empirical evidence for the relationship between cognitive workload and attentional reserve. Presentation given at the Mid-Atlantic Region Conference of the American College of Sport Medicine, Harrisburg PA.
- Ziegler, M., Kraft, A., Krein, M., Lo, L. C., **Hatfield, B. D.**, Casebeer, W., & Russell, B. (2016). Sensing and assessing cognitive workload across multiple tasks. Paper presented at the HCI International 2016, Toronto, Hatfield, B. D., Canada.
- Shaw, E. P., Rietschel, J. C., McDonald, C. G., Miller, M. W., Gentili, R. J., Jaquess, K., Lo, L. C., Hendershot, B., Pruziner, A., & **Hatfield, B. D.** (2015). A real-time objective assessment of cognitive workload during ambulation. Poster presented at the Society for Neuroscience, Chicago, IL, United States. 45<sup>th</sup>Annual Meeting of the Society for Neuroscience Meeting, October 17-21, Chicago, IL, USA.
- Johnson, M.K., Blanco, J.A., Gentili, R.J., Jacquess, K.J., Oh, H., **Hatfield, B.D.** (2015). Probe-independent EEG assessment of mental workload in pilots. IEEE Neural Engineering and Rehabilitation (IEEE NER 2015), April 22-24, p. 381-384, Montpellier, France.
- Jaquess, K., Oh, H., Lo, L., Tan, Y. Y., Rietchel. J. C., Miller, M. W., Prevost, M., Mohler, J., Postlethwaite, H., Blanco, J., Chen, S., Gentili, R. (2015). A composite cognitive state and load assessment system in pilots under various task demands.

- Oh H, Hatfield BD, Jaquess KJ, Lo L-C, Tan YY, Prevost MC, Mohler JM, Postlethwaite H, Rietschel JC, Miller MW, Postlethwaite H, Blanco JA, Chen S, **Gentili RJ**. (2015). A composite cognitive workload assessment system in pilots under various task demands using ensemble learning. *Proceedings of the 17<sup>th</sup> Human-Computer Interaction Conference*. Foundations of Augmented Cognition. Lecture Notes in Computer Science, 2-7 August, 9183, p. 91-100, Los Angeles, CA, USA.
- Oh H, **Hatfield BD**, Jaquess KJ, Lo L-C, Tan YY, Prevost MC, Mohler JM, Postlethwaite H, Rietschel JC, Miller MW, Blanco JA, Chen S, Gentili RJ. (2015). A composite cognitive workload assessment system in pilots under various task demands using ensemble learning. 54<sup>th</sup>Annual Meeting of the Society for Psychophysiological Research September 10-14, Atlanta, GA, USA Proceedings of the 17<sup>th</sup> Human-Computer Interaction Conference. Foundations of Augmented Cognition. Lecture Notes in Computer Science, 2-7 August, 9183, p. 91-100, Los Angeles, CA, USA.
- Gentili RJ, Rietschel JC, Jaquess KJ, Lo L-C, Prevost M, Miller MW, Mohler JM, Oh H, Tan YY, Hatfield BD. (2014). Brain biomarkers based assessment of cognitive workload in pilots under various task demands. Proceedings of the 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS '14), August 28 September 01, San Diego, USA.
- **Hatfield, B. D.**, Gentili, R. J., Jaquess, K. J., Lo, L. C., Oh, H., Rietschel, J. C., Tan, Y. Y. (2014). Objective assessment of cognitive workload and attentional reserve in pilots during varying degrees of task difficulty and mental stress. *54<sup>th</sup>Annual Meeting of the Society for Psychophysiological Research September 10-14, Atlanta, GA, USA*.
- Gentili, R. J., Oh, H., Shuggi, I. M., Rietschel, J. C., Shewokis, P. A., **Hatfield, B. D.** & Reggia, J. A. (2014). Cognitive workload assessment for a user-prosthesis cooperative intelligent control system during reaching movements. Journal of Sport and exercise Psychology, 36: S30. North American Society for the Psychology of Sport and Physical Activity Conference, June 12-14, 2014, Minneapolis, Minnesota, USA.
- Russell, B. A. H., Presacco, A., & **Hatfield, B. D.** (2014). Top-down attention control and bottom-up attention capture during threat of shock: An electroencephalographic investigation. Annual meeting of the American College of Sports Medicine, Orlando, Fla.
- Kayes, M. K, Venezia, A., Sprenger, A., Roth, S. M., Dougherty, M. R., Bolger, D. J., & **Hatfield, B. D.** (2014). Variability in Learning in Adults Explained by Cardiovascular Fitness, Physical Activity, and APOE Genotype, annual meeting of the American College of Sports Medicine, Orlando, Fla.
- Oh H, Gentili RJ, Costanzo ME, Lo LC, Rietschel JC, Saffer M, **Hatfield BD**. (2013). Understanding brain connectivity patterns during motor performance under social-evaluative competitive pressure. *Proceedings of the 15<sup>th</sup> Human-Computer Interaction Conference. Foundations of Augmented Cognition. Lecture Notes in Computer Science*, 21 26 July, 8027(2013), p. 361-370, Las Vegas, USA.
- Gentili RJ, Oh H, Shuggi I, Rietschel JC, **Hatfield BD**, Reggia JA. (2013). Human-robotic collaborative intelligent control for reaching performance. *Proceedings of the 15<sup>th</sup> Human-Computer*

- Interaction Conference. Foundations of Augmented Cognition. Lecture Notes in Computer Science, 21 26 July, 8027(2013), p. 666-675, Las Vegas, USA.
- Jaquess, K., Rietschel, J. C., Lo, L. & Hatfield, B. D. (2013). Objective assessment of cognitive workload during varying degrees of task difficulty using a dry EEG system: Relevance for ecological validity. Conference: Society for Neuroscience, Washington, DC.
- Costanzo, M. E., **Hatfield, B. D.** (2013). Brain Biomarkers of Neural Efficiency during Cognitive-Motor Performance: Performing Under Pressure, Conference: 7th International Conference, AC 2013, Held as Part of HCI International 2013, At Las Vegas, NV, Volume: 802
- Russell, B. A. H., Goodman F., Guzmán M. Y., **Hatfield, B. D.** (2012). Measurement of Attention from a Cognitive Neuroscience Perspective: An Essential Element of Human Performance, annual meeting of the American College of Sports Medicine, San Francisco, CA, Paper presented.
- Miller, M. W., Pressaco, A., Groman, L. J., Bur, S., Rietschel, J. C., Gentili, R. J., McDonald, C. G., Iso-Ahola, S. E., & **Hatfield, B. D.** (2012). The impact of team environment on attentional reserve. Annual Meeting of the Society for Psychophysiological Research, New Orleans, LA, Poster presented.
- Miller, M. W., Pressaco, A., Groman, L. J.\*, Bur, S.\*, Rietschel, J. C., Gentili, R. J., McDonald, C. G., Iso-Ahola, S. E., & **Hatfield, B. D**. (2012). The effect of team environment on arousal and cerebral cortical activation. *Poster presented at the Annual Meeting of the Society for Neuroscience*, New Orleans, LA.
- Miller, M. W., Rietschel, J. C., McDonald, C. G., & **Hatfield, B. D.** (2012). Perception of teammate competence during task performance alters neurophysiological correlate of motivation orientation, Annual Meeting of the Society for Social Neuroscience, New Orleans, LA, Poster presented.
- Rietschel, J. C., McDonald, C. G., Goodman, R. N., Miller, M. W., Jones-Lush, L. M., Wittenberg, G. F., & **Hatfield, B. D.** (2012). Psychophysiological investigation of attentional processes during motor skill learning, Annual Meeting of the Society for Neuroscience, New Orleans, LA, Poster presented
- Rietschel, J. C., McDonald, C. G., Goodman, R. N., **Miller, M. W.**, Jones-Lush, L. M., Wittenberg, G. F., & Hatfield, B. D. (2012). Psychophysiological investigation of attentional processes during motor skill learning. *Poster presented at the Annual Meeting of the Society for Neuroscience*, New Orleans, LA.
- Russell, B. A. H., Goodman F., Guzmán M. Y., **Hatfield, B. D.** (2012). Measurement of Attention from a Cognitive Neuroscience Perspective: An Essential Element of Human Performance, annual meeting of the American College of Sports Medicine, San Francisco, CA, Paper presented.

- Hunt, C., Rietschel, J., Iso-Ahola, S., & **Hatfield, B. D.** (2012). The neural correlates of winning, Annual Meeting of the Society for Neuroscience, New Orleans, LA, Poster presented.
- Miller, M. W., Pressaco, A., Groman, L. J.\*, Bur, S.\*, Rietschel, J. C., Gentili, R. J., McDonald, C. G., Iso-Ahola, S. E., & **Hatfield, B. D**. (2012). The effect of team environment on the allocation of attentional resources to novel stimuli. *Poster presented at the Annual Meeting of the Social and Affective Neuroscience Society*, New York, NY.
- Miller MW, Presacco A, Groman LJ, Burr S, Rietschel JC, Gentili RJ, McDonald CG, Iso-Ahola SE, **Hatfield BD**. (2012). The effect of team environment on arousal and cerebral cortical activation. *42<sup>nd</sup> Annual Meeting of the Society for Neuroscience, November 13-17, New Orleans, USA*.
- Rietschel JC, Miller MW, **Gentili RJ**, Goodman RN, McDonald CG, Hatfield BD. (2011). Cerebral-cortical networking and activation increases as a function of task-difficulty. 41<sup>st</sup> Annual Meeting of the Society for Neuroscience, November 12-16, Washington DC, USA.
- Miller, M. W., Groman, L. J., Rietschel, J. C., McDonald, C. G., Iso-Ahola, S. E., & **Hatfield, B. D.** (2011). The effects of team dynamics on attentional resource allocation and cognitive workload, Mid-Atlantic Regional Chapter of the American College of Sports Medicine Conference, Harrisburg, PA, Paper presented.
- Rietschel, J. C. <sup>+</sup>, **Miller, M. W.** <sup>+</sup>, Gentili, R. J., Goodman, R. N., McDonald, C. G., & Hatfield, B. D. (2011). Cerebral-cortical networking and activation increase as a function of task-difficulty. *Poster presented at the Society for Neuroscience Annual Meeting*, Washington, D.C
- Goodman, F., Russell, B., & **Hatfield, B. D.** (2011) Measuring residual processing capacity under different levels of task difficulty, Mid-Atlantic Regional Chapter of the American College of Sports Medicine Conference, Harrisburg, PA, Paper presented.
- Lo, L. C., Hung, T. M., Wu, C.T., Chang, T. C., & **Hatfield, B. D.** (June, 2010). An investigation of the effect of anxiety on EEG coherence and visual-motor performance. Paper presented at the 2010 American College of Sports Medicine Annual Meeting, Baltimore, MD, United States. Published. abstract in: Medicine and Science in Sports and Exercise, 42 (5), S203-204
- Miller, M. W., Rietschel, J., McDonald, C., Pangelinan, M., Bush, L., & **Hatfield, B. D.** (2010). EEG assessment of cognitive workload under ecologically valid conditions, Society for Neuroscience Annual Meeting, San Diego, CA, Poster presented.
- Kayes, M., Zimmerman, J., Rietschel, J. C., Deeny, S. P., Roth, S. M., Ludlow, A. T., & **Hatfield, B. D.** (2010). Cognitive performance in relation to APOE genotype, physical activity, and cardiovascular fitness, American College of Sports Medicine annual meeting, Baltimore, MD, Paper presented, Published abstract in: Medicine and Science in Sports and Exercise, 42 (No. 5), S53.

- Haufler, A. J., Pangelinan, M. M., Zhang, G., VanMeter, J., Clark, J. E., & **Hatfield, B. D.** (2010). An examination of cognitive-motor ability and structural brain changes in typically-developing children, American College of Sports Medicine annual meeting, Baltimore, MD, Paper presented, Published abstract in: Medicine and Science in Sports and Exercise, 42 (No. 5), S465.
- Spalding, T. W., Moffatt, L. D., Donald, W., Egle, C. T., & **Hatfield, B. D.** (2010). Autonomic regulation of heart rate during recovery from moderate- and low-intensity exercise, American College of Sports Medicine annual meeting, Baltimore, MD, Paper presented, Published abstract in: Medicine and Science in Sports and Exercise, 42 (No. 5), p. S382.
- Costanzo, M. E., Beatty, G., Breeden, A., Fawver, B., Hancock, G., Janelle, C., Miller, M., Oldham, J., Russell, B., VanMeter, J., & **Hatfield, B. D.** (2010). Examination of the brain processes underlying emotion regulation within a stress resilient population, 4th Annual Meeting of the Social & Affective Neuroscience Society, Chicago IL, (2010), October 29th-31<sup>st</sup>.
- Pangelinan, M. M., **Hatfield, B. D.**, & Clark, J.E., (2010). Attenuated cortical activation may underlie movement deficits in children with Developmental Coordination Disorder, annual meeting of the North American Society for the Psychology of Sport and Physical Activity, Tucson, AZ, USA, Paper presented, (abstract published in: Journal of Sport and Exercise Psychology, 32, p. S47-S48).
- Gentili RJ, Bradberry TJ, **Hatfield BD**, Contreras-Vidal JL. (2009). Brain biomarkers of motor adaptation using phase synchronization. 31<sup>st</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS '09), September 2-6, p. 5930-5933, Minneapolis, USA
- Costanzo, M., Oh, H., Bulkley, B., Goodman, R., Haufler, A., Lo, L., Rietschel, J., Saffer, M., Contreras-Vidal, J., & **Hatfield, B. D.** (October, 2009). Independent Component Analysis of Brain Processes under Psychological Stress during Motor Performance. Paper presented at the Annual Meeting of the Society for Neuroscience, Chicago, IL, United States.
- Rietschel, J., Costanzo, M., Bulkley, B., Goodman, R., Haufler, A., Lo, L., Saffer, M., & **Hatfield, B. D.** (October, 2009). The effects of neurofeedback training and motor skill learning on performance during conditions of challenge. Paper presented to the Annual Meeting of the Society for Neuroscience, Chicago, IL, United States.
- Saffer, M., Haufler, A., Costanzo, M., Bulkley, B., Goodman, R., Lo, L., Rietschel, J., & **Hatfield, B. D.** (October, 2009). Environmental Manipulation Increases Physiological and Central Arousal during Psychomotor Performance. Paper presented at the Annual Meeting of the Society for Neuroscience, Chicago, IL, United States.
- Zimmerman, J.B., Ludlow, A.T., Witkowski, S., Kayes, M., Roth, S.M., Poeppel, D., & **Hatfield**, **B.D.**, (2009) Cortical activation during working memory challenge is moderated by APOE e4 and aerobic fitness in middle-aged adults, American College of Sports Medicine annual meeting, Seattle, WA, Paper presented

- Pangelinan, M.M., **Hatfield, B.D.** & Clark, J.E., (2009) Differences in electrocortical activity during movement planning in children with DCD, 8th International Conference on Developmental Coordination Disorder, Baltimore, MD, Paper presented
- Pangelinan, M.M., Zhang, G., VanMeter, J.W., Clark, J.E., **Hatfield, B.D.**, & Haufler, A.J., (2009) Developmental differences in regional brain volumes are related to visuomotor performance, University of California Conference on Neurocognitive Development, Berkeley, CA, Paper presented
- Costanzo, M., Oh, H., Bulkley, B., Goodman, R., Haufler, A., Lo, L., Rietschel, J., Saffer, M., Contreras-Vidal, J., & **Hatfield, B.D.** (2009) Independent Components Analysis of Brain Processes under Psychological Stress during Motor Performance, Annual Meeting of the Society for Neuroscience, Chicago, IL, Paper presented
- Rietschel, J., Costanzo, M., Bulkley, B., Goodman, R., Haufler, A., Lo, L., Saffer, M., & **Hatfield**, **B.D.** (2009) The effects of neurofeedback training and motor skill learning on performance during conditions of challenge, Annual Meeting of the Society for Neuroscience, Chicago, IL
- Saffer M, Haufler A, Costanzo M, Bulkley B, Goodman R, Lo L, Rietschel J, & **Hatfield, B.D.** (2009) Environmental manipulation increases physiological and central arousal during psychomotor performance, Annual Meeting of the Society for Neuroscience, Chicago, IL.
- Pangelinan, M.M., Oliveira, M.A., Contreras-Vidal, J.L., **Hatfield, B.D.**, & Clark, J.E., (2009) Reduced desynchronization, attenuated movement-related cortical potentials, and poor functional communication in children with Developmental Coordination Disorder, Annual Meeting of the Society for Neuroscience, Chicago, IL, Paper presented
- Lo, L., Hung, T.M., Chien-Ting, W., Tzu-Chien, C., & **Hatfield, B.D.** (2009) An investigation of the effect of anxiety on EEG coherence and visual-motor performance, Mid-Atlantic Regional Chapter of the American College of Sports Medicine, Harrisburg, PA, Paper presented
- Kayes, M., Zimmerman, J., Rietschel, J., & **Hatfield, B.D.** (2009) Cognitive performance on Wisconsin Card Sort Test in relation to APOE genotype and cardiovascular fitness, Mid-Atlantic Conference of American College of Sports Medicine, Harrisburg, PA, Paper presented
- Deeny, S., Nichol, K., Roth, S., **Hatfield, B. D.** & Cotman, C.W. (2008) Use of Neuroimaging to Examine Genotype and Exercise Interactions on Cognitive Function: 463. Medicine & Science in Sports & Exercise 40(5), 69-70. DOI: 10.1249/01.mss.0000321389.68496.33
- Hung, T. M., Haufler, A. J., Lo, L., Mayer-Kress, G. & **Hatfield, B. D.** (2008). Visuomotor Expertise and Dimensional Complexity of Cerebral Cortical Activity. Medicine and Science in Sports and Exercise, 40 (4), 752-759. DOI: 10.1249/MSS.0b013e318162c49d
- Ludlow, A. T., Zimmerman, J. B., Witkowski, S., Hearn, J. W., **Hatfield, B. D.** & Roth S.M. (2008). Relationship between physical activity level, telomere length, and telomerase activity. Medicine and Science in Sports and Exercise, 40 (10), 1764-1771. DOI: 10.1249/MSS.0b013e31817c92aa

- Zimmerman, JB, Hearn, JW, Ludlow, AT, Savin-Murphy, J., Rietschel, JC, Conery, R., Deeny, SP, Roth, SM, & **Hatfield, B.D.** (2008) Executive and memory performance is moderated by APOE and physical activity in middle-aged adults, American College of Sports Medicine, Indianapolis, IN., Paper presented. Published abstract in: Medicine and Science in Sports and Exercise, 40, (Supplement, S89)
- Savin-Murphy, J., Zimmerman, JB, Deeny, SP, Ludlow, AT, Poeppel, D., Roth, SM, Contreras-Vidal, J, & **Hatfield, B.D.** (2008) Fitness and cognitive decline of the aging brain: A preliminary investigation, American College of Sports Medicine, Indianapolis, IN, Paper presented. Published abstract in: Medicine and Science in Sports and Exercise, 40, (Supplement, S90)
- McCullagh, P., Christina, B., Gould, D., Brawley, L., Feltz, D., **Hatfield, B. D.**, Crews, D., Etnier, J., & Arent, S., (2008) Five decades of impact in sport and exercise psychology: A legacy of mentorship, North American Society for the Psychology of Sport and Physical Activity, Niagara Falls, Canada, Journal of Sport and Exercise Psychology, 30 (Supplement), S3. Paper presented.
- Haufler, A. J., Goodman, S. R., Shim, J., & **Hatfield, B. D.** (2008) From novice to expert motor behavior: A process of refinement to achieve a stable goal, North American Society for the Psychology of Sport and Physical Activity, Niagara Falls, CANADA, Paper presented. Published abstract in: Journal of Sport and Exercise Psychology, 30 (supplement), S31
- Pangelinan, MM, Kagerer, FA, **Hatfield, B. D**, & Clark, JE, (2008) Increased recruitment of the ipsilateral sensorimotor cortex and coherence during multi-joint, goal-directed arm movements, North American Society for the Psychology of Sport and Physical Activity, Niagara Falls, CANADA, Paper presented, Published abstract in: Journal of Sport and Exercise Psychology, 30 (supplement), S117
- Saffer, MI, Deeny, SP, Haufler, AJ, & **Hatfield, B.D.** (2008) EEG coherence during visuomotor performance: A comparison of corticocortical communication in experts and novices, North American Society for the Psychology of Sport and Physical Activity, Niagara Falls, CANADA, Paper presented, Published abstract in: Journal of Sport and Exercise Psychology, 30 (supplement), S124-125
- Rietschel, JC, King, BR, Pangelinan, MM, Clark, JE, & **Hatfield, B. D.** (2008) EEG coherence associated with using an explicit strategy during a motor task, North American Society for the Psychology of Sport and Physical Activity, Niagara Falls, CANADA, Paper presented, Published abstract in: Journal of Sport and Exercise Psychology, 30 (supplement), S195-196
- Woo, M, Roth, S., & **Hatfield, B. D.** (2008) Physical activity, brain function, and the role of the apolipoprotein E4 allele in young adults, North American Society for the Psychology of Sport and Physical Activity, Niagara Falls, CANADA, Paper presented, Published abstract in: Journal of Sport and Exercise Psychology, 30 (supplement), S214
- Goodman, R. N., Rietschel, J. C., Lo, L., Sane, N., Costanzo, M., & **Hatfield, B. D.** (September, 2008). Performance under pressure: Frontal asymmetry and emotion regulation. Paper presented at

the Annual Meeting of the Society for Psychophysiological Research, Austin, TX, United States. Published abstract in: Psychophysiology, 45 (supplement 1), S39.

Rietschel, JC, Zimmerman, JB, McDonald, CG, Haufler, AJ, & **Hatfield, B. D.** (2008) Physical activity is positively associated with executive functioning in older adults: A principal component analysis of the ERP response, Society for Psychophysiological Research, Austin, TX, Paper presented, Published abstract in: Psychophysiology, 45 (supplement 1), S76-77.

Rietschel, J. C., Costanzo, M. E., Goodman, R. N., Haufler, A. J., Lo, L. C., McDonald, C. G., Saffer, M, & **Hatfield, B. D.** (November, 2008). Electrocortical dynamics during competitive psychomotor performance. Paper presented at the Society for Neuroscience annual conference, Washington, D. C., United States. Listed in Society for Neuroscience Final Program, November 16, 2008 – Sunday. Society for Neuroscience Abstract. S-114560-SfN

Goodman, R.N., Rietschel, J.C., Lo, L., Sane, N., Costanzo, M., & **Hatfield, B.D.** (November, 2008). Phasic EEG frontal asymmetry mediates markers of emotion regulation. Paper presented to the Society for Neuroscience annual conference, Washington, D. C., United States. Listed in Society for Neuroscience Final Program, November 19, 2008 - Wednesday. Society for Neuroscience Abstract. S-115385-SfN

Gentili, RJ., Bradberry, TJ., **Hatfield, BD**., Contreras-Vidal, JL. (2008). A new generation of non-invasive biomarkers of cognitive-motor states with application to smart brain computer interfaces. Proceeding of the 16<sup>th</sup> European Signal Processing Conference (EUSIPCO-2008), EURASIP Society, 2008, August 25-27, Lausanne, Switzerland. <a href="http://www.eurasip.org/Proceedings.Eusipco?Eusipco2008/papers/1569105504.pdf">http://www.eurasip.org/Proceedings.Eusipco?Eusipco2008/papers/1569105504.pdf</a> 2551-2554, San Diego, USA

Gentili RJ, Bradberry TJ, **Hatfield BD**, Contreras-Vidal JL. (2007). Power increase in specific EEG bands reflects the acquisition of an internal model of a novel environment during a visuomotor adaptation task. *37*<sup>th</sup> Annual Meeting of the Society for Neuroscience, November 3-7, San Diego, USA.

**Gentili RJ**, Bradberry TJ, Hatfield BD, Contreras-Vidal JL. (2007). Power increase in specific EEG bands reflects the acquisition of an internal model of a novel environment during a visuomotor adaptation task. 37th Annual Meeting of the Society for Neuroscience, November 3-7, San Diego, USA.

Ludlow, A. T., Zimmerman, J. B., Hearn, J. W., Witkowski, S., **Hatfield, B. D.**, & Roth, S. M., (2007) Relationship between exercise energy expenditure and telomere length and telomerase activity, FASEB meeting, Washington, D. C., Experimental Biology, XX (supplement). Paper presented

Zimmerman, J. B., Conery, R., Hearn, J. W., Rietschel, J. C., Deeny, S. P., Roth, S. M., & **Hatfield**, **B. D.** (2007) Behavioral evidence of brain changes moderated by APOE and physical activity in middle-aged adults, Annual Meeting of the American College of Sports Medicine, New Orleans, LA, Medicine & Science in Sports & Exercise. 39 (5), S164. Paper presented

- Pangelinan, M.M., Kagerer, F.A., **Hatfield, B.D.**, Momen, B., & Clark, J.E., (2007) Age-related changes in motor readiness potentials and kinematics of goal-directed reaching in children and adults, Progress in Motor Control VI, Santos, Sao Paulo, Brazil, Motor Control, 11, S24. Paper presented
- Pangelinan, M.M., Kagerer, F.A., Momen, B., **Hatfield, B.D.**, & Clark, J.E., (2007) Age-related differences in task-relevant activation and functional coupling during motor planning of discrete drawing in children and adults, 37th Annual Meeting of the Society for Neuroscience, San Diego, CA, USA, Presented
- Gentili, R.J., Bradberry, T. J., **Hatfield, B.D.**, & Contreras-Vidal, J.L., (2007) Power increase in specific EEG bands reflects the acquisition of an internal model of a novel environment during a visuomotor adaptation task, 37th Annual Meeting of the Society for Neuroscience, San Diego, CA, USA, Presented
- Lo, L. C., J. B. Zimmerman, M. J. Woo, A. J. Haufler, and **Hatfield, B. D.** (June, 2006). The relationship between frontal brain activation, physical activity, and depression in older men and women. Paper presented at the national meeting of the North American Society for the Psychology of Sport and Physical Activity, Denver, CO, United States. Published abstract in: Journal of Sport & Exercise Psychology, 28(supplement), S121-122.
- Goodman, R. N., J. C. Rietschel, L. C. Lo, M.J. Woo, A. J. Haufler, J. L. Contreras-Vidal, and **Hatfield, B. D.** (June, 2006). Frontal asymmetry during high and low stress conditions in cognitive motor performance. Paper presented at the national meeting of the North American Society for the Psychology of Sport and Physical Activity, Denver, CO, United States. Published abstract in: Journal of Sport & Exercise Psychology, 28(supplement), S74-75.
- Rietschel, J. C., R. N. Goodman, L. Lo, M. Woo, A. J. Haufler, J. L. Contreras-Vidal, and **Hatfield**, **B. D.** (June, 2006). Explaining motor performance decrement associated with stress through electroencephalography (EEG) coherence. Paper presented at the national meeting of the North American Society for the Psychology of Sport and Physical Activity, Denver, CO, United States. Published abstract in: Journal of Sport & Exercise Psychology, 28(supplement), S153-154.
- Woo, M. J., R. N. Goodman, J. C. Rietschel, L. C. Lo, A. J. Haufler, J. L. Conteras-Vidal, and **Hatfield, B. D.** (June, 2006). Cortical activation during visuomotor performance and stress. Paper presented at the national meeting of the North American Society for the Psychology of Sport and Physical Activity, Denver, CO, United States. Published abstract in: Journal of Sport & Exercise Psychology, 28(supplement), S194. 666-675.
- Goodman, R.N., Rietschel, J.C., Lo, L.C., Woo, M.J., Haufler, A.J., Contreras-Vidal, J.L., & **Hatfield, B.D.** (2006) Frontal asymmetry during high and low stress conditions in cognitive motor performance, North American Society for the Psychology of Sport and Physical Activity, Denver, CO, Journal of Sport and Exercise Psychology, S28 (supplement), S74. Paper presented
- Hung, T.M., Haufler, A.J., & **Hatfield, B.D.** (2006) Comparison of mental efficiencies between marksmen and novice shooters during rifle shooting: Examining the psychomotor efficiency

- hypothesis, North American Society for the Psychology of Sport and Physical Activity, Denver, CO, Journal of Sport and Exercise Psychology, p. S28 (supplement), S91. Paper presented
- Lo, L.C., Zimmerman, J.B., Woo, M.J., Haufler, A.J., & **Hatfield, B.D.** (2006) The relationship between frontal brain activation, physical activity, and depression in older men and women, North American Society for the Psychology of Sport and Physical Activity, Denver, CO, Journal of Sport and Exercise Psychology, 28 (supplement), S121-122. Paper presented
- Rietschel, J.C., Goodman, R.N., Lo, L., Woo, M., Haufler, A.J., Contreras-Vidal, J.L., & **Hatfield**, **B.D.** (2006) Explaining motor performance decrement associated with stress through electroencephalography (EEG) coherence, North American Society for the Psychology of Sport and Physical Activity, Denver, CO, Journal of Sport and Exercise Psychology, 28 (supplement), S153-154. Paper presented
- Woo, M.J., Goodman, R.N., Rietschel, J.C., Lo, L.C., Haufler, A.J., Contreras-Vidal, J.L., & **Hatfield, B.D.** (2006) Cortical activation during visuomotor performance and stress, North American Society for the Psychology of Sport and Physical Activity, Denver, CO, Journal of Sport and Exercise Psychology, 28 (supplement), S194. Paper presented
- Zimmerman, J.B., Deeny, S.P., Hearn, J.W., Conery, R., Poeppel, D., & **Hatfield, B.D.** (2006) Physical activity and MEG current dipole intensity in middle-aged men and women, North American Society for the Psychology of Sport and Physical Activity, Denver, CO, Journal of Sport and Exercise Psychology, 28 (supplement), S198. Paper presented
- Keenan, J.F., Zimmerman, J.B., Deeny, S.P., Hearn, J.W., Conery, R., Young, D., & **Hatfield**, **B.D.** (2006) Validating the Physical Activity Survey (PAS) for Adults aged 50-70: A comparison of the Yale Physical Activity Survey (YPAS) to the Physical Activity Survey, North American Society for the Psychology of Sport and Physical Activity, Denver, CO, Journal of Sport and Exercise Psychology, 28 (supplement). Paper presented
- **Hatfield, B.D.** & Meeusen R., (2005) Exercise, sport performance, and the human brain Overview of assessment techniques with selected applications, American College of Sports Medicine, Nashville, TN, Medicine and Science in Sports and Exercise, 37 (50), S415. Highlighted symposium presented, Participants: C. Cotman (U. California, Irvine; S Deeny, U.C., Irvine; A. Kramer, U. of Illinois; C. Hillman, U. Illinois; & J. Williamson, U.Texas Southwestern
- Spalding, T.W., Lyon, L.A., & **Hatfield, B.D.** (2004) Relative efficacy of aerobic training and stress management in lowering cardiovascular activity during psychological stress, annual meeting of the American College of Sports Medicine, Indianapolis, IN, Medicine and Science in Sports and Exercise, 36 (5), S90. Paper presented
- Zimmerman, J., Stover, H., Wallace, B., Deeny, S., Goodman, R., Pangelinan, M., Haufler, A., & **Hatfield, B. D.** (2004) Effects of a low-intensity short-duration physical activity intervention on cognitive function in older adults, annual meeting of the American College of Sports Medicine, Indianapolis, IN, Medicine and Science in Sports and Exercise, 36 (5), S274, Paper presented

- Zimmerman, J., Stover, H., Deeny, S., Wallace, B., Price, R., Bixby, W., Haufler, A., & **Hatfield**, **B.D.** (2004) Relationship of physical activity with neurocognitive functioning during an executive function task in older men and women, North American Society for the Psychology of Sport and Physical Activity, Vancouver, BC, Journal of Sport and Exercise Psychology, 26 (supplement), S206. Paper presented
- Goodman, R., Price, R., Zimmerman, J., Stover, H., Deeny, S., Wallace, B., Bixby, W., Haufler, A., & **Hatfield, B. D.** (2004) Attenuation of frontal lobe decline with physical activity: a neuroimaging study, North American Society for the Psychology of Sport and Physical Activity,, Vancouver, BC, Journal of Sport and Exercise Psychology, 26 (supplement), S81. Paper presented
- Zimmerman, J., Haufler, A., Bixby, W., Stover, H., Deeny, S., & **Hatfield, B. D.** (2004) Physical activity and neurocognitive function during executive challenge in older men and women, annual meeting of the Gerontological Society of America, Washington, DC, The Gerontologist, 44 (special issue 1), xx. Paper presented
- Conroy, D. E., Hillman, C. H., Janelle, C. M., Ginis, K. A. M. & **Hatfield, B. D.** (2003). New Directions for emotion research in kinesiology. Journal of Sport & exercise Psychology, 23, S16-S16.
- **Hatfield, B.D.,** Landers, D.M., Cotman, C.W., Schuit, J., & Kaspar, B., (2003) Exercise and cognitive function; from genes to behavior, Annual meeting of the American College of Sports Medicine, San Francisco, CA, Symposium presented, May 28-June 1, 2003
- Bixby, W.R., & **Hatfield, B.D.** (2003) Does fitness influence the affective response during and following acute aerobic exercise?, annual meeting of the American College of Sports Medicine, San Francisco, CA, Medicine and Science in Sports and Exercise, 35, S202. Paper presented, May 28-June 1, 2003
- Deeny, S.P., Bixby, W.R., Zimmerman, J.B., Price, R.W., Stover, H.S., Haufler, A.J., & **Hatfield, B.D.** (2003) Exercise and resting alpha power in the elderly, annual meeting of the American College of Sports Medicine, San Francisco, CA, Medicine and Science in Sports and Exercise, 35, S394. Paper presented, May 28-June 1, 2003
- Deeny, S., Farrell, R., Bixby, W.R, Zimmerman J., Stover, H., Haufler, A., & **Hatfield**, **B.D.** (2003) The effect of physical activity and APOE genotype on memory and executive function in the elderly, North American Society for the Psychology of Sport and Physical Activity, Savannah, GA, Journal of Sport and Exercise Psychology, 25, S48. Paper presented
- Zimmerman, J., Stover, H., Deeny, S., Walden, T., Price, R., Wallace, B., Bixby, W.R., Haufler, A., & **Hatfield, B.D.** (2003) Relationship of neurocognitive functioning with physical activity in older men and women, North American Society for the Psychology of Sport and Physical Activity, Savannah, GA, Journal of Sport and Exercise Psychology, 25, S144-145. Paper presented
- Conroy, D.E., Hillman, C.H., Janelle, C.M., Martin-Ginis, K.A., & **Hatfield, B.D.** (2003) New dimensions for emotion research in kinesiology, North American Society for the Psychology of

- Sport and Physical Activity, Savannah, GA, Journal of Sport and Exercise Psychology, 25, S16. Paper presented
- Bixby, W.R., Deeny, S., Zimmerman, J., & **Hatfield, B.D.** (2003) Physical activity, executive control, and the oldest old, The Cooper Institute Conference Series: Physical activity and mental health: A multidisciplinary approach From molecular biology to clinical practice, Dallas, TX, Paper presented
- Schleifer, L. Spalding, T., **Hatfield, B.D.** Kerick, S., & Ley, R., (2002) Effects of mental workload stress on end-tidal CO2 in computer work, annual Meeting of the Biological Psychology 62(3), 234-235 International Society for the Advancement of Respiratory Psychophysiology, Washington, D.C., Paper presented
- Walters, R. S., **Hatfield, B. D.**, Haufler, A., Lockwood, P., & Hung, T. (2002) Effect of Exercise-Induced Hypoglycemia on CNS Function in Elite Cyclists. Conference paper. Medicine and Science in Sports and Exercise 34(5).
- Haufler, A. J., Spalding, T. W., Santa Maria, D. L., & **Hatfield, B. D.** (2002) Erratum: Neurocognitive activity during a self-paced visuospatial task: Comparative EEG profiles in marksmen and novice shooters(Biological Psycological (2000) 53, 131-160. PII: S0301051100000478). Biological Psychology 59(1).
- Spalding, T.W., Kerick, S., **Hatfield, B.D.**, Schleifer, L.M., & Cram, J.R., (2002) Description and validation of a method to remove ECG artifact from EMG records, 33rd Annual Meeting of the Association for Applied Psychophysiology and Biofeedback, Las Vegas, NV, Paper presented
- **Hatfield, B.D.** Contreras-Vidal, J.L., & Van Gemmert, A.W.A., (2002) A multilevel approach to the understanding of cognitive-motor behavior: From neurobiology to conceptual modeling, national meeting of the North American Society for the Psychology of Sport and Physical Activity, Baltimore, MD, Journal of Sport & Exercise Psychology, 24 (supplement), S14, Paper presented
- **Hatfield, B.D.** (2002) The characterization of expert performance: Concurrent measures of a central organizing principle economy of effort, national meeting of the North American Society for the Psychology of Sport and Physical Activity, Baltimore, MD, Journal of Sport & Exercise Psychology, 24 (supplement), S15, Paper presented
- Kerick, S.E., Schleifer, L.M., Spalding, T.W., & **Hatfield, B.D.** (2002) Cognitive workload influences neuromuscular activity and performance of skilled typists, national meeting of the North American Society for the Psychology of Sport and Physical Activity, Baltimore, MD, Journal of Sport & Exercise Psychology, 24 (supplement), S18, Paper presented
- Bixby, W.R., Deeny, S., Zimmerman, J.B., Price, R.W., Stover, H.S., Walden, T.T., Haufler, A.J, & **Hatfield, B.D.** (2002) Physical activity and the aging brain: Inhibitory processes, national meeting of the North American Society for the Psychology of Sport and Physical Activity, Baltimore, MD, Journal of Sport & Exercise Psychology, 24 (supplement), S33, Paper presented

- Deeny, S., Bixby, W.R., Zimmerman, J.B., Stover, H.S., Price, R.W., Walden, T.T., & **Hatfield**, **B.D.** (2002) The effect of physical activity on cortico-cortical communication in the elderly, national meeting of the North American Society for the Psychology of Sport and Physical Activity, Baltimore, MD, Journal of Sport & Exercise Psychology, 24 (supplement), S50, Paper presented
- Haufler, A.J., Mahlow, P.T., & **Hatfield, B.D.** (2002) Exercise and cognitive processes in the elderly, national meeting of the North American Society for the Psychology of Sport and Physical Activity, Baltimore, MD, Journal of Sport & Exercise Psychology, 24 (supplement), S68, Paper presented
- Zimmerman, J.B., Bixby, W.R., Deeny, S., Price, R.W., Stover, H.S., Walden, T.T., Haufler, A.J., & **Hatfield, B.D.** (2002) Physical activity and the aging brain: Fluid vs. crystallized intelligence, national meeting of the North American Society for the Psychology of Sport and Physical Activity, Baltimore, MD, Journal of Sport & Exercise Psychology, 24 (supplement), S137, Paper presented
- Bixby, W.R., & **Hatfield, B.D.** (2002) The relationship of physical activity and frontal cerebral asymmetry to depression in the elderly, national meeting of the American College of Sports Medicine, St. Louis, MO, Medicine & Science in Sports and Exercise, 34(5), (supplement), S526, Paper presented
- McAllister, L.D. & **Hatfield, B.D.** (2002) Attentional processes and psychomotor expertise: An ERP study, Annual Meeting of the Society for Psychophysiological Research, Washington, D.C., Psychophysiology, 39 (supplement 1), S56, Paper presented
- Deeny, S., Bixby, W., Zimmerman, J., Stover, H., Price, R., Walden, T., Hillman, C.H., Haufler, A.J., & **Hatfield, B.D.** (2002) Effects of physical activity on P300 for a Go/No-Go task in a healthy elderly population, Annual Meeting of the Society for Psychophysiological Research, Washington, D.C., Psychophysiology, 39 (supplement 1), S31, Paper presented
- Meijer, E.H., Smulders, F.T.Y., & **Hatfield, B.D.** (2002) Effects of rhythmic physical activity on the EEG, Annual Meeting of the Society for Psychophysiological Research, Washington, D.C., Psychophysiology, 39 (supplement 1), S58, Paper presented
- **Hatfield, B.D.** & Haufler, A.J., (2002) Exercise and the aging brain, annual Meeting of the Gerontological Society of America, Boston, MA, Paper to be presented, (paper part of symposium Exercise, Fall Prevention, and Cognition Within a Continuing Care Retirement Community chair: J. Gaines)
- Contreras-Vidal, J.L., Kerick, S.E., & **Hatfield, B.D.** (2002) Adaptive visuo-motor learning mechanisms in normal aging, Annual Meeting of the Society for Neuroscience, Orlando, FL, Program No. 170.8. 2002 Abstract viewer/Itinerary Planner. Washington, D.C.: Society for Neuroscience, 2002. Online, Paper presented

- **Hatfield, B.D.** & Haufler, A.J., (2002) The psychology of superior performance, Mid-Atlantic Chapter of the American College of Sports Medicine, Fernwood, Pennsylvania, Invited paper presented
- Lockwood, P., Haufler, A.J., & **Hatfield, B.D.** (2001) Effect of an acute bout of exercise on affective state as indexed by electroencephalogram (EEG), Annual Meeting of the Society for Psychophysiological Research, Washington, D.C., Psychophysiology, 39 (supplement 1), S52, Paper presented
- Deeny, S.D., Haufler, A.J., & **Hatfield, B.D.** (2001) EEG coherence and regional autonomy in the cortex of expert and novice shooters, annual meeting of the North American Society for the Psychology of Sport and Physical Activity, St. Louis, MO, Journal of Sport and Exercise Psychology, 23 (supplement), S70, Paper presented
- Bixby, W.R., Spalding, T.S., & **Hatfield, B.D.** (2001) An examination of opponent process theory as a mechanism for affective changes associated with acute exercise, annual meeting of the North American Society for the Psychology of Sport and Physical Activity, St. Louis, MO, Journal of Sport and Exercise Psychology, 23 (supplement), S22, Paper presented
- Cowan, J.D., Haufler, A.J., Kerick, S.E., **Hatfield, B.D.**, Sime, W.J., & Allen, T.W., (2001) Attention, skill development, and brainwave changes during sports training, annual meeting of the North American Society for the Psychology of Sport and Physical Activity, St. Louis, MO, Journal of Sport and Exercise Psychology, 23 (supplement), S5, Paper presented
- Meeusen, R., **Hatfield, B.D.**, Dishman, R.K., Greenough, W.T., Milton, J., & Petruzzello, S., (2001) A brain odyssey methods of neuroscience research in exercise science, annual meeting of the American College of Sports Medicine, Baltimore, MD, Medicine and Science in Sports and Exercise, 33 (5) (supplement), S226, presented a paper "EEG and exercise: another view on brain activity" as part of this symposium (co-chair with Meeusen) presented Kerick, S.E., McDowell, K., Hung. T.M., Spalding, T.S., & Hatfield, B.D.,
- Kerick, S.E., McDowell, K., Hung, T.M., Spalding, T.S., **Hatfield, B.D.** (2001) Event-related alpha power in marksmen: Motor versus integrated perceptual-motor demands of shooting, annual meeting of the American College of Sports Medicine, Baltimore, MD, Medicine and Science in Sports and Exercise, 33 (5) (supplement), S178, Paper presented
- Deeny, S.P., Hillman, C.H., Janelle, C.M., & **Hatfield, B.D.** (2001) EEG coherence and neural efficiency in expert and non-expert marksmen, annual meeting of the American College of Sports Medicine, Baltimore, MD, Medicine and Science in Sports and Exercise, 33 (5) (supplement), S177, Paper presented
- Haufler A.J., Lockwood, P., Spalding, T.W., & **Hatfield, B.D.** (2001) Affective responses to acute exercise are dependent upon approach/withdrawal orientation, annual meeting of the American College of Sports Medicine, Baltimore, MD, Medicine and Science in Sports and Exercise, 33 (5) (supplement), S50, Paper presented

- Kerick, S. E., McDowell, K., Hung, T. M., Spalding, T. S., & **Hatfield, B. D.** (2001) Event related alpha power in marksmen: Motor versus integrated perceptual-motor demands of shooting. Medicine & Science in Sports & Exercise 33(5):supplement.
- Meeusen, R., **Hatfield, B. D.,** Dishman, R. K., Greenough, W. T., Milton, J., & Petruzello, S. (2001) 2001 A brain odyssey methods of neuroscience. Medicine & Science in Sports & Exercise 33(5)
- Deeny, S., Hillman, C., Janelle, C., & **Hatfield, B. D.** (2001) EEG coherence and psychomotor efficiency in expert and nonexpert marksmen. Psychophysiology 38, S35-S35
- Bixby, W.R., Spalding, T.S., & **Hatfield, B.D.** (2001) An examination of opponent-process theory as an explanation for the anxiolytic effect of acute exercise, annual meeting of the American College of Sports Medicine, Baltimore, MD, Medicine and Science in Sports and Exercise, 33 (5) (supplement), S50, Paper presented
- Deeny, S., Hillman, C., Janelle, C., **Hatfield, B. D.** (2001) EEG coherence and neural efficiency in expert and non-expert marksmen, Society for Psychophysiological Research, Montreal, Canada, Psychophysiology, 38 (suppl), S35. Paper presented
- Hillman, C., Snook, E., Mahlow, P., Haufler, A., Spalding, T., Petruzzello, S., and **Hatfield, B. D.** (2001) Physical activity, EEG frontal asymmetry, and affect in elderly adults, Society for Psychophysiological Research, Montreal, Canada, Psychophysiology, 38 (suppl), S50, Paper presented
- Schleifer, L.M., Spalding, T.W., **Hatfield, B.D**., Kerick, S., and Cram, J.R., (2001) Muscle activity of the upper extremities under high and low mental demands during computer work: Preliminary findings, meeting of the 9th International Conference on Human-Computer Interaction, New Orleans, LA, Paper presented
- **Hatfield, B. D.,** Schleifer, L.M., Spalding, T.W., Kerick, S., and Cram, J.R., (2001) Measurement of trapezius and forearm EMG gaps or micromomentary pauses during computer work, meeting of the 9th International Conference on Human-Computer Interaction, New Orleans, LA, Paper presented
- Spalding, T.W., Kerick, S., **Hatfield, B. D.**, Schleifer, L.M., and Cram, J.R., (2001) Cardiac signal artifact and the interpretation of trapezius muscle activity during computer work, meeting of the 9th International Conference on Human-Computer Interaction, New Orleans, LA, Paper presented
- Cram, J.R., Schleifer, L.M., Spalding, T.W., **Hatfield, B.D.**, and Kerick, S., (2001) EMG gaps and musculoskeletal disorders in computer work, meeting of 9th International Conference on Human-Computer Interaction, New Orleans, LA, Paper presented
- **Hatfield, B. D.** (2001) Exercise and aging brain, Mid-Atlantic Chapter of the American College of Sports Medicine, Split Rock, Pennsylvania, Part of a symposium on Exercise and Aging presented, Other members included J. Hagberg, B. Hurley, & M Rogers)

- Hillman, C., Weiss, E, & **Hatfield, B. D.** (2000) Exercise and the aging brain: Mens sana in corpore sano?, national meeting of the Society for Psychophysiological Research, San Diego, CA, Psychophysiology, 37 (supplement 1), S48, Paper presented
- Petruzzello, S.J., **Hatfield, B.D.** (2000) Boutcher, S.H., & Cacioppo, J.T., Mind-body perspectives on exercise and mental health., annual meeting of the American College of Sports Medicine, Indianapolis, IN, Medicine and Science in Sports and Exercise, 32 (5) (supplement), S343, Symposium presented
- Bixby, W.R., Spalding, T.W., & **Hatfield, B.D.** (2000) The temporal dynamics of affect during and following exercise, annual meeting of the American College of Sports Medicine, Indianapolis, IN, Medicine and Science in Sports and Exercise, 32 (5) (supplement), S301, Paper presented
- Spalding, T.W., Lyons, L.A., & **Hatfield, B.D.** (2000) Effect of aerobic exercise training on cardiovascular reactivity to psychological stressors, annual meeting of the American College of Sports Medicine, Indianapolis, IN, Medicine and Science in Sports and Exercise, 32 (5) (supplement), S294, Paper presented
- Hillman, C.H., Weiss, E.P., Deeny, S.P., Zooker, C.C., Roltsch, M.H., Hagberg, J.M., & **Hatfield**, **B.D.** (2000) Age and fitness effects on ERPs: Implications for exercise and the aging brain, annual meeting of the American College of Sports Medicine, Indianapolis, IN, Medicine and Science in Sports and Exercise, 32 (5) (supplement), S43, Paper presented
- Kerick, S.E., Haufler, A.J., & **Hatfield, B.D.** (2000) The psychology of superior performance: An electroencephalographic (EEG) comparison between skilled and novice target shooters, annual meeting of the North American Society for the Psychology of Sport and Physical Activity, San Diego, CA, Journal of Sport and Exercise Psychology, 22 (supplement), S57, Paper presented
- Hillman, C., Weiss, E., Deeny, J., Hagberg, J., & **Hatfield, B. D.** (2000) Physical fitness and neurocognitive processes in older adults, annual meeting of the North American Society for the Psychology of Sport and Physical Activity, San Diego, CA, Journal of Sport and Exercise Psychology, 22 (supplement), S51-S52, Paper presented
- Deeny, S, Hillman, C, Janelle, C, & **Hatfield, B. D.** (2000) EEG coherence and neural efficiency in expert and non-expert marksmen, Mid- Atlantic Regional Chapter of the American College of Sports Medicine, Split Rock, PA, Paper presented
- Bixby, WR, Spalding, TS, & **Hatfield, B. D.** (2000) An examination of opponent -process theory as an explanation for the anxioloytic effects of acute exercise, Mid-Atlantic Regional Chapter of the American College of Sports Medicine, Split Rock, PA, Paper presented
- Haufler, A., & **Hatfield, B.D.** (1999) The psychology of expert performance: Comparative brain activation profiles in marksmen and novices, meeting of the North American Society for the Psychology of Sport and Physical Activity, Chicago, IL, Journal of Sport & Exercise Psychology, 21(supplement), S127, Paper presented, (paper presented in 1998 but erratum abstract published in 1999 due to omission from journal supplement in year of presentation)

- Hatfield, B.D., Hillman, C.H., & Apparies, R.J., Janelle, C.M., & Vickers, J., (1999) Expert performance states: Psychophysiological perspectives on efficiency, meeting of the North American Society for the Psychology of Sport and Physical Activity, Clearwater Beach, FL, Journal of Sport & Exercise Psychology, (supplement), 21, S55, Paper presented
- Lanter, J.R. & **Hatfield, B.D.** (1999) The effect of mental imagery training on brain electrical activity, meeting of the North American Society for the Psychology of Sport and Physical Activity, Clearwater Beach, FL, Journal of Sport & Exercise Psychology, (supplement), 21, S74, Paper presented
- Murray, N.P., Janelle, C.M., Hillman, C.H., Apparies R., & **Hatfield, B.D.** (1999) The eye as a window to the mind: Concurrent recording of EEG and eye movement activity, meeting of the North American Society for the Psychology of Sport and Physical Activity, Clearwater Beach, FL, Journal of Sport & Exercise Psychology, (supplement), 21, S84, Paper presented
- McDowell, K., **Hatfield, B.D.** & Jeka, J.J., (1999) Motor area activation for a two-choice directional movement task, 6th annual meeting of the Cognitive Neuroscience Society, Washington, D.C., Journal of Cognitive Neuroscience, (supplement annual meeting program), 87, Paper presented
- Jeka, J.J., McDowell, K., Schoner, G., & **Hatfield, B.D.** (1999) Testing dynamic field theory with a two-choice directional movement task, 6th annual meeting of the Cognitive Neuroscience Society, Washington, D.C., Journal of Cognitive Neuroscience, (supplement annual meeting program), Paper presented.
- Spalding, T.W., Jeffers, L.S., Porges, S.W., &. **Hatfield, B.D.** (1999) Respiratory sinus arrhythmia during psychological stress and recovery in aerobically trained and untrained young men, annual meeting of the American College of Sports Medicine, Seattle, WA, Medicine and Science in Sports and Exercise, 31 (5) (supplement), S289, Paper presented
- Bond, B., Vaccaro, P., Adams, R., Caprarola, M., Roltsch, M., **Hatfield, B. D.**, Blakely, R., Fairfax, J., & Franks, B.D., (1999) Aerobic fitness level and family history of hypertension influence blood pressure reactivity to mental stress in African Americans, annual meeting of the American College of Sports Medicine, Seattle, WA, Medicine and Science in Sports and Exercise, 31 (5) (supplement), S216, Paper presented
- Bixby, W.R., **Hatfield, B. D.**, & Spalding, T.W. (1999) Temporal dynamics of hemispheric asymmetry and affect associated with an acute bout of aerobic exercise, annual meeting of the American College of Sports Medicine, Seattle, WA, Medicine and Science in Sports and Exercise, 31 (5) (supplement), S173, Paper presented
- Bond, V., Mills, R. M., Caprarola, M., Vaccaro, P., Adams, R. G., Blakely, R., Roltsch, M., **Hatfield, B. D.**, Davis, G. C., Framls. B. D., Fairfax, J., & Banks, M. (1999) Aerobic exercise attenuates blood pressure reactivity to cold pressor test in normotensive, young adult African–American women. Ethnicity & disease 9(1), 104-10

- Janelle, C.M., Hillman, C.H., (1999) Apparies, R.A., & **Hatfield, B. D.** Ocular and cortical measures of performance efficiency during rifle shooting, annual meeting of the American Psychological Association, Boston, MA, Paper presented
- Bixby, W.R., Spalding, T.W., & **Hatfield B.D.** (1999) The relationship between exercise intensity and the temporal dynamics of affect during and following exercise, Mid-Atlantic Regional Chapter of the American College of Sports Medicine, Ithaca, NY, Paper presented
- Apparies, R., **Hatfield, B. D.,** & SantaMaria, L., (1998) The effect of fitness on pattern reversal visual evoked potential in the elderly, American College of Sports Medicine, Orlando, Florida, Medicine and Science in Sports & Exercise, 30 (5), (supplement), S128, Paper presented
- Haufler, A.J., **Hatfield, B.D.**, & SantaMaria, D.L., (1998) Brain activation profiles of marksmen and novices: an examination of a model of psychomotor performance, American College of Sports Medicine, Orlando, Florida, Medicine and Science in Sports & Exercise, 30 (5), (supplement), S119, Paper present ed
- Apparies, R.J., Hillman, C.H., & **Hatfield, B.D.** (1998) Slow potentials and P300 in motor and nonmotor processing during cognitive challenge, Society for Psychophysiological Research, Denver, Co, Psychophysiology, 35, (S1), S17, Paper presented
- Kerick, S.E., Iso-ahola, S.E., and **Hatfield, B.D**., & Gruber, K., (1998) Psychological momentum in target shooting: Behavioral, affective, and brain responses, annual Association for the Advancement of Applied Sport Psychology (AAASP) Conference, Hyannis, MA, Journal of Applied Sport Psychology, 10 (supplement), S136, Paper presented
- McDowell, K., Jeka, J.J., Schoner, G., & **Hatfield, B.D.** (1998) Testing Dynamic Field theory with directional arm movements, Society for Neuroscience, Los Angeles, CA, Paper presented
- Hung, T., **Hatfield, B. D.**, & SantaMaria, D., (1997) Understanding attention in fast-action sports athletes: Behavioral and brain processes, joint meeting of the North American Society for the Psychology of Sport and Physical Activity/American College of Sports Medicine Annual Meeting, Denver, Colorado, Journal of Sport and Exercise Psychology, 19, (supplement), S25, Paper presented
- Hung, T., **Hatfield, B. D.**, & SantaMaria, D., (1997) Are fast-action sport athletes characterized by greater attentional flexibility and motor preparedness? An electrophysiological study of elite table tennis players, joint meeting of the North American Society for the Psychology of Sport and Physical Activity/American College of Sports Medicine Annual Meeting, Denver, Colorado, Journal of Sport and Exercise Psychology, 19, (supplement), S68, Paper presented
- Apparies, R., **Hatfield, B. D.**, SantaMaria, L., & Spalding, T., (1997) Cortical and autonomic measures of attentional challenge, joint meeting of the North American Society for the Psychology of Sport and Physical Activity/American College of Sports Medicine Annual Meeting, Denver, Colorado, Journal of Sport and Exercise Psychology, 19 (supplement), S26, Paper presented

- **Hatfield, B. D.,** & SantaMaria, D., (1997) Extending our understanding of exercise induced psychological change: The contribution of neuroscience, joint meeting of the North American Society for the Psychology of Sport and Physical Activity/American College of Sports Medicine Annual Meeting, Denver, Colorado, Journal of Sport and Exercise Psychology, 19, (supplement), S14, Paper presented
- **Hatfield, B.** (1997) Toward dynamic models of exercise and sport behavior: The convergence of sport psychology and cognitive neuroscience, joint meeting of the North American Society for the Psychology of Sport and Physical Activity/American College of Sports Medicine Annual Meeting, Denver, Colorado, Journal of Sport and Exercise Psychology, 19, (supplement), S13, Paper presented
- Snyder-Bauer, R., **Hatfield, B. D.,** Haufler, A., Lockwood, P., & Hung, T., (1997) Effect of exercise-induced hypoglycemia on CNS activation in elite cyclists, American College of Sports Medicine Annual Meeting, Denver, Colorado, Medicine and Science in Sports and Exercise, 29 (5), (supplement), S223, Presented
- Haufler, A., **Hatfield, B. D.,** & SantaMaria, D.L., (1997) The cognitive correlates of skilled performance in marksmen: An examination of brain activation profiles, Society for Psychophysiological Research, Annual meeting, Cape Cod, Massachusetts, Psychophysiology 34 (1), (supplement), S42, Paper presented
- Bixby, W.R., & **Hatfield, B. D.** (1997) Aerobic exercise as an inhibitor of the cognitive slowing associated with age, Southeast Exercise and Sport Psychology Symposium, Morgantown, West Virginia, Paper presented
- Lanter, J.R., & **Hatfield, B. D.** (1997) An explanation of brain during mental imagery: A proposal, Southeast Exercise and Sport Psychology Symposium, Morgantown, West Virginia, Paper presented
- Haufler, A., & **Hatfield, B. D.** (1997) The behavioral, psychological, and neurocognitive correlates of novice and expert performance, Southeast Exercise and Sport Psychology Symposium, Morgantown, West Virginia, Paper presented
- Apparies, R., **Hatfield, B. D.**, & SantaMaria, L., (1997) The effect of fitness on the pattern reversal visual evoked potential in the elderly, Mid-Atlantic American College of Sports Medicine Annual Meeting, State College, Pennsylvania, Presented
- Haufler, A.J., **Hatfield, B.D.,** & SantaMaria, D.L., (1997) Brain activation profiles of marksmen and novices: An examination of a model of psychomotor performance, Mid-Atlantic American College of Sports Medicine Annual Meeting, State College, Pennsylvania, Presented
- **Hatfield, B. D.,** SantaMaria, D., Spalding, T., Blanchard, C., Haufler, A., Hung, T., Kerick, S., Lockwood, P., McAllister, L., Saarela, P., Apparies, R., Lanter, J., & McDowell, K., (1997) The association of age and aerobic activity history with 40-HC Hz EEG activity during cognitive

- challenge, Southeast Exercise and Sport Psychology Symposium, Morgantown, West Virginia, Paper presented
- Apparies, R., **Hatfield, B. D.,** Santa Maria, L., & Spalding, T. (1996) The role of stimulus preceding negativity and heart rate deceleration as an index of attention. Psychophysiology 33, S20-S20
- Bond, V., Vaccaro, P., **Hatfield, B. D.,** Caprarola, M., Fairfax, J., Franks, B.D., Curry, C., Harrell, J., Roltsch, M., Gills, S., & Mendez, T., (1996) Cardiovascular fitness is not related to cardiovascular reactivity in African Americans, American College of Sports Medicine, Cincinnati, OH, Medicine and Science in Sports and Exercise, 28, (supplement), S174, Paper presented
- Haufler, A., **Hatfield, B. D.**, SantaMaria, D.L., Blanchard, C., Hung, T., Lockwood, P., McAllister, L., Saarela, P., & Apparies, R., (1996) Is cardiovascular activity history associated with math and spatial cognitive processing in younger and older adults? An examination of the efficiency hypothesis, North American Society for the Psychology of Sport and Physical Activity, Cleveland's House, Ontario, CANADA, Journal of Sport and Exercise Psychology, 18, (supplement), S40, Paper presented
- Apparies, R., **Hatfield, B. D.**, SantaMaria, L., & Spalding, T., (1996) The role of stimulus-preceding negativity and heart rate deceleration as an index of attention, Society for Psychophysiological Research, Vancouver, Canada, Psychophysiology, 33 (supplement 1), S20, Paper presented
- **Hatfield, B. D.,** SantaMaria, D., Spalding, T., Blanchard, C., Haufler, A., Hung, T., Kerick, S., Lockwood, P., McAllister, L., Saarela, P., Apparies, R., Lanter, J., & McDowell, K., (1996) The association of age and aerobic activity history with 40-Hz EEG activity during cognitive challenge, Society for Psychophysiological Research, Vancouver, Canada, Psychophysiology, 33, (supplement 1), S44, Paper presented
- **Hatfield, B. D.** (1996) Exercise and the aging brain: an examination of the efficiency hypothesis, American College of Sports Medicine, Cincinnati, OH, Paper (part of symposium) presented
- Snyder-Bauer, R., **Hatfield, B. D.**, Haufler, A., Lockwood, P., & Hung, T., (1996) Effect of exercise induced hypoglycemia on CNS activation in elite eyclists, Mid-Atlantic Regional Chapter of the American College of Sports Medicine, White Haven, PA, Paper presented
- McDowell, K., Lanter, J., **Hatfield, B. D.,** SantaMaria, D.L., Spalding, T., Apparies, R., Blanchard, C., Haufler, A., Hung, T., Kerick, S., McAllister, L., & Saarela, P., (1996) Age and aerobic activity history impact upon cognitive processing, Mid-Atlantic Regional Chapter of the American College of Sports Medicine, White Haven, PA, Paper presented
- **Hatfield, B. D.**, Santa Maria, D.L., Spalding, T., Blanchard, C., Donofrio, D., Haufler, A., Hung, T., Lockwood, P., McAllister, L., Saarela, P., Slater, B., Apparies, R., & Drazin, H., (1995) Does cardiovascular activity history impact upon cognitive processing in older people?, Society for

- Psychophysiological Research, Toronto, Ontario, Canada, Psychophysiology, 32, (supplement 1), S39, Paper presented
- **Hatfield, B. D.,** SantaMaria, D.L., Spalding, T., Blanchard, C., Donofrio, D., Haufler, A., Hung, T., Lockwood, P., McAllister, L., Saarela, P., Slater, B., Apparies, R., & Drazin, H., (1995) Does cardiovascular activity history impact upon cognitive processing in older people?, Society for Psychophysiological Research, Atlanta, GA, Psychophysiology, 32, S39, Paper presented
- McAllister, L., **Hatfield, B. D.**, SantaMaria, D.L., Spalding, T., Blanchard, C., Donofrio, D., Haufler, A., Hung, T., Lockwood, P., McAllister, L., Saarela, P., Slater, B., Apparies, R., & Drazin, H., (1995) The effects of age and cardiovascular fitness status on neurocognitive functioning, Southeast Sport and Exercise Psychology Symposium, University of Virginia, Charlottesville, VA, Paper presented
- Haufler, A., Donofrio, D., **Hatfield, B. D.**, SantaMaria, D.L., Spalding, T., Blanchard, C., Hung, T., Lockwood, P., McAllister, L., Saarela, P., Slater, B., Apparies, R., & Drazin, H., (1995) The relationship of self-reported activity history and aging on behavioral and cognitive performance, Southeast Sport and Exercise Psychology Symposium, University of Virginia, Charlottesville, VA, Paper presented
- Slater, B. A., & **Hatfield, B. D**. (1993) 506 Tie effect of acute aerobic exercise upon cortical evoked potentials. Medicine & Science in Sports & Exercise 25(Supplement)
- SantaMaria, D.L., **Hatfield, B. D**., & Slater, B.A., (1993) Relationship of aerobic training status to central nervous system function in older males, meeting of the Research Consortium, America Alliance of Health, Physical Education, Recreation and Dance, Washington, D.C., Research Quarterly for Exercise and Sport, 64 (1) (supplement), A104, Paper presented
- **Hatfield, B.D.,** SantaMaria, D.L., Slater, B.A., & Krotz, A.J., (1993) Aerobic training is associated with increased efficiency of the central nervous system in older males, meeting of the VIII World Congress of Sport Psychology, Lisbon, Portugal, Paper presented
- Morales, J.O. Santa Maria, D.L., & **Hatfield, B.D.** (1992) The comparative effect of a combined velocity and a traditional resistive training program on muscular power, Sports Medicine, Training, and Rehabilitation, 3, 223
- Landers, D.M., Crews, D.L., **Hatfield, B. D.,** Dustman, R.E., & Black, J.E., (1992) Exercise and brain function: A new frontier in exercise and sports science research, meeting of the American College of Sports Medicine, Dallas, Medicine & Science in Sports & Exercise 24(Supplement) Symposium presented
- SantaMaria, D.L., **Hatfield, B. D.,** Slater, B.A., Krotz, A.J., & Blesy-Krohn, C., (1992) The relationship of aerobic training status to motor, sensory, and cognitive tasks for older males, meeting of the American College of Sports Medicine, Dallas, Medicine and Science in Sports and Exercise, 24 (5), (supplement), 24, Paper presented

- Slater, B.A., **Hatfield, B. D.**, SantaMaria, D.L., Krotz, A.J., & Blesy-Krohn, C., (1992) The relationship of aerobic training status to cortical coupling of EEG in older males, meeting of the American College of Sports Medicine, Dallas, Medicine and Science in Sports and Exercise, 24 (5), (supplement), 24, Paper presented
- Slater, B.A., **Hatfield, B. D.**, & SantaMaria, D.L., (1992) Aerobic training relates to increased inhibitory function of the central nervous system of older males, meeting of the Society for Psychophysiological Research, San Diego, CA, Psychophysiology, 29 (4a), supplement, 65, Paper presented
- **Hatfield, B. D.,** Slater, B.A., & SantaMaria, D.L., (1992) Aerobic training status is associated with increased central nervous system efficiency in older trained males, meeting of the North American Society for the Psychology of Sport and Physical Activity, Pittsburgh, Paper presented
- Brody, E.B., Slater, B.A., **Hatfield, B. D.,** & SantaMaria, D.L., (1991) The effects of varying cognitive states upon biceps and triceps brachii EMG activity and force during elbow flexion, meeting of the Society for Psychophysiological Research, Chicago, Psychophysiology, 28, (3), supplement, S13, Paper presented
- Brody, E.B., Slater, B.A., **Hatfield, B. D.,** & SantaMaria, D.L., (1991) An examination of attentional focus (the psyching phenomenon) upon psychological state and force production in highly strength-trained males, meeting of the North American Society for the Psychology of Sport and Physical Activity, Asilomar, CA, Paper presented
- Morales, J., SantaMaria, D.L., & **Hatfield, B. D.** (1991) The comparative effect of a combined velocity and a traditional resistive training program upon muscular power, meeting of the Southwest Regional Chapter of the American College of Sports Medicine, San Diego, Paper presented
- Lemons, P., Armstrong, D., Moran, R., & **Hatfield, B. D.** (1990) Psychological assessment of United States Canoe Association marathon canoeists, American College of Sports Medicine, Salt Lake City, UT, Paper presented
- Moran, R., Armstrong, D., Lemons, P., & **Hatfield, B. D.** (1990) Skinfold characteristics in United States Canoe Association marathon canoeists, American College of Sports Medicine, Salt Lake City, UT, Paper presented
- Philbin, J., & **Hatfield, B. D.** (1990) Physiological and psychological aspects of superior performance, National Strength and Conditioning Association, San Diego, CA, Paper presented
- Spalding, T.W., Allen, R.J., **Hatfield, B. D.**, & Siders, S., (1990) Cardiac and Electrocortical activity measured during performance of an attention-demanding task, Southeast Sport and Exercise Psychology Symposium, University of North Carolina at Greensboro, NC, Paper presented
- Brody, E.B., **Hatfield, B. D.,** & Slater, B.A., (1990) The effect of varying concentration upon force alteration and activation of the biceps and medial triceps brachii during as isometric elbow flexion

- task: An electromyographic assessment, Southeast Sport and Exercise Psychology Symposium, University of North Carolina at Greensboro, NC, Paper presented
- **Hatfield, B. D.,** SantaMaria, D.L., Porges, S.W. Potts, J.T., Mahon, A., Brody, E.B., & Spalding, T.W., (1989) Parasympathetic withdrawal is similar in trained and untrained young males during progressive relative aerobic work, American College of Sports Medicine, Baltimore, Maryland, Medicine and Science in Sports and Exercise, 21, (supplement), S42, Paper presented
- Jeffers, L.S., **Hatfield, B. D.,** & Porges, S.W., (1989) A comparison of vagal reactivity to cognitive stressors by aerobically trained and untrained males, national meting of the Society for Psychophysiological Research, New Orleans, Psychophysiology (supplement), 26 (4a), S35, Paper presented
- **Hatfield, B. D.,** Bennett, B.L., Snyder-Bauer, Spalding, T.W., & Van Orden, K., (1989) Aerobic training affects visual evoked potential amplitude in young and elderly males, national meeting of the Society for Psychophysiological Research, New Orleans, Psychophysiology (supplement), 26 (4a), S32, Paper presented
- **Hatfield, B.D.** (1989) Psychoneuroimmunology, American Alliance for Health, Physical Education, Recreation and Dance, Boston, Massachusetts, Participant in Symposium presented, Sponsored by the Research Consortium. Subtopic: Physiology of the immune system
- **Hatfield, B. D.** (1989) Adherence and motivation: The psychological connection to exercise and training, American Alliance for Health, Physical Education, Recreation and Dance, Boston, Massachusetts, Participant in Symposium presented, Sponsored by the Sport Psychology Academy of NASPE. Subtopic presentation: Interactionalist theory: A holistic view
- Goldfarb, A.H., **Hatfield, B. D.**, Kamimori, G., Armstrong, D., & Potts, J., (1988) Relationship of beta-endorphins to catecholamine in blood during exercise, Seventh International Conference on the Biochemistry of Exercise, London, Canada, Canadian Journal of Sport Sciences, Paper presented
- Goldfarb, A.H., **Hatfield, B. D.**, Armstrong, D., Potts, J., & Mann, P., (1988) B-EP response to intensity and duration of exercise, American College of Sports Medicine, Dallas, Texas, Medicine and Science in Sports and Exercise, 20 (Supplement), 39, Paper presented
- **Hatfield, B.D.,** Goldfarb, A.H., Armstrong, D., Potts, J., & Mann, P., (1988) Time course of exercise induced mood change, Medicine and Science in Sports and Exercise, 20 (Supplement), 95
- **Hatfield, B.D.,** SantaMaria, D.L., Spalding, T.W., Brody, E.B., & Potts, J., (1988) The effects of skill level upon regional EEG activity during rifle marksmanship, Society for Psychophysiological Research, San Francisco, California, Psychophysiology, 25, (4), 453, Paper presented
- **Hatfield, B.D.,** SantaMaria, D.L., Porges, S.W., Potts, J.T., Mahon, A., Stein, S., Brody, E.B., & Spalding, T.W., (1988) Vagal influences upon the heart during exercise workloads, Society for Psychophysiological Research, San Francisco, California, Psychophysiology, 25 (4), 453, Paper presented

- Hatfield, B.D., & SantaMaria, D.L., (1988) Biofeedback and athletic performance, American Alliance for Health, Physical Education, Recreation and Dance, Kansas City, Missouri, Paper presented, (Sport Psychology Academy)
- **Hatfield, B.D.** (1988) Exercise and psychological well-being: Underlying mechanisms and current theories, Association for the Advancement of Applied Sport Psychology, Nashua, New Hampshire, Paper presented
- **Hatfield, B.D.,** Spalding, T.W., Mahon, A., Brody, E.B., & Vaccaro, P., (1987) Ventilatory feedback increases oxygen pulse durSTing steady state exercise, American College of Sports Medicine, Las Vegas, Nevada, Medicine and Science in Sports and Exercise, 19 (Supplement), 51, Paper presented
- **Hatfield, B.D.** (1987) Research in sport psychology and related disciplines supporting the interactionary psychophysiological view, North American Society for the Psychology of Sport and Physical Activity, Vancouver, Canada, Psychology of Motor Behavior and Sport, 14, 14-15, Paper presented
- **Hatfield, B.D.** Landers, D.M., & Ray, W.J., (1987) Cardiac-cortical relationships during a psychomotor task requiring autonomic control: Elite rifle marksmanship, North American Society for the Psychology of Sport and Physical Activity, Vancouver, Canada, Psychology of Motor Behavior and Sport, 14, 30, Paper presented
- Spalding, T.W., **Hatfield, B.D.**, & Brody, E..B., (1987) Cardiac-cortical relationships during a psychomotor task requiring autonomic control, Psychology of Exercise Symposium, University of Virginia, Charlottesville, Paper presented
- Brody, E.B., **Hatfield, B.D.,** & Spalding, T.W., (1987) The generalization of self-efficacy to a continuum of stressors upon mastery of a high-risk sport skill, Psychology of Exercise Symposium, University of Virginia, Charlottesville, Paper presented
- **Hatfield, B.D.,** Spalding, T.W., Mahon, A., Brody, E.B., & Vaccaro, P., (1987) Self-control of cardiopulmonary activity during intense dynamic exercise, Psychology of Exercise Symposium, University of Virginia, Charlottesville, Paper presented
- Brody, E.B., **Hatfield, B.D**., & Spalding, T., (1986) The enhancement and generality of self-efficacy through mastery of a high-risk sport skill, North American Society for the Psychology of Sport and Physical Activity, Phoenix, Arizona, North American Society for the Psychology of Sport and Physical Activity Abstracts, 13, 80, Paper presented
- **Hatfield, B.D.,** Spalding, T., Mahon, T., Brody, E.B., & Vaccaro, P., (1986) Ventilatory economy as a function of attentional self-focus during treadmill running, Society for Psychophysiological Research, Montreal, Canada, Psychophysiology, 23 (4), 440-441, Paper presented

- **Hatfield, B.D.,** SantaMaria, D.L., & Morales, J. (1986) Research considerations in the development of muscular power, National Strength and Conditioning Association, New Orleans, Louisiana, Paper presented
- **Hatfield, B.D.,** Bretting, M., & Wrenn, J., (1986) Comparative competencies and curricular forecasts for the preparation of intercollegiate athletic directors and professional sport general managers, North American Society for Sports Management, Kent, Ohio, Paper presented
- **Hatfield, B.D.,** Goldfarb, A.H., Sforzo, G.A., Flynn, M., Moore, T., & Walford, J., (1985) Plasma Beta-endorphin response and mood alteration in young and old males following a graded exercise test, North American Society for the Psychology of Sport and Physical Activity, Gulfport, Mississippi, Psychology of Motor Behavior and Sport, Champaign, IL: Human Kinetics, 12, 85, Paper presented
- **Hatfield, B.D.** (1985) The biological perspectives of sport psychology, an international meeting of the North American Society for the Psychology of Sport and Physical Activity, Gulfport, Mississippi, Paper presented to a preconference workshop on the "Teaching of Sport Psychology" prior
- Ingram, A., **Hatfield, B. D.**, & Vaccaro, P., (1985) Sport survey of participation patterns and attitudes reported by sex, Tenth Congress, International Association of Physical Education and Sport for Girls and Women, University of Warwick, Coventry, England, Paper presented
- **Hatfield, B.D.,** & SantaMaria, D.L., (1985) New ideas for muscular power training for the athlete, Eastern District Association of the American Alliance of Health, Physical Education, Recreation and Dance, Atlantic City, New Jersey, Symposium presented, Published in Proceedings of the Annual Meeting of the Eastern District Association of AAHPERD
- **Hatfield, B.D**. (1985) Observations of mental preparedness on athletes with implications for psychological training, Eastern District Association of American Alliance of Health, Physical Education, Recreation and Dance, Atlantic City, New Jersey, Paper presented
- **Hatfield, B.D.,** Vaccaro, P., Brown, E.Y., Moore, T., & Ostrove, S., (1984) Electrocortical relaxation response in high and low cognitively anxious persons as a result of cardiovascular exercise stress, International Olympic Scientific Congress, Eugene, Oregon, Motor development-Sport Psychology and Motor Learning/Motor Control: Proceedings of the 1984 Olympic Scientific Congress, 65-66, Paper presented
- SantaMaria, D.L, Grzybinski, P., & **Hatfield, B. D.** (1984) Power as a function of load for a supine bench press exercise, National Strength and Conditioning Association, Pittsburgh, Pennsylvania, National Strength and Conditioning Association Journal, 6(6), 58, Paper presented
- Goldfarb, A.H., Sforzo, G.A., Flynn, M.G., & **Hatfield, B. D**. (1984) The relationship between serum beta-endorphins and the intensity of exercise, Mid-Atlantic Regional meeting of the American College of Sports Medicine, Ithaca, New York, Paper presented

- **Hatfield, B.D.** (1984) What research can tell the coach about motivation, Eastern District Association of American Alliance of Health, Physical Education and Dance, Philadelphia, Pennsylvania, Paper presented
- Daniels, F.S., Landers, D.M., & **Hatfield, B.D.** (1983) The effect of autonomic perception and physiological reactivity on performance of a self-paced motor skill, Society for Psychophysiological Research, Asilomar, California, Psychophysiology, 20, 437, Paper presented
- **Hatfield, B.D.,** & Mathis, S.C., (1983) Interactional specificity for the prediction of anxiety in novice mountain climbers, North American Society for the Psychology of Sport and Physical Activity. East Lansing, Michigan, Psychology of Motor Behavior and Sport, Champaign, IL: Human Kinetics Publishers, 10,78, Paper presented
- Wilkinson, M.O., Barber, H., **Hatfield, B.D.,** & Landers, D.M., (1981) Causality and the cohesion-performance relationship, American Alliance of Health, Physical Education, Recreation and Dance, Boston, Massachusetts, Paper presented
- Wilkinson, M.O., Landers, D.M., Daniels, F.S., & **Hatfield, B.D.** (1980) Respiration patterning as related to performance in elite and subelite rifle shooters, Psychology of Motor Behavior and Sport, Psychology of Motor Behavior and Sport, Champaign, IL: Human Kinetics Publishers, 7, 95. (erratum: Hatfield omitted). Paper presented to the North American Society for the psychology of Sport and Physical Activity. Boulder, Colorado, May, 1980
- Landers, D.M., Christina, R.W., **Hatfield, B.D.,** Daniels, F.S., Wilkinson, M.O., Doyle, L.A., & Feltz, D.L., (1980) A comparison of elite and subelite competitive shooters on selected physical, psychological and psychophysiological tests, Psychology of Motor Behavior and Sport, Champaign, IL: Human Kinetics Publishers, 7, 93, Paper presented to the North American Society for the Psychology of Sport and Physical Activity. Boulder, Colorado, May, 1980
- Daniels, F.S., Landers, D.M., **Hatfield, B.D.,** & Wilkinson, M.O., (1980) Cardiac self-regulation and performance in elite and subelite rifle shooters, Psychology of Motor Behavior and Sport, Champaign, IL: Human Kinetics Publishers, 7, 90. (erratum: Hatfield omitted). Paper presented to the North American Society for the Psychology of Sport and Physical Activity. Boulder, Colorado, May, 1980
- Landers, D.M., Christina, R.W., Feltz, D.L., **Hatfield, B.D.,** & Daniels, F.S., (1980) Demographic and physical characteristics of shooters, Psychology of Motor Behavior and Sport, Champaign, IL: Human Kinetics Publishers, 7, 89. (erratum: Landers omitted as lead author), Paper presented to the North American Society for the Psychology of Sport and Physical Activity. Boulder, Colorado, May, 1980
- **Hatfield, B.D.,** Landers, D.M., & Ray, W.J., (1980) A psychophysiological profile of competitive rifle shooters, Psychology of Motor Behavior and Sport, Champaign, IL: Human Kinetics Publishers, 7, 92, Paper presented to the North American Society for the Psychology of Sport and Physical Activity. Boulder, Colorado, May, 1980

- Daniels, F.S., & **Hatfield, B.D.** (1980) The basis of biofeedback techniques and their use for stress management with athletes, Eastern District Association of the American Alliance Health, Physical Education and Dance, Lancaster, Pennsylvania, Paper presented
- **Hatfield, B.D.,** & Daniels, F.S., (1980) The basis of hypnosis and its use for stress management with athletes, Eastern District Association of the American Alliance of Health, Physical Education and Dance, Lancaster, Pennsylvania, Paper presented
- **Hatfield, B.D.,** & Landers, D.M., (1977) Observer expectancy effects upon appraisal of gross motor performance, North American Society for the Psychology of Sport and Physical Activity, Ithaca, New York, Paper presented

## **Regional Meetings**

- **Hatfield, B. D.** Series of presentations to Lockheed Martin Corporation (contact Vice President for Research Office)
- Jaquess, K.J., Lu, Y., Ginsberg, A., Lu, C., Ritland, B., Oh, H., Lo, L.C., Kahl, Jr., S., **Hatfield, B.D.**, & Gentili, R.J. (2017). Memory system engagement as a potential neurocognitive mechanism underlying the effectiveness of self-regulated practice. Presentation to given at the Mid-Atlantic Region Conference of the American College of Sport Medicine, Harrisburg, PA.
- Elue, E., Bah, M., Ginsberg, A., Lu, C., **Hatfield, B.** (2017). Psyching effects on voluntary torque production and cortico-cortical communication using electroencephalography. University of Maryland College Park, MD, Howard University, Washington, DC. Mid-Atlantic Regional Chapter of the American College of Sports Medicine (MARC-ACSM)
- Ginsberg, A., Lu, C., Elue, E., Bah, M., **Hatfield, B.** (2017). The effect of mental preparation on voluntary torque production and cortico-cortical communication. University of Maryland College Park, MD., Howard University, Washington, DC. Mid-Atlantic Regional Chapter of the American College of Sports Medicine (MARC-ACSM)
- Lu, C., **Hatfield, B. D.** (2017). Indexing attentional focus: A critical neural element of athletic performance. University of Maryland, College Park, MD., Mid-Atlantic Regional Chapter of the American College of Sports Medicine (MARC-ACSM)
- Shaw, E.P., Rietschel, J.C., McDonald, C., Miller, M.W., Jaquess, K.J., Lo, L.C., Hendershot, B., Pruziner, A., **Hatfield, B.D.**, Gentili, R.J. (2016). A novel assessment of attentional reserve and mental workload during locomotion. Bioscience Research and Technology Review Day. October 25, University of Maryland, College Park, USA.
- Jaquess, KJ., Gentili, RJ., Lo, LC., Oh, H., Zhang, J., Rietschel, JC., Miller, MW., Tan, YY., Hatfield, BD. (2016). The relationship between cognitive workload and attentional reserve: An empirical investigation. 47<sup>th</sup> Annual Meeting of the Society for Neuroscience Meeting, November 11-15, Washington, DC, USA.

- Shaw, E., Rietschel, J.C., McDonald, C., Miller, M.W., Jaquess, K.J., Lo, L.C., Hendershot, B., Pruziner, A., Gentili, R.J., **Hatfield, B.D.** (2015). An objective assessment of cognitive workload during ambulation in individuals with and without unilateral lower limb amputation. Bioscience Research and Technology Review Day. November 19, University of Maryland, College Park, USA.
- Hsiung, A., Jaquess, K. J., Oh, H., Domingues, C. A., Lo, L. C., Gentili, R. J., **Hatfield, B. D.,** Tan, Y. Y. (2015). "Differences in cognitive load affect performance in flight simulation in beginner pilots". Piblic Health Research @Maryland, University of Maryland, College Park, MD, USA
- Shuggi, I. M., Oh, H., Rietschel, J. C., **Hatfield, B. D.**, Reggia, J. A., Gentili, R. J. (2014). Adaptive human-prosthesis interface for adaptive arm reaching movements. Graduate Research Interaction Day. April 09, University of Maryland, College Park, USA
- Jacquess, KJ., Rietschel, JC., Lo, LC., Miller, MW., Oh, H., Tan, YY., Hatfield, DB., Gentili, RJ. (2014). Objective assessment of cognitive workload during varying degrees of task difficulty using a dry EEG system: Relevance for ecological validity. *44<sup>th</sup> Annual Meeting of the Society for Neuroscience Meeting. November 15019, Washington, DC, USA.*
- Gentili, R. J., OH, H., Shuggis, I. M., Goodman, R. N., Rietschel, J. C., **Hatfield, B. D.**, Reggia, J. A. (2013). Inteligent cooperative human-prosthertics control for reaching movements. Pulic Health Research Day. April 04, University of Maryland, College Park, USA.
- Jaquess, K. J., Rietschel, J. C., Lo, L., Miller, M., Oh, H., Tan, Y. Y., Gentili, R. J., & **Hatfield, B. D.** (November, 2013). Developing an objective measure of cognitive workload using pilots in a flight simulator task. Paper presented at the Bioscience Day, University of Maryland, College Park, MD, United States.
- Shuggi, I.M., Goodman, R. N., Rietschel, J. C., **Hatfield, B. D.,** Reggia, J. A. (2013). Human-robotic cooperative intelligent share control for reaching movements. GraduateResearch Interaction Day. April 10, University of Maryland, College Park, USA
- **Hatfield, B. D.**, Gentili, R. J., Rietschel, J. C., Lo, L. C., Oh, H., Jaquess, k. J., Miller, M. W., & Tan, Y. Y. (2013). Objective assessment of cognitive workload and attentional reserve in pilots during varying degrees of task difficulty and mental stress. Bethesda, MD: Lockheed Martin Corp.
- Oh, H., Gentili, R.J., Costanzo M. E., Lo, L. L., Rietschel, J. C., Saffer, M., & **Hatfield, B.D**. (2013). "EEG Source Localization and Connectivity Estimation in Cognitive Motor Performance under Mental Stress Condition". Graduate Research Interaction Day 2013, University of Maryland, College Park, MD, USA.
- Gentili, R. J., Oh, H., Shuggi, I. M., Goodman, R. N., Rietschel, J. C., **Hatfield. B. D.,** & Reggia, J.A. (2013). Intelligent cooperative human-prosthetics control for reaching movements. Public Health Research Day. April 04, University of Maryland, College Park, MD.
- Shuggi, I. M., Oh, H., Goodman, R. N., Rietschel, J. C., **Hatfield, B. D.**, Reggia, J. A., & Gentili, R. J. (2013). Human-robotic cooperative intelligent shared control for reaching movements. Graduate

- Research Interaction Day. April 10, University of Maryland, College Park, MD.
- Miller, MW., Presacco, A., Groman, LJ., Burr, S., Rietschel, JC., Gentili, RJ., McFonald, CG., Iso-Ahola, SE., Hatfield, BD. (2012). The effect of team environment on ythe allocation of attentional resources to novel stimuli. 5<sup>th</sup> Annual Meeting of gthe Social & Affective Neuroscience Society, April 20-21, New York, USA.
- Miller, M. W., Groman, L. J.\*, Rietschel, J. C., McDonald, C. G., Iso-Ahola, S. E., & **Hatfield, B. D.** (2011). The effects of team environment on attentional resource allocation and cognitive workload. *Oral presentation delivered at the Mid-Atlantic Regional Chapter of the American College of Sports Medicine Conference*, Harrisburg, PA.
- Haufler, A.H., Costanzo, M.E., **Hatfield, B.D.**, VanMeter, J., (2010) Cognitive Restructuring and fMRI Brain, Mind and Healing: A Scientific Exploration of the Role of Mind in Healing, The Samueli Institute, Alexandria, VA
- Costanzo, M.E., VanMeter, J., Jannelle, C., Miller, M., Oldham, J., Russell, B., & **Hatfield, B. D.** (2010) Examination of the brain processes underlying emotion regulation within a stress resilient population, School of Public Health Research Interaction Day, University of Maryland, College Park
- Gentili, R. J., Bradberry, T. J., Rong, F., **Hatfield, B. D.**, & Contreras-Vidal, J. L. (2009). Decoding of Non-invasive functional brain biomarkers for sensorimotor adaptation assessed by MEG. Graduate Research Interaction Day, April 13, University of Maryland, College Park, Maryland.
- Haufler, A. J., Hung, T. M., Lo, L., Woo, M. J., (2009) Regulation of cerebral cortical activity during cognitive motor performance: effect of left temporal neurofeedback, School of Public Health Research Interaction Day, University of Maryland, College Park, MD, Paper presented
- Costanzo, M., **Hatfield, B. D.**, & Haufler, A. J., (2009) Brain processes underlying emotion regulation: an fMRI investigation, School of Public Health Research Interaction Day, University of Maryland, College Park, MD, Paper presented
- Swett, K., Zimmerman, J.B., & **Hatfield, B. D**. (2008) Does exercise reduce neurocognitive decline in individuals at genetic risk for Alzheimers disease? The role of signal processing in answering the question, Neural and Cognitive Sciences (NACS) Summer Research Interns' Day, College Park, MD, Paper presented
- Elele, N.N., Zimmerman, J.B., & **Hatfield, B. D.** (2008) The impact of physical activity on middle-aged adults at genetic risk for dementia, UMSTAR Research Poster day, College Park, MD, Paper presented
- Obot, U., Zimmerman, J.B., & **Hatfield, B. D.** (2008) The role of genetics and exercise in cognitive decline, UMSTAR Research Poster day, College Park, MD, Paper presented
- Saffer, M., Zimmerman, J.B., & **Hatfield, B. D.** (2008) Brain dynamics and motor behavior: Antecedants and consequences, Keck Research Foundation, College Park, MD, Paper presented

- Swett, K., Zimmerman, J.B., Contreras-Vidal, J., Roth, S.M., & **Hatfield, B. D.** (2008) Exercise and the aging brain: A comparative study of MEG filtering, School of Public Health Research Interaction Day, University of Maryland, College Park, MD, Paper presented
- Costanzo, M.C., Rietschel, J.C., Goodman, R.N., Haufler, A.J., Lo, L., McDonald, C.G., Saffer, M., **Hatfield, B. D.** (October, 2008) Electrocortical dynamics during competitive psychomotor performance, School of Public Health Research Interaction Day, University of Maryland, College Park, MD, Paper presented
- Rietschel, J., Zimmerman, J., McDonald, C., Haufler, A., & **Hatfield, B. D.** (2008) Physical activity is positively associated with executive function in older adults: A principal component analysis of the ERP response, School of Public Health Research Interaction Day, University of Maryland, College Park, MD, Paper presented
- Saffer, M., Deeney, S., Haufler, A., & **Hatfield, B**. D. (2008) EEG coherence during visuomotor performance: a comparison of corticocortical communication in experts and novices, School of Public Health Research Interaction Day, University of Maryland, College Park, MD, Paper presented
- Zimmerman, J.B., Hearn, J.W., Ludlow, A.T., Roth, S.M., & **Hatfield, B. D.** (2008) Executive and memory performance is moderated by APOE and physical activity in middle-aged adults, School of Public Health Research Interaction Day, University of Maryland, College Park, MD, Paper presented
- Savin-Murphy, J., Zimmerman, J.B., Ludlow, A.T., Roth, S.M., & **Hatfield, B. D.** (2008) Fitness and cognitive decline of the aging brain, School of Public Health Research Interaction Day, University of Maryland, College Park, MD, Paper presented
- Obot, U., Zimmerman, J.B., Ludlow, A.T., Roth, S.M. & **Hatfield, B. D.** (2008) The role of exercise and genetics in delaying cognitive decline, School of Public Health Research Interaction Day, University of Maryland, College Park, MD, Paper presented
- Gentili, R. J., Bradberry, T. J., Rong, F., **Hatfield, B. D.,** & Contreras-Vidal, J. L. (2008). Executive functioning: Extending from cognitive to sensorimotor control. Graduate Research Interaction Day, October 17, University of Maryland, College Park, USA.
- Gentili RJ, Bradberry TJ, Hatfield BD, Contreras-Vidal JL. (2007). EEG-based monitoring of brain dynamics during the acquisition of an internal model of a novel environment. *Graduate Research Interaction Day, September 26, University of Maryland, College-Park, USA*.
- Haufler, A. J., **Hatfield. B. D.**, Costanzo, M., Goodman, R., Lo, L. C., Rietschel, J., & Saffer, M. (October, 2007). Performance under pressure: brain processes of the superior athlete. Poster presented at the College of Chemical and Life Sciences, Bioscience Day, College Park, MD, United States.
- **Hatfield, B.D.**, Zimmerman, J., Haufler, A.J., Roth, S., Poeppel, D., & Contreras-Vidal, J., (2007) Physical activity and the graying of America: Preventing the decline of the aging brain a public health imperative, College of Chemical and Life Sciences, Bioscience Day, College Park, MD

- Haufler, A. J., **Hatfield. B. D.**, Costanzo, M., Goodman, R., Lo, L. C., Rietschel, J., & Saffer, M., (2007) Performance under pressure: brain processes of the superior athlete, College of Chemical and Life Sciences, Bioscience Day, College Park, MD, Poster presented
- Ludlow, A. T., Zimmerman, J. B., Hearn, J. W., Witkowski, S., **Hatfield, B. D.**, & Roth, S. M., (2007) Relationship between exercise energy expenditure and telomere length and telomerase activity, College of Chemical and Life Sciences, Bioscience Day, College Park, MD
- Zimmerman, J.B., Hearn, J.W., Ludlow, A.T., Savin-Murphy, J., Rietschel, J.C., Conery, R.C., Deeny, S.P, Roth, S.M., & **Hatfield, B.D.**, (2007) Executive and memory performance is moderated by APOE and physical activity in middle-aged adults, College of Chemical and Life Sciences, Bioscience Day, College Park, MD
- Savin-Murphy, J., Zimmerman, J.B., Deeny, S.P., Ludlow, A.T., Poeppel, D., Roth, S.M., **Hatfield, B. D.**, (2007) Fitness, aging, and cognitive decline: A preliminary investigation, School of Public Health, Research Interaction Day, College Park, MD
- Zimmerman, J.B., Conery, R., Hearn, J.W., Rietschel, J.C., Deeny, S.P., Roth, S.M., & Hatfield, **B. D.** (2007) Behavioral evidence of brain changes moderated by APOE and physical activity in middle-aged adults, School of Public Health, Research Interaction Day, College Park, MD
- **Hatfield, B.D.**, Zimmerman, J., Haufler, A.J., Roth, S., Poeppel, D., & Contreras-Vidal, J.L., (2007) Physical activity and the graying of America: Preventing the decline of the aging brain a public health imperative, School of Public Health, Research Interaction Day, College Park, MD
- Gentili, R.J., Bradberry, T.J., **Hatfield, B. D.**, & Contreras-Vidal, J.L., (2007) EEG-based monitoring of brain dynamics during the acquisition of an internal model of a novel environment, School of Public Health, Research Interaction Day, College Park, MD
- Rietschel, J.C., King, B.B., Pangelinan, M M, Clark, J.E., **Hatfield, B.D.** (2007) EEG coherence associated with using an explicit strategy during a motor task, Graduate Research Interaction Day, University of Maryland, College Park, Poster presentation
- **Hatfield, B.D.** (2005) The psychology of superior athletic performance, Mid-Atlantic meeting of the National Strength and Conditioning Association, College Park, MD, Lecture presented
- McDowell, K., Jeka, J.J., Schoner, G, & **Hatfield, B.D.** (1999) Testing Dynamic Field Theory with Directional Arm Movements, 1st Annual Winter Fest Neural & Cognitive Program, College Park, MD, Paper presented
- Kerick, S.E., Iso-Ahola, S.E., **Hatfield, B.D.**, & Gruber, K., (1998) A psychophysiological analysis of psychological momentum in target shooting, Southeast Sport & Exercise Psychology Symposium, College Park, MD, Paper presented

- Bixby, W., & **Hatfield, B. D.** (1998) Temporal dynamics of affect associated with an acute bout of aerobic exercise, Southeast Sport and Exercise Psychology Meeting, College Park, MD, Paper presented
- Haufler, A., Donofrio, D., **Hatfield, B. D.**, SantaMaria, D.L., Spalding, T., Blanchard, C., Hung, T., Lockwood, P., McAllister, L., Saarela, P., Slater, B., Apparies, R., & Drazin, H., (1995) The relationship of cardiovascular activity history and aging on behavioral and cognitive performance, Mid-Atlantic Regional Chapter of the American College of Sports Medicine, University of Maryland, College Park, MD, Paper presented
- **Hatfield, B.D.** (1989) Psychology of athletic performance, second Annual Sports Medicine Symposium (Maryland State Games, College Park, Maryland, Paper presented
- **Hatfield, B.D.** (1989) Motivational techniques for young athletes, annual convention of the Maryland Association for Health, Physical Education, Recreation and Dance, Annapolis, Maryland, Paper presented
- **Hatfield, B. D.**, & Philbin, J., (1989) Speed and power development through drills and plyometrics, Annual convention of the Maryland Association for Health, Physical Education, Recreation and Dance, Annapolis, Maryland, Paper presented
- Jeffers, L., **Hatfield, B. D.** & Porges, S.W., (1989) Vagal response to psychogenic stress by trained and untrained subjects, Aerobic Exercise, Psychophysiology and Mental Health Conference, University of Maryland, College Park, Paper presented April 28, 1989.
- Potts, J., **Hatfield, B. D.**, & SantaMaria, D.L., (1989) Acute exercise and vagal tone responses, Aerobic Exercise, Psychophysiology and Mental Health Conference, University of Maryland, College Park, Paper presented April 28, 1989.
- Bowman, E., Brody, E., **Hatfield, B. D.**, Spalding, T., & Tyler, S., (1987) Sport psychology-past, present and future: Psychologists' expanding role, Maryland Psychological Association Convention, Baltimore, Maryland, Paper presented
- **Hatfield, B. D.**, & Philbin, J., (1987) Training for strength speed and power. Science and application, Maryland Association for Health, Physical Education, Recreation and Dance, Ocean City, Maryland, Paper presented
- **Hatfield, B.D.,** Vaccaro, P., Spalding, T., Byarlay, J.A., Brody, E.B., Seaward, B.L., & Siders, S., (1986) Lateralization of electroencephalographic activity following aerobic exercise, Mid-Atlantic Regional Meeting of the American College of Sports Medicine, College Park, Maryland, Paper presented
- **Hatfield, B.D.** (1984) Psychological knowledge and the physical education curriculum, National Association for Physical Education in Higher Education, College Park, Maryland, Paper presented

#### **Grants**

# Sponsored Research NAWCAD\* Pitt\* cdmrp\* nsf\* lmco-afrl\* pcde\* bbi-zhang, polly, byoung

# **Research Support**

Sponsor: Naval Air Warfare Center Aircraft Division (NAWCAD)

Title: The Relationship between Brain Measurement of Pilot Mental Workload during Rotorcraft

Dynamic Interface Tests and Subjective Rating Scales (DIPES)

Award Amount: \$160,000 Role: Principal Investigator

Period of Performance: 2-years award pending approval of Human Research Protections Office

(HRPO)

Sponsor: Army-Aviation Applied Technology Directorate, Department of Defense

Title: The Influence of Brain Processes on Cognitive Workload under Varying Levels of Challenge

in a Degraded Visual Environment (DVE) During Helicopter Flight

Award Number: W911W6-17-2-0004

Award Amount: \$500,000

Role: Principal Investigator (Co-PI: Roberto Celi) Period of Performance: 11/25/2016 – 11/24/2021

Sponsor: The Henry M. Jackson Foundation (Department of Defense)

Title: Center for Rehabilitation Sciences Research: Biomechanical and Cognitive Changes of

Walking in Virtual Environments: Influences of Lower-Limb Amputation

Award Number: 023887-00001 Award Amount: \$357,092 Role: Co-Investigator

Period of Performance: 08/01/2015 – 11/30/2019

Brain and Behavior Initiative – University of Maryland FY 17 Seed Grant Program

Title: Dance and EEG: Neural Correlates of Expressive Movement

Award Number:

Award Amount: \$75,000

Role: Co-PI ((Abshire, Bradley, Fang, Hatfield & Simon)

Period of Performance:

Summary:

**Lockheed Martin Corporation** 

Title: Physiological Triggers of Autonomy Award Number: Contract # 4102604429

Award Amount: \$67,000

Project Location: University of Maryland, College Park, MD

Role: Principal Investigator

Period of Performance: 06/01/2016 – 09/30/2016

Summary: The aim of this project is to assess dependency on automated decision cues in human

subjects for target identification under conditions of varying cognitive demand.

# Lockheed Martin Corporation Advanced Technology Laboratory

Title: Human Performance Sensing – Biomarker/Metric Identification and Sensor Development

Award Number: Grant Number, Prime: FA8650-15-C-6627, Contract #: 4102321904

Award Amount: \$200,000

Project Location: University of Maryland, College Park

Role: Principal Investigator

Period of Performance: 01/01/2016 – 12/31/2016

Summary: This project aims to examine the interactive role of physiological state with cognitive demand on brain dynamics and the measurement of cognitive workload during a virtual airplane piloting task.

## NIH/National heart, Lung, and Blood Institute

Title: University of Maryland Summer Training and Research (UMSTAR) Program,

R25HL092604-06 (Hagberg)

Award Amount:

Project location: University of Maryland

Role: Mentor

Period of Performance: 04/01/2013 – 03/31/2018

Summary: The aim of the program is to increase diversity in the pool of individuals who ultimately choose careers in biomedical and behavioral research to reduce premature morbidity and mortality from cardiovascular and related diseases.

# NIH-National Institute on Aging

Title: Aging, Diversity, and Professional Training (ADAPT) Program

5R25AG045063 (Hagberg)

Award Amount:

Project Location: University of Maryland, College Park

Role: Mentor

Period of Performance: 08/01/13-05/31/18

Summary: The aim of this project is to advance scientific training and mentoring in

underrepresented minority students.

#### Completed:

#### Lockheed Martin Corporation

Title: Individual Templates of Cognitive Workload

Award Number: Contract #: P04101832234

Award Amount: \$47,000

Project Location: University of Maryland, College Park

Role: Principal Investigator

Period of Performance: 02/01/2015 – 09/30/2015

Summary: The aim of the project is to provide a valid biomarker of cognitive workload, derived from electroencephalography (EEG), eye tracking, and cardiovascular activity under conditions of varying mental challenge, which is robust for employment in operational environments.

## **Lockheed Martin Corporation**

Title: Objective assessment of Cognitive Workload in Flight Tasks as a Result of Flight Simulation

Demand and Expertise (Phases 3 and 4). Award Number: Contract #: U12001B

Award Amount: \$150,000.00

Project location: United States Naval Academy, Annapolis, MD and University of Maryland,

College Park

Role: Principal Investigator

Period of Performance: 3/1/2014 to 12/31/2015

Summary: The aim of the project is to provide a valid biomarker of cognitive workload, derived from electroencephalography (EEG), eye tracking, and cardiovascular activity under conditions of varying mental challenge, which is robust for employment in operational environments.

# **Lockheed Martin Corporation**

Title: Personalized Complex Data Exploration. Award Number: Contract #: P04101088651

Status: Funded. \$135,000

Project Location: University of Maryland, College Park

Role: Co-Investigator (PI: Paul Kogut)

Period of Performance: 10/23/2013 - 11/30/2014

Summary: This project aims to identify behavioral (eye-movements) and brain (EEG) biomarkers to identify and predict the user's information needs in order to extract relevant information from printed text.

## **Lockheed Martin Corporation**

Title: Objective Assessment of Cognitive Workload in Pilots during Varying Degrees of Task Difficulty and Mental Stress (Phases 1 and 2).

Role: Principal Investigator, University of Maryland, College Park

Award Number: Contract #: U12001B

Award Amount: \$100,000

Period of Performance: 11/12/2012 – 11/12/2013.

Summary: The general purpose of the research plan is to facilitate effective decision-making and cognitive-motor performance of human operators and to provide a valid and robust biomarker of cognitive workload, derived from electroencephalography (EEG), under conditions of varying challenge.

## Samueli Institute for Integrative Medicine

Title: Superior Performance under Pressure

Status: Total award \$134,675

Project Location: University of Maryland

Role: Co-Investigator

Period of Performance: April 1, 2010 – March 31, 2012

Summary: Samueli Institute for Integrative Medicine, 1700 Diagonal Road, Suite 400, Alexandria VA 22314. The aim of this project was to assess brain processes during emotion regulation by employment of fMRI BOLD in military personnel characterized as stress resilient vs controls. The gene-environment interaction will also be assessed by consideration of genotypic influence (5-HTT) on the observed brain processes,

# Ruth L. Kirschstein National Research Service Award (NRSA) from the National Institutes of Health (NIH - NICHHD)

Title: Pre-Doctoral Fellowship from the to Support Doctoral Studies Dissertation Effort

Status: awarded an F-31

Project Location:

Role: Melissa Pangelinan, Co-sponsored by Jane Clark

Period of Performance: 2010

Summary:

# Department of Defense, Army Research Office, U.S. Army Research

Title: Workshop on Research Efforts and Future Directions in Neuroergonomics & Neuromorphics

Status: Total award: \$47,957.00

Project Location: University of Maryland

Role: Co-Investigator

Period of Performance: July 14, 2008 - January 30 2009

Summary: Development and Engineering Command, Research Triangle Park, NC, ARMY. W911NF0810314. The aim of this program was to provide reports of scientific studies of relevance to human factors and to identify future research directions of value to the U.S. Department of Defense

#### National Institutes of Health (NIH)

Title: Description Resonance Image (MRI)-Derived Tissue Density of Key Regions of Interest in the Brain including the Motor Cortex and Cerebellar Cortex

Status: Data-sharing project with NIH

Project Location: University of Maryland, College Park MD USA

Role: Co-Investigator

Period of Performance: July 2008 – June, 2009

Summary: The aim of this project was to examine the relationship between the quality of motor behavior/coordination in children and magnetic. Motor ability and the developing brain:

Examination of neural tissue density employing the magnetic resonance imaging (MRI) normal brain development database, School of Public Health SEED grant, University of Maryland

#### National Institutes of Health, R21 AG025505

Title: Age, Physical Activity, Genotype and Cognitive Function

Status: Total award: \$429,362.00

Project Location: University of Maryland

Role: PI

Period of Performance: September 1, 2006 - August 31, 2008, extended to Aug 31, 2009

Summary: The aim of this project was to examine the interactive effects of physical activity and APOE e4 genotype on cerebral cortical processes during memory challenge to determine if the

neurobiological benefits of exercise slow neurodegenerative processes in middle-aged men and women.

# <u>Department of Defense, Army Research Office, U.S. Army Research, Development and</u> Engineering Command, Research Triangle Park, NC, ARMY.W911NF0510538

Title: Brain Processes and Precision Psychomotor Performance under Stress

Status: Total Award: \$377,375.00

Project Location: University of Maryland

Role: PI

Period of Performance: October 1, 2005 - September 30, 2008, extended to March 30, 2009 Summary: Person months: 7.0, The aim of this project was to determine cerebral cortical activity during skilled motor performance under conditions of psychological stress and to determine appropriate intervention strategies to attenuate the stress-induced alterations in brain activity,

# Army Research Laboratory (ARL) - Human Research and Engineering Directorate (HRED)

Title: Cognitive Neuroscience Investigations of Human Performance, Cooperative Research and Development Agreement (CRADA)

Project Location:

Role: (Co-Directors) J. Clark/ J. Contreras-Vidal

Period of Performance: 2004

Summary: The purpose of this agreement is to facilitate the exchange of personnel and equipment for research in the cognitive neuroscience of skilled movement control with special emphasis on brain processes related to cognitive load and psychological stress

#### Center for Neuroscience Research

Title: Visuo-motor learning in aging, Center for Neuroscience Research Award,

Status:

Project Location: University of Maryland, College Park

Role: Contreras-Vidal, J.L., & Hatfield, B.D.

Period of Performance: 2002

Summary: The purpose of this grant was to acquire equipment for monitoring of eye movement

#### The Erickson Foundation

Title: Exercise and the Aging Brain

Status: Total cost: \$50,000, Type: Basic Research Grant Project Location: Maiden Choice Lane, Baltimore, Maryland

Role: PI

Period of Performance: June 1, 2000 to June 1, 2002

Summary: The goal of this project was to determine the relationship of physical activity involvement in seniors to mental health and the integrity of cerebral cortical processes

# Johns Hopkins University

Johns Hopkins University - Center for Information Technology and Health Research

Title: Electromyographic activity, psychosocial factors, and musculoskeletal disorders in VDT-computer workers,

Status: Total cost: \$200,000, Type: Basic Research Grant

Project Location: School of Hygiene and Public Health

Role: Principal Investigator: L. Schleiffer, Co-Investigators: T. Spalding

Period of Performance: June 1, 1999 - December 31, 2002

Summary: The goal of this ergonomic project was to determine the role of psychological stress in

the etiology of musculoskeletal disorders in the workplace

Cooperative Research and Development Agreement between the Department of Kinesiology, University of Maryland, College Park, and the Director of the U.S. Army Research Institute for the Behavioral & Social Sciences

United States Army Research Institute for the Behavioral and Social Sciences

Title: The psychophysiological correlates of elite performance,

Status: Total cost: \$60,000, Type: Research Contract, Sponsorship for 1996-1997: three predoctoral Fellows at approximately \$17,000 each. (Total: \$51,000 per annum), Contract MDA903-93-C-0054

Project Location: 5001 Eisenhower Avenue, Alexandria, VA 22333-5600

Role: Co-Investigators: D.L. SantaMaria & G.Lawton, PI

Period of Performance: September 1, 1995 - September 1, 1998

Summary: The goal of this project was to determine the cortical activation patterns during

marksmanship in order to infer cognitive-affective states during superior psychomotor performance

# National Institutes of Health, Department of Health and Human Services

Title: Training grant for Neural and Cognitive and Sciences Program

Status: training grant

Project Listed as a core faculty member, by Dr. Avis H. Cohen, Director t Location: Center for

Neural and Cognitive Sciences, University of Maryland, College Park

Role: Faculty member

Period of Performance: 1995

Summary:

## University of Maryland/College of HHP Research Committee

Title: Aerobic Exercise, Aging and Biobehavioral Change in Males and Females

Status: \$14,500.00

Project Location: College of Health and Human Performance

Role: PI

Period of Performance: 1994

Summary:

#### American Heart Association

Title: Relationship between Aerobic Fitness, Family History of Hypertension and Response to

Stressors in African-Americans

Status: \$60,000 Project Location:

Role: PI: Bond, V.; Vaccaro, PI; co-investigator

Period of Performance: 1994

Summary:

# National Institutes of Health and University of Maryland Research Board

Title: The Effect of Aerobic Training Status upon CNS Activity in Young and Older Men

Status: \$3,500.00

Project Location: Biomedical Research Support Grant

Role: PI

Period of Performance: 1988

Summary:

# College of Physical Education, Recreation and Health

Title: Exercise Intensity and Plasma Beta-Endorphin Response

Status: \$500.00 Project Location:

Role: PI: Goldfarb, A.H., co-investigator

Period of Performance: 1987

Summary:

# Division of Human and Community Resources, University of Maryland

Title: Changes in Cerebral Hemispheric Processes as a Function of Physical Exercise

Status: \$640.00

Project Location: University of Maryland, College Park Role: Division Faculty Development Coordinating Committee

Period of Performance: 1986

Summary:

# Office of the Dean for Undergraduate Studies, University of Maryland

Title: PHED 455: Scientific Bases of Athletic Conditioning

Status: Instructional improvement grant \$1250.00

**Project Location:** 

Role:

Period of Performance: 1985-86

Summary:

#### University of Maryland

Title: The Relationship between Electroencephalographic and Peripheral Beta-Endorphin

Response to an Acute Aerobic Exercise Stress

Status: Funded by the Division of Human and Community Resources, \$650.00

**Project Location:** 

Role: Division Faculty Development Coordinating Committee

Period of Performance: 1985

Summary:

## National Institutes of Health, Public Health Service

Title: Electrocortical (EEG) Relaxation Response in High and Low Cognitively Anxious

Persons as a Result of Cardiovascular Exercise Stress

Status: \$1,950.00, Biomedical Research Support Grant \$RR-07042 to the from the Division

of Research Resources

Project Location: University of Maryland

Role:

Period of Performance: 1984

Summary:

Division of Human and Community Resources, University of Maryland

Title: The Role of Cardiovascular Exercise upon Mental Relaxation in Different Anxiety

Types

Status: \$500.00

Project Location: University of Maryland

Role: Division Faculty Development Coordinating Committee

Period of Performance: 1984

Summary:

Graduate School, University of Maryland

Title: The Role of Plasma Endorphins. The Effects of Prolonged Exercise Training in

**Depressed Populations** 

Status: (Summer Research Award) of the, \$4,000.00 Project Location: University of Maryland, College Park

Role: General Research Board Period of Performance: 1983

Summary:

University of Maryland, Division of Human and Community Resources

Title: Role of Exercise in Moderating Depression as Related to Plasma Endorphin Levels

Status: \$405.00

Project Location: University of Maryland

Role:

Period of Performance: 1983

Summary:

Grant-in-Aid Committee of the National Rifle Association

Title: An electroencephalographic study of Left-handed rifle marksmen: A test of motoric

involvement and temporal brainwave activity

Status: \$2,600.00

Project Location: Washington, D.C., Role: Landers, D.M., Daniels, F.S.

Period of Performance: 1982

Summary:

National Research Council of Canada for the Social Sciences and Humanities

Title: Dissertation Research Travel Grant

Status: \$1,000.00 Project Location:

Role:

Period of Performance: 1981

#### Summary:

#### National Rifle Association Research Grant

Title: A Comparison of Elite and Subelite Rifle, Pistol, Trap and Skeet Shooters and Selected

Physical, Psychological and Psychophysiological Tests Status: Funded by, Washington, D.D, \$5,750.00, \$3,000.00,

Project Location: Washington, D.C.

Role: Landers, D.M., Daniels, F.S., Wilkinson, M.O., & Feltz, D.L.

Period of Performance: 1980

Summary: A practical conditioning program for rifle, shotgun and pistol shooters

## National Rifle Association Research Grant

Title: An Investigation of Hand-Eye Dominance and Performance in Competitive Riflery

Status: National Rifle Association Research Grant, \$1,450.00

Project Location: Washington, D.C

Role: Landers, D.M., Furst, D.M. & Daniels, F.S

Period of Performance: 1980

Summary:

## National Rifle Association Research Grant

Title: The Effect of Selected Biofeedback Training Versus Traditional Instruction upon

Performance Scores and Performance Consistency in Rifle Shooters

Status: \$2,400.00

Project Location: Washington, D.C

Role: Daniels, F.S., Wilkinson, M.O., & Hatfield, B.D.

Period of Performance: 1980

Summary:

## Stuart K Wilson Research Fund

Title: The Aim of this research was to Examine the Relationship between Physical and Cerebral Cortical Response, using Magnetoencephalography (MEG), to Memory Challenge in Carriers and Non-Carriers of the APOE e4 Allele

Status: Stuart K Wilson Research Fund

**Project Location:** 

Role: Faculty Advisor to student recipient Sean P. Deeney

Period of Performance:

Summary:

#### TEACHING, MENTORING AND ADVISING

# **Courses Taught**

- EPIB/KNES, Seminar on Research Ethics, Spring of 2013, (co-taught with Dr. Dushanka Kleinman, Associate Dean for Research School of Public Health)
- EPIB/KNES, Seminar on Research Ethics, Spring of 2014, 2015, 2016 (co-taught with Dr. Barbara Alving, Director of Public Health Science School of Public Health)

- KNES 350, The Psychology of Sport, Spring (1998), (37 students)
- KNES 350, The Psychology of Sport, Spring (1999), (47 students)
- KNES 350, The Psychology of Sport, Fall (1999), (52 students)
- KNES 350, The Psychology of Sport, Fall (2000), (69 students)
- KNES 350, The Psychology of Sport, Fall (2002), (144 students)
- KNES 350, The Psychology of Sport, Spring (2003), (200 students total), (2 sections taught)
- KNES 350, The Psychology of Sport, Fall (2003), (150 students)
- KNES 350, The Psychology of Sport, Spring (2004), (150 students)
- KNES 350, The Psychology of Sport, Fall (2004), (180 students)
- KNES 350, The Psychology of Sport, Spring (2005), (190 students)
- KNES 350, The Psychology of Sport, Fall (2005), (190 students)
- KNES 350, The Psychology of Sport, Spring (2006), (190 students)
- KNES 350, The Psychology of Sport, Winter (2008), (16 students)
- KNES 350, The Psychology of Sport, Winter (2009), (23 students)
- KNES 350, Psychology of Sports, Fall of 2009, (150 students)
- KNES 455, Scientific Basis of Athletic Conditioning, Fall (1997), (49 students)
- KNES 455, Scientific Basis of Athletic Conditioning, Fall (1998), (43 students)
- KNES 497, Independent Studies Seminar, Spring (2009), (24 students)
- KNES 497, Independent Studies Seminar, Fall of 2009, (23 students)
- KNES 650, Mental and Emotional Aspects of Sport and Exercise, Fall (1997), (4 students)
- KNES 650, Mental and Emotional Aspects of Sport and Exercise, Fall (1998), (9 students)
- KNES 650, Mental and Emotional Aspects of Sport and Exercise, Fall (1999), (8 students)
- KNES 650, Mental and Emotional Aspects of Sport, Fall (2000), (4 students)
- KNES 650, Mental and Emotional Aspects of Sport and Exercise, Fall (2001), (4 students)
- KNES 689L, Biopsychological Aspects of Exercise and Mental Health, Fall (2007), (7 students)
- KNES 689M, The Biopsychological Foundations of Skilled Motor Behavior, Fall (2003), (7students)
- KNES 689M, The Biopsychological Foundations of Skilled Motor Behavior, Fall (2005)
- KNES 689M, The Biopsychological Foundations of Skilled Motor Behavior, Fall (2008), (4 students)
- KNES 689U, Biopsychological Foundations of Exercise and Mental Health, Fall (2002), (5 students)
- KNES 689U, Biopsychological Foundations of Exercise and Mental Health, Fall (2004), (10 students)
- KNES 789A, Advanced Seminar: Exercise and the Aging Brain, Spring (2005), (6 students)
- KNES 789A, Advanced seminar: Exercise and the Aging Brain, Spring (2008), (5 students)
- KNES 789A, Advanced seminar: Exercise and the Aging Brain, Spring of 2010, (12 students)
- KNES 789K, Advanced Seminar: Exercise and the Aging Brain, Spring (1999), (7 students)
- KNES 789K, Advanced Seminar: Exercise and the Aging Brain, Spring (2002), (7 students)
- KNES 789R, Advanced Seminar: The Psychology of Elite Performance, Spring (1998), (5 students)
- KNES 789R, Advanced Seminar: The Psychology of Elite Performance, Spring (2001), (9 students)

- KNES 789R, Advanced Seminar: The Psychology of Elite Performance, Spring (2004), (12 students)
- KNES 789R (689K 498i), Advanced Seminar: The Psychology of Elite Performance, Spring (2006), (18 students)
- Sabbatical Leave, Spring (2000)
- Released from teaching for grant preparation, Fall (2006)
- Released from teaching for grant preparation, Spring (2007)

#### **Teaching Innovations**

# **Course or Curriculum Development**

- 1997, KNES789O Advanced Seminar: Applications of Electroencephalography in Kinesiology, (taught spring semester)
- KNES 455 Scientific Basis of Athletic Conditioning
- KNES 789A Advanced Seminar: Exercise and the Aging Brain
- KNES 789R Advanced Seminar: The Psychology of Elite Performance
- KNES 689U Biopsychological Foundations of Exercise and Mental Health
- KNES 689M The Biopsychological Foundations of Skilled Motor Behavior

#### Advising: Research or Clinical

#### Master's

- Spring 2017 (Expected), Calvin Lu
- Spring 2016, Seth Nieman, Kinesiology
- Spring 2013, Ghedem Solomon, Neuroscience and Cognitive Science program
- Spring 2012, Marie Oben, Exercise Psychology
- Spring 2007, Joseph Hearn, Exercise Psychology
- Melissa Pangelinan, Motor Behavior (co-advised with Jane Clark)
- Ryan Conery, Exercise Psychology
- Jeremy Rietschel, Sport Psychology
- Robert Price, Exercise Psychology
- Holly Stover, Exercise Psychology
- Tamara Walden, Exercise psychology
- Pamela Chisholm, Exercise Psychology
- Walter Bixby, Exercise Psychology
- Jason Lanter, Sport Psychology
- Ross Apparies, Sport Psychology
- Lisa D. Mugavero, Sport psychology
- Heather Drazin, Sport Psychology
- Christine Jordan, Sport Psychology
- Cara Joy Lockman, Sport psychology
- Margaret Meharg, Sport Psychology
- Mark Orrell, Sport Psychology
- Steve Siders, Sport Psychology

- Albert J. Krotz, Sport Psychology
- Susan Stein, Exercise Physiology
- Julie Hamon, Sport Psychology
- Heather Lewis, Sport Psychology
- Laurie Jeffers, Exercise Physiology
- Valerie Mauck, Sport Management
- Mitchell Batkin, Exercise Physiology
- Linard Hancock, Sport Psychology
- Debra Wiegand, Sport Psychology
- Robert Baldwin, Sport Management
- Evan Brody, Sport Psychology
- Jacobo Morales, Exercise Physiology

# **Doctoral Advisees Completed as primary mentor**

Spring 2016, Mark Saffer, The Impact of Motor Learning on Motor Behavior and Cortical Dynamics in a Complex Stressful Environment, Post Doctoral Fellow, Veteran's Administration, Baltimore, MD

Spring, 2016, Ying Ying Tan, The Influence of Motivation on Emotion Regulation and Motor Performance: Examination of a Neuro-Affective Model, Research Scientist, Defense Sciences Organization, Singapore

Fall 2015, Li-Chuan Lo, The Influence of Conscious Control of Movement on Brain Processes and the Quality of Cognitive-Motor Performance, Post-doctoral Fellow, University of Maryland, College Park

Spring 2013, Matthew Miller, A Programmatic Research Approach to Understanding the Impact of Team Environment on Cerebral Cortical Dynamics and Attention, Assistant Professor, Department of Kinesiology, Auburn University, Alabama

Spring 2013, Maureen Kayes, Variability in Cognitive Performance and Learning in Young Adults Explained by Cardiovascular Fitness, Physical Activity, and ApoE Genotype Psychological Counselor, State of Virginia

Spring 2013, Bartlett Russell, The Effect of Mental Stress on Brain Dynamics and Performance Related to Attention Control during a Vigilance Task: An Electroencephalographic Investigation Research Scientist, Lockheed Martin Corporation

Spring 2011, Michelle Costanzo, Examination of the Brain Processes Underlying Emotion Regulation within a Stress-Resilient Population, Post Doctoral Fellow, Uniformed University of the Health Sciences, Bethesda, MD

Spring 2011, Jeremy Rietschel, Psychophysiological Investigation of Attentional Processes

Health Research Scientist, Maryland Exercise and Robotics Center of Excellence, VA, Baltimore

Spring 2008, Ronald N. Goodman, Performing Motor Skills Under Psychological Stress – Assessment of Neurobiological and Genetic Influence, Post Doctoral Fellow, Veteran's Administration, Baltimore, MD

Spring 2008, Minjung Woo, Physical Fitness, Brain Function, and the Role of the Apolipoprotein E4 Allele in Young Adults
Associate Professor, Ulsan University, South Korea

Spring 2007, Shu-Chen Lee, Spectators' Emotional and Physiological Responses to Televised Sports Violence: A Test of Sensation Seeking Theory

Spring 2005, Sean Deeny, Physical activity is associated with greater task-related cortical activation during executive function and working memory challenge in cognitively normal middle-aged APOE E4 carriers. Post Doctoral Fellow, Brain Aging and Dementia Institute, University of California, Irvine. Currently employed by the Rehabilitation Institute of Chicago.

Spring 2004, Park Lockwood, Aerobic exercise, hemispheric Asymmetry and affective state: Does exercise differentially impact approach versus withdrawal-oriented individuals? Assistant Professor, Exercise Science, Washburn University, Topeka, Kansas

Spring 2003, Walter Bixby, A multifaceted examination of the exercise and affect relationship, Associate Professor, Assistant Professor, Elon University, Elon, North Carolina

Spring 2002, Scott E. Kerick, Neurocognitive adaptations associated with marksmanship training. Research scientist, Army Research Laboratory, Human Research and Engineering Directorate, Aberdeen Proving Grounds, Aberdeen, MD.

Spring 2002, Lisa D. McAllister, Selective attention characteristics of expert and novice rifle shooters: An electrocortical study, Advising Coordinator, Robert H. Smith School of Business, University of Maryland, College Park, MD

Spring 2000, Charles H. Hillman, Cardiovascular fitness and neurocognitive processes in older adults Professor, Department of Psychology, Department of Health Sciences, Northeastern University

Spring 1999, Pekka Saarela, The effect of mental stress on cerebral hemispheric asymmetry and psychomotor performance in skilled marksmen, Finnish Institute of Occupational Health, \*Research Scientist

Spring 1999, Ross J. Apparies, The relationship of attention to cortical slow potentials, Neuroscan Laboratories, El Paso, Texas, \*National Technical Coordinator

Spring 1998, Cassandra Blanchard, The effect of exercise-induced hyperthermia on post exercise cerebral asymmetry and affective state

Spring 1997, Amy J. Haufler, The psychology of expert performance: Comparative brain activation profiles in marksmen and novice shooters, Dept of Kinesiology, University of Maryland, College Park, Johns Hopkins University Applied Physics Laboratory, \*Research Assistant Professor

Spring 1997, T.M. Hung, Are fast-action sport athletes characterized by greater attentional flexibility and motor preparedness? An electrophysiological study of table tennis players, Graduate Institute of Sport and Exercise Science, Taipei Physical Education College, Taiwan, Republic of China, \*Professor

Spring 1996, Robyn Snyder-Bauer, The effect of exercise-induced hypoglycemia on selected measures of central nervous system function in elite cyclists, Dept of Exercise Science, Rutgers University, New Brunswick, NJ, \*Instructor

Spring 1995, Lewis Lyon, A comparative analysis of aerobic conditioning, resistance training, and a structured stress management program in the attenuation of the adult psychophysiological response to cognitive stress, Good Health Center, Good Samaritan Hospital, Baltimore, MD, \*Director

Spring 1993, Evan B. Brody, The effect of attention upon force alteration and activation of the biceps and medial triceps brachii during an isometric elbow flexion task: An EMG assessment, University of Maryland, College Park; President- Performance Enhancement Corporation, Olney, MD, \*Lecturer

Spring 1993, David W. Armstrong, The role of opioid receptors in exercising humans acutely exposed to cold and hot air, Dept of Endocrinology – National Naval Medical Command Hospital, Bethesda, MD, 1700 Diagonal Road, Suite 400, Alexandria, VA 22314, Samueli Institute for Integrative Medicine, \*Research Scientist

# **Current Advisees:**

Kyle Jacquess, (Kinesiology) Andrew Ginsberg, (Kinesiology) Bradley Ritland, (Kinesiology) Steve Kahl (Kinesiology)

# **Awards-Mentorship received by graduate advisees**

- 2017, Graduate School Summer Research Fellowship, Graduate School, University of Maryland (Andrew Ginsberg)
- April 2016, Lockheed Martin Advanced Technology Laboratories Engineer of the Year
- 2015, Southeastern Conference Visiting Faculty Travel Program Recipient (Matt Miller)
- 2015, Dean's Fellowship, Graduate School, University of Maryland (Andrew Ginsberg)

- 2015, Most Valuable Professor, Maryland Women's Basketball, University of Maryland(MVP) (Andrew Ginsberg)
- 2014, Lynn Wagner Owens Faculty Physical Activity Instruction Award, Kinesiology Department, University of Maryland (Andrews Ginsberg)
- 2014, Outstanding Paper of the Year in Sport, Exercise, and Performance Psychology (Miller et al.)
- 2014, American Kinesiology Association Doctoral Scholar (Bart Russell)
- 2013-2014, SPH's Dean's Graduate Scholar PhD (Bart Russell)
- 2013, Most Valuable Professor (MVP), Maryland Men's Soccer, University of Maryland (Andrews Ginsberg)
- 2013, University of Maryland Distinguished Dissertation Award Nominee (Bart Russell)
- 2013, Jeremy Rietschel, received Career Development Award (CDA-1), awarded by Veteran's Affairs Rehabilitation Research and Development, 2013.
- 2013, Jeremy Rietschel, received Golden Award for best paper at Human-Computer Interaction International Conference (Hyuk et al., 2013)
- 2012, Jeremy Rietschel, received James A. Humphrey Award for Most Outstanding Publication by a Graduate Student in the University of Maryland Department of Kinesiology (Miller, Rietschel, McDonald, & Hatfield, 2011)
- 2012, Graduate Research Initiative Program (GRIP) Award (Bart Russell)
- 2012, University of Maryland Graduate Research Interaction Day First-Place Poster Presentation in the Education: Pedagogy and Learning Category (Matt Miller)
- 2012, Induction as a Lifetime Member into the University of Maryland School of Public Health Gamma Zeta Chapter of Delta Omega, the Honorary Society of Public Health (Matt Miller)
- 2011, James A. Humphrey Award for Most Outstanding Publication by a Graduate Student in the University of Department of Kinesiology (received in 2012 for Miller, Rietschel, McDonald & Hatfield)
- 2011-2012, University of Maryland Center of Teaching Excellence Graduate Fellowship (Matt Miller)
- 2011, Distinguished Teaching Assistant Award, University of Maryland (Matt Miller)
- 2011, Mattew Miller received F. Daniel Wagner Most Outstanding Physical Activity Teacher Award, University of Maryland first person to win award multiple times since the award's inception in 1988
- 2011, UMD Graduate School Summer Fellowship (Bart Russell)
- Fall 2011, James A. Humphrey Award for Most Outstanding Publication by a Graduate Student
- Fall 2011, F. Daniel Wagner Most Outstanding Physical Activity Teacher Award, first person to win award multiple times since the award's inception in 1988 (Matt Miller)
- Fall 2011, Jeremy Rietschel, doctoral advisee, awarded the William Hodos award for dissertation research (Neuroscience and Cognitive Science program)
- 2010, F. Daniel Wagner Most Outstanding Physical Activity Teacher Award (Matt Miller)
- 2010, Jeremy Rietschel, Ann G. Wylie Dissertation Writing Fellowship. University of Maryland, College Park
- 2009-2010, University of Maryland, College Park First-Year University Fellowship Award (Matt Miller)
- Fall 2010, F. Daniel Wagner Most Outstanding Physical Activity Teacher Award

- Fall 2009, Spring 2010, College Park First-Year University Fellowship Award
- 2008-2013, CASL Graduate Fellowship (Bart Russell)
- Fall 2008, Joanne Zimmerman, won first place in the campus Graduate Research Interaction Day (Public Health section) for her oral presentation on Exercise and Cognitive Decline in Carriers of the APOE e4 Genotype
- 2008, Jeremy Rietschel, Society for Psychophysiological Research Travel Award
- Spring 2008, Sean Deeny, received the Alzheimer's Association "Best Paper" for the New Investigator Alzheimer's Disease Neuroimaging Award at the annual meeting of International Conference on Alzheimer's disease (ICAD) in Chicago July, 2008. This award was in recognition of Dr. Deeny's paper in Biological Psychology "Exercise, APOE, and working memory: MEG and behavioral evidence for benefit of exercise in epsilon4 carriers." Other authors on the paper were: David Poeppel, Jo B. Zimmerman, Stephen M. Roth, Josef Brandauer, Sarah Witkowski, Joseph W. Hearn, Andrew T. Ludlowa, José L. Contreras-Vidal, Jason Brandt, and Bradley D. Hatfield
- Fall 2007, Jo Zimmerman, Doctoral Advisee, recipient of Outstanding Graduate Teaching Award, Department of Kinesiology
- 2006-2010, Jeremy Rietschel, Neuroscience and Cognitive Science Annual Fellowship Award. University of Maryland, College Park. (Awarded for 5 consecutive years.
- 2006, Jeremy Rietschel, received Dan Wagner award for teaching excellence. University of Maryland, College Park, 2006.
- Fall 2006, Sean Deeny, Doctoral Advisee, awarded post-doctoral fellowship by the Institute for Brain Aging and Dementia
- Fall 2005, Jo Zimmerman, Doctoral Advisee, nominated for University of Maryland Graduate Service Award
- 2004 Research and Development Achievement Award Department of the Army, Washington, DC (Scott Kerick)
- 2002 Post-Doctoral Research Associateship at U.S. Army Research Laboratory National Academy of Sciences, Washington, DC (Scott Kerick)
- Fall 2000, Walter Bixby, Doctoral advisee, recipient of President's Award, Mid-Atlantic regional chapter of the American College of Sports Medicine
- 1999 Burris Husman Research Scholarship Department of Kinesiology, University of Maryland (Scott Kerick)
- Fall 1999, Charles H. Hillman, Doctoral advisee, was awarded a pre-doctoral training grant from the National Institutes of Health
- Fall 1998, Amy Haufler, Doctoral advisee, recipient of Outstanding Dissertation Award Sport Psychology Academy of American Alliance of Health Physical Education Recreation and Dance (National Association of Sport and Physical Education)
- 1998 Excellence in Teaching Assistantship Award Department of Kinesiology, University of Maryland (Scott Kerick)

# Masters and doctoral committee memberships:

#### **Doctoral committees (degree in progress)**

(Expected), Lauren Weiss, Kinesiology (Expected), Isabelle Shuggi, Kinesiology

# **<u>Doctoral comprehensive examination committees:</u>**

| 2008 | Kimberly         | Drnec  | Neural                   | and Co  | ognitive Sciences |
|------|------------------|--------|--------------------------|---------|-------------------|
| 2005 | JoAnn Kuo        |        | Exercise                 |         | Physiology        |
| 2005 | Kyle             | Savage | Sport                    | Psycho  |                   |
| 2004 | Choong           | Lim    | Sport                    | Manag   | ••                |
| 2004 | Bruce            | Swett  | Neural                   | Cog Sc  | ience             |
| 2000 | Kerrie           | Gruber | Sport Psychology         |         |                   |
| 2000 | Kaleb McDowell   |        | Neural Cognitive Science |         |                   |
| 2000 | Laura            | Kraft  | Exercise                 | e Physi | ology             |
| 1999 | Pedro            | Silva  | Motor Control            |         |                   |
| 1997 | Tim Bryant       |        | Sport Sociology          |         |                   |
| 1990 | John Gilligan    |        | Exercise Physiology      |         |                   |
| 1989 | Steve Weiss      |        | Exercise Physiology      |         |                   |
| 1989 | Anthony Mahon    |        | Exercise Physiology      |         |                   |
| 1989 | Rod Williamson   |        | Sport Psychology         |         |                   |
| 1989 | Andy Jennings    |        | Sport Psychology         |         |                   |
| 1989 | Rob Confessore   |        | Exercise Physiology      |         |                   |
| 1989 | Doug Miller      |        | Exercise Physiology      |         |                   |
| 1988 | Karen Sullivan   |        | Health                   |         |                   |
| 1988 | Brad L. Bennett  |        | Exercise Physiology      |         |                   |
| 1987 | Ronald Bradley   |        | Sport Psychology         |         |                   |
| 1987 | James Coale      |        | Exercise Physiology      |         |                   |
| 1987 | Colleen Farmer   |        | Exercise Physiology      |         |                   |
| 1986 | Gerald Walford   |        | Sport Psychology         |         |                   |
| 1985 | Steven Bocuzzi   |        | Exercise Physiology      |         |                   |
| 1985 | Luke Seaward     |        | Exercise Physiology      |         |                   |
| 1985 | Hideko Yamaguchi |        | Exercise Physiology      |         |                   |
| 1985 | J. Yoo           |        | Sport Psychology         |         |                   |
| 1984 | Jack Bruno       |        | Exercise Physiology      |         |                   |
| 1984 | Joseph Hannah    |        | Exercise Physiology      |         |                   |
| 1984 | Susan Kyle       |        | Exercise Physiology      |         |                   |
| 1983 | Gary Sforzo      |        | Exercise Physiology      |         |                   |

# **Advising: Other than Research Direction**

# Master's

- Spring 2016, Taylor Knapp, Sport Psychology
- Fall 2013, Alissa Kregling, Biomechanics, 2013 (August)
- Spring 2012, Carly Hunt, Sport Psychology
- Spring 2007, Andrew Ludlow, Exercise Physiology
- Spring 2005, David Oviatt, Sport Psychology
- Spring 2004, Michael Hamberger, Sport psychology
- Spring 2003, Katherine Kerr, Sociology of Sport

- Spring 2003, John Kouame, Motor Behavior
- Spring 2002, Jonathan P. Liba, Pedagogy
- Spring 2002, Kathy Kerr, Sport Sociology
- Spring 2001, Chad Cirafesi, Sport Psychology
- Spring 2001, Alex Porter, Sport Psychology
- Spring 2001, Dan Barlow, Exercise Physiology
- Spring 2001, Margaret McDermott, Sport Psychology
- Spring 1998, Jason Fajardo, Sport psychology
- Spring 1997, Cindy Waddell, Exercise Physiology
- Spring 1997, Miyuki Iwamoto, Exercise Physiology
- Spring 1997, Julius Bevetta, Exercise Physiology
- Spring 1997, Margot Royer, Exercise Physiology
- Spring 1995, Waddell Wright, Sport Psychology
- Spring 1995, Derick Donofrio, Sport Psychology
- Spring 1995, Yves Reidrich, Sport Psychology
- Spring 1994, Myles Berg, Sport Psychology
- Spring 1993, C. Blesy-Khron, Exercise Physiology
- Spring 1993, Jon Rogers, Sport Psychology
- Spring 1993, Mary Hankey (non-thesis), Sport Psychology
- Spring 1992, Wendy Hurley, Sport Psychology
- Spring 1992, Casandra Blanchard, Sport Psychology
- Spring 1992, Bart Lerner, Sport Psychology
- Spring 1991, Kathleen Haberman, Exercise Physiology
- Spring 1990, Sylvester Mathis, Exercise Physiology
- Spring 1989, Dwight B. Galt, Exercise Physiology
- Spring 1987, Joseph Grikis, Biomechanics
- Spring 1986, Diana Barcelo-Viera, Exercise Physiology
- Spring 1986, Ruth Ragsdale, Sport Management
- Spring 1985, Dawn Diehl, Exercise Physiology
- Spring 1985, Catherine Kohlensein, Exercise Physiology
- Spring 1984, Gary Benedict, Exercise Physiology
- Spring 1984, Jackie Briley, Exercise Physiology
- Spring 1984, Peter Gryzbinski, Exercise Physiology
- Spring 1984, Timothy Moore, Exercise Physiology
- Spring 1983, Judith Smith, Sport Psychology
- Amy Halverstedt, Exercise Physiology

### **Doctoral (Students completed degrees)**

2017 Alfonso Alfini, Kinesiology

2016 Katiah Llerena, Psychology

- Spring 2016, Yue Du, Motor Behavior
- Spring 2016, Jay Goldstein, Kinesiology
- Fall 2015, Hyuk Oh, Neuroscience and Cognitive Science
- Fall 2015, Shikka Prasad, Kinesiology
- Spring 2014, Katiah Llerena, Psychology

- Fall 2015, Christine Hopple, Kinesiology
- Fall 2105, Hyuk Oh, Neuroscience and Cognitive Science
- Fall, 2015, Shikah Prashad, Neuroscience and Cognitive Science
- Spring 2013, Kim Drnec, Neuroscience and Cognitive Science
- 2012 Melissa Pangelinan, Kinesiology
- Spring 2012, Kyle Savage, Kinesiology
- Spring 2012, Sharona Atkins, Psychology
- Spring 2011, Wendy Bibeau, Epidemiology and Biostatistics
- Spring 2010, Trent Bradberry, Bioengineering
- Spring 2009, Claudia Bonin, Neuroscience and Cognitive Science
- Spring 2009, Tracy Tomlinson, Psychology
- Spring 2009, Xihe Zhu, Kinesiology (Pedagogy)
- Spring 2009, Radha Golkar, Psychology
- Spring 2009, Alice Saperstein, Psychology
- Spring 2008, Joseph Mahan, Kinesiology Sport Management
- Spring 2008, Hoa Vo, Psychology
- Spring 2008, Kimberly Drnec, Neural and Cognitive Sciences
- Spring 2007, Haichun Sun, Kinesiology Pedagogy
- Spring 2007, Choong Lim, Kinesiology Sport Management
- Spring 2007, Amber Sprenger, Psychology
- Spring 2007, Bruce Swett, Neural and Cognitive Science
- Spring 2005, Josef Brandauer, Exercise Physiology
- Spring 2005, JoAnn Kuo, Exercise Physiology
- Spring 2004, Kerrie Gruber, Sport Psychology
- Spring 2004, Choong Lim, Sport management
- Spring 2003, Cindy Waddell, Sport Psychology
- Spring 2003, Julie Blackburn, Sport psychology
- Spring 2003, Kaleb McDowell, Neural & Cognitive Science
- Spring 2003, Francis Allen, Public Comm Health
- Spring 2001, Virginia Schardt, Sport psychology
- Spring 2001, Dana Phares, Exercise Physiology
- Spring 2000, Pedro Silva, Motor Control
- Spring 2000, Laura Kraft, Exercise Physiology
- Spring 1999, Daniel Rodriguez, Human Development
- Spring 1997, Frank Merino(NZ), Sport Psychology
- Spring 1997, Tim Bryant, Sport Sociology
- Spring 1995, Dorothy Hyman, Sport Psychology
- Spring 1994, Gina Oliva, Recreation
- Spring 1994, Rose Mince, Human Development
- Spring 1994, Joseph Jacobs, Sport Psychology
- Spring 1993, Ronald Bradley, Sport psychology
- Spring 1992, Judy Dole, Exercise Physiology
- Spring 1992, C. Dooly-Manning, Exercise Physiology
- Spring 1992, Rod Williamson, Sport psychology
- Spring 1992, Doug Miller, Sport Psychology
- Spring 1992, Alice Smith, Exercise Physiology

- Spring 1992, Margarita Smith, Exercise Physiology
- Spring 1991, Brad Bennett , Exercise Physiology
- Spring 1991, Gretchen Schlabach, Exercise Physiology
- Spring 1990, Jodi Cognato, Health
- Spring 1990, Anthony Mahon, Exercise Physiology
- Spring 1990, John Gilligan, Exercise Physiology
- Spring 1989, Thomas W. Spalding, Health/Psychophysiology
- Spring 1989, Susan Kyle, Exercise Physiology
- Spring 1989, Nancie Park, Recreation
- Spring 1989, Steve Weiss, Exercise Physiology
- Spring 1989, Anthony Mahon, Exercise Physiology
- Spring 1989, Rod Williamson, Sport Psychology
- Spring 1989, Andy Jennings, Sport Psychology
- Spring 1989, Rob Confessore, Exercise Physiology
- Spring 1989, Doug Miller, Exercise Physiology
- Spring 1988, Stephen J. Bocuzzi, Exercise Physiology
- Spring 1988, Timothy R. Harvey, Sport Psychology
- Spring 1988, Edward J. Marcinik, Exercise Physiology
- Spring 1988, Steven M. Ostrove, Exercise Physiology
- Spring 1988, Gerald A. Walford, Sport Psychology
- Spring 1988, Karen Sullivan, Health
- Spring 1988, Brad L. Bennett, Exercise Physiology
- Spring 1987, James Coale, Exercise Physiology
- Spring 1987, Brian Luke Seaward, Exercise Physiology
- Spring 1987, Ronald Bradley, Sport Psychology
- Spring 1987, James Coale, Exercise Physiology
- Spring 1987, Colleen Farmer, Exercise Physiology
- Spring 1986, Alex Isherwood, Sport Management
- Spring 1986, Suzanne Tyler, Sport Psychology
- Spring 1986, J. Yoo, Sport Psychology
- Spring 1986, Gerald Walford, Sport Psychology
- Spring 1985, Steven Bocuzzi, Exercise Physiology
- Spring 1985, Luke Seaward, Exercise Physiology
- Spring 1985, Hideko Yamaguchi, Exercise Physiology
- Spring 1985, J. Yoo, Sport Psychology
- Spring 1984, Gary Sforzo, Exercise Physiology
- Spring 1984, Jack Bruno, Exercise Physiology
- Spring 1984, Joseph Hannah, Exercise Physiology
- Spring 1984, Susan Kyle, Exercise Physiology
- Spring 1983, Gary Sforzo, Exercise Physiology
- Brad L. Bennett, Exercise Physiology
- Andrew M. Jennings, Sport Psychology
- Greg Kitchen, Sport Psychology
- Jacobo Morales, Exercise Physiology
- Scott James Leischow, Health Psych/Psychophysiology
- Anthony Mahon, Exercise Physiology

- Rodney Williamson, Sport Psychology
- Joseph M. Hannah, Exercise Physiology

# **Doctoral program of study committees:**

- (Expected), Isabelle Shuggi, Neuroscience and Cognitive Science program
- (Expected), Lauren Weiss, Neuroscience and Cognitive Science program
- Andrew Ludlow, Exercise Physiology
- Erik Hanson, Exercise Physiology
- Tina Ellis, Exercise Physiology
- Joe Mahon, Sport management
- JoAnne Kuo, Exercise Physiology
- Sean Walsh, Exercise Physiology
- Steve Prior, Exercise Physiology
- J.J. Park, Exercise Physiology
- Marl Roltsch, Exercise Physiology
- Matt Kostek, Exercise Physiology
- Diane Hurlbut, Exercise Physiology
- Dana Brown, Exercise Physiology
- Jeff Gardner, Sport Psychology
- Andrew M. Jennings, Sport Psychology
- Lewis Lyon, Sport Psychology
- Gerald A. Walford, Sport Psychology
- Rodney G. Williamson, Sport Psychology
- Brad L. Bennett, Exercise Physiology
- Stephen J. Bocuzzi, Exercise Physiology
- John Francis Bruno, Exercise Physiology
- James A. Coale, Exercise Physiology
- Robert Joseph Confessore, Exercise Physiology
- Colleen Mary Farmer, Exercise Physiology
- John Gilligan, Exercise Physiology
- Susan Kyle (Wigutoff), Exercise Physiology
- Anthony P. Mahon, Exercise Physiology
- Edward J. Marcinek, Exercise Physiology
- Steve D. McCole, Exercise Physiology
- Douglas K. Miller, Exercise Physiology
- Jacobo Morales, Exercise Physiology
- Jeffrey T. Potts, Exercise Physiology
- Gretchen Schlabach, Exercise Physiology
- Brian Luke Seaward, Exercise Physiology
- Michael A. Smutok, Exercise Physiology
- Hideko Yamaguchi, Exercise Physiology
- Steven J. Stanhope, Biomechanics

# Post-doctoral students and visiting scholars

- Hyuk Oh: current
- Li-Chuan Lo: current
- Clayton A Domingues: 2013-2015
- Scott E Kerick: 2002-2003
- Ewout Meijer (Mastriicht University) Spring 2000- 2002

# SERVICE AND OUTREACH

### **Editorships, Editorial Boards and Reviewing Activities**

#### **Editorial Boards**

- 2012 Editorial Board Member, Sport, Exercise and Performance Psychology, 2012-present
- 2011 Psychology of Sport and Exercise, 2011-present
- 2004 Journal of Contemporary Athletics, 2004- present
- 2001 2014, Journal of Sport and Exercise Psychology
- 1988 1994, American Running and Fitness Association
- 1988 1994, Associate Editor, Journal of Sport and Exercise Psychology
- 1988 1994, Associate Editor, Journal of Applied Sport Psychology
- 1987 1994, Associate Editor, Journal of Applied Sport Science Research
- 1987 Exercise and Sport Sciences Reviews
- 1985 Research Quarterly for Exercise and Sport
- 1984 1994, Associate Editor, National Strength and Conditioning Association Journal
- 1984 Canadian Journal of Applied Sport Sciences
- 1983 Reviewer, Current Selected Research in the Psychology and Sociology of Sport, a series of volumes entitled, (Editors J. Humphrey and L. VanderVelden)
- 1983-1986 Sports Psychologists' Digest, an annotated abstract section of the Journal of Sport Psychology, Compiler of abstracts
- 1981-1988 Reviewer, Journal of Sport Psychology
- 1981 Journal of Sport Psychology, Assistant to the Editor

#### **Reviewing Activities for Journals and Presses**

- Journal of Sport and Exercise Psychology
- Neuroimage
- Psychophysiology
- Neuropsychologia
- Biological Psychology
- Neurobiology of Aging
- Brain and Cognition
- Medicine and Science in Sports and Exercise
- European Journal of Applied Physiology
- Journal of Cognitive Neuroscience
- Pharmacology, Biochemistry and Behavior
- Behavior Therapy
- Life Sciences

- Research Quarterly for Exercise and Sport
- Journal of Aging and Physical Activity
- Perceptual and Motor Skills
- International Journal of Sport Psychology
- The Sport Psychologist
- Journal of Sport Sciences
- Scandinavian Journal Of Medicine and Science in Sports
- Exercise and Sport Sciences Reviews
- Ouest
- Journal of Applied Sport Psychology
- Psychosomatic Medicine
- Journal of Lifestyle Medicine

# **Reviewing Activities for Agencies and Foundations**

- 2015, Review panel for NIH, study sections ZRG1 F16-L (20) Fellowships: Risk, Prevention and Health Behavior
- 2015, Review panel for NIH, study sections ZRG1 F16-W (07) Fellowships: Health and Behavior
- 2013, Review panel for NIH, study sections ZRG1 F16-e (02) Fellowships: Health and Behavior
- 2013, Review panel for NIH, study sections ZRG1 F16-e (20) Fellowships: Risk, Prevention and Health Behavior
- 2013, Review panel for NIH, study section ZRG1-F16-A (02) Research Service Awards for Individual Predoctoral Fellows
- 2013, Review panel for NIH, study section ZRG1-F16-L (02) Fellowships: Risk, Prevention and Health Behavior
- 2013, Review panel for NIH, study section ZRG1- BBBP-V (55) PAR-11-100: Alzheimer's Disease Pilot Clinical Trials
- 2013, 2019-2013 Member of NIH review panels for Alzheimer's disease Pilot Clinical Trials as
- 2013, 2019-2013 Member of NIH review panels for Alzheimer's disease Pilot Clinical Trials as well as Ruth Kirschstein National Research Service Awards for pre-doctoral (F-31) and post-doctoral (F-32) fellowships
- 2012, Review panel for NIH, study section ZRG1- F16-E (02) Fellowships: Personality Studies

- 2012, Review panel for NIH, study section ZRG1- F16-L (20) Fellowships: Risk, Prevention and Health Behavior
- 2012, Review panel for NIH, study section ZRG1- F16-L (20) Fellowships: Risk, Prevention and Health Behavior
- 2012, Review panel for NIH, study section ZRG1-BBBP-V (55) PAR-11-100: Alzheimer's Disease Pilot Clinical Trials
- 2012, Review panel for NIH, study section ZRG1 RPHB-L (02) Member Conflict: Risk Prevention and Health Behavior
- 2012, Review panel for NIH, study section ZRG1 RPHB-L (90) PA-10-070: Academic Research Enhancement Award (Parent R15)
- 2011, Review panel for NIH, study sections ZRG1BBBP-N (52), Exercise Training and Brain Ativity during Memory Challenge in APOE e4 Carriers.
- 2011, Review panel for NIH, study section ZRG1 RPHB-P (02) Member Conflict: Risk Prevention and Health Behavior
- 2010, Reviewer, Social Sciences and Research Council (SSRHC) of Canada
- 2009, Review panel for NIH, study section ZRG1BBBP-J (52) RFA-OD-09-003 Challenge Grants Panel 32
- 2009, Review panel for NIH, study section ZRG1BBBP-J (58) RFA-OD-09-003 Challenge Grants Panel 1
- 2009, Review panel for NIH, study section ZRG1BBBP-L (24) RFA-OD-09-003 Challenge Grants Panel 24
- 2009, Review panel for NIH study section ZR1 BBBP-N (52) Exercise Training and Brain Activity During Memory Challenge in APOE e4 Carriers
- 2009, Review panel for NIH study section LAM PCC 3CCCTLR NI Age, Physical Activity, Genotype, and Brain Function During Cognitive Chllange
- 2008, Review panel for NIH study section ZRG1 BBBP-M (52) Exercise Training and Brain Activity During Memory Challenge in APOE e4 Carriers
- 2008, Review panel for NIH study section LAM PCC:3CCDPKT Age, Physical Activity, Genotype, and Brain Function During Cognitive Challenge
- 2007, Review panel for NIH study section ZRG1 CND-L (03) Age, Physical Activity, Genotype and Cognitive Function

2006, Review panel for NIH study section ZRG1 CND-L (03) Age, Physical Activity, Genotype and Cognitive Function

2005, Review panel for NIH study section ZRG1 BDCN-A (03) Age, Physical Activity, Genotype and Cognitive Function

2005, Review panel for NIH study section CND PCC: 3CCCCNB NI Age, Physical Activity, Genotype and Cognitive Function

2004, Review panel for NIH, study section CP Cognition and Perception Study Section

1999, Review panel for NIH study section ZAG1 PCR-5 (J3) The Brain, Physical Activity and Falls in the Elderly

2009, Review panel member for NIH – NIA study sections ZRG1 BBBP-J(58)R and ZRG1 BBPL (58) R Special Emphasis Panel Challenge grant applications

2004, National Institutes of Health (NIH) National Institute of Aging (NIA) study section on proposals related to neurobiological bases of cognition, Review panel member, (October, 21 2004). I reviewed the proposals and wrote summaries over a two-week period and attended the meeting sessions held in Washington, DC over a two-day period

# Reviewing Activities for Conferences

1990, Reviewer, abstracts for Research Consortium of AAHPERD national meeting held in New Orleans

Reviewer, abstracts for various meetings of the American College of Sports Medicine over 20- year period

# Committees, Professional & Campus Service

# **Campus Service – Department**

2015-2016 – Member of Search Committee, UMD Research Development Officer, Strategic Corporate Research Relationship, Office of the Vice President of Research

2014 – Department of Behavioral and Community Health Search Committee Co-Chair

2010–present - Executive, Committee, Department of Kinesiology (Chair), Merit review Committee, Search Committee (member)

2008-2009 - Executive Committee, Department of Kinesiology, (Chair), Husman Lecture series, Department of Kinesiology, (Member), Search Committee in Translational research in Kinesiology, (Member), Humphrey award for scholarly paper contribution by graduate

students, (Chair), Three-year review committee for assistant professors Advisor to Epidemiology and Biostatistics on three-year progress of assistant professor (Sun-Min Lee)

2007-2008 - Chair, Graduate Research Initiative Program, (Member), Executive Committee (elected), 5-year review committee

2006-2007 - Chair, APT Committee, Dr. Andrews, (Chair), APT Committee, Dr. Young, (Member), APT Committee, Dr. Silk, (Chair), 5-year review committee, (Member) Committee on Undergraduate Appeals

2005-2006 - Chair, Undergraduate Program Committee, (Member), Search committee for faculty position in molecular biology, (Member), Committee on Department APT guidelines

2004-2005 - Chair, APT Committee, Dr JL Contreras-Vidal, (Chair), Undergraduate Program Committee

2003-2004 - Chair, Undergraduate Program Committee, (Chair), Husman Lecture Series (speaker: Art Kramer U of Illinois), (Member), Undergraduate Honors Program Committee

2002-2003 - Executive Committee member (elected), Undergraduate Committee (member), 5-year Review Committee (Chair: Undergraduate Program in Cognitive-Motor Behavior), Promotion and Tenure Committee for Dr. David Andrews (member), Burris Husman Lecture Committee (member)

2001-2002 - Chair, Promotion and Tenure Committee for Dr. Steven McDaniel, (Chair), Graduate Committee, Executive committee member (elected), (Member), 3-year review evaluation for Dr. J.L.Contreras-Vidal

2000-2001 - Chair, Promotion and Tenure Committee for Dr.Ang Chen, (Chair), Graduate Committee, (Member), search committee for exercise epidemiology position, (Member), 3-year review evaluation for Dr. M.D. Brown, (Member), computer committee, (Director), Cognitive-motor Behavior Lab

1999-2000 - Chair, Three-year review for Dr. Stephen McDaniel, Search Committee for Sport Studies position (member), Computer committee (member), Human Subjects Committee (member), Graduate and Research Committee (member)

1998-1999 - Human Subjects, Graduate & Research committee member, (Chair), 3-year review evaluation for Dr. Steven McDaniel, Search committee member, sport studies position

1997 - Executive Committee (Elected member), Merit Review Committee member, Department Research Committee (Chair), Search Committee (Sport Management position) (co-chair), Search Committee (Department Chair position), (member), Promotion and Tenure Committee, Graduate Committee, Promotion Committee for Marvin Scott 1996 - Executive Committee, Merit Review Committee (Spring), Department Research Committee (Chair), Search Committee (Sport mgmt position)

1995 - Executive Committee, Merit Review Committee, Department Research, Committee (Chair), Search Committee (Sport Mgmt position)

1992-1993 - Member, Five-year Review Committee, Chair of department Review Committee, (member), Graduate Committee, (member), Computer Committee, (member)

1991-1992 - Elected member, Department Executive Committee, Undergraduate Committee, (member)

1990-1991 - Elected member, Department Executive Committee, (Chair), Department Research Committee, Human Subjects Committee, (member)

1987-1988 - Elected member, Department Executive Committee; Graduate Committee; Appointed member, Department Research Committee; Appointed member, Ad hoc Committee on Faculty Merit Pay Allocation; Member, Ad hoc Steering Committee for Department Convocation

1986-1987 - Member, Graduate Committee; (Member), Kinesiological Sciences Program Committee; (Member), Sports Medicine Committee Member, Search Committee for Sport Management position

1985-1986 - Chair, Teaching and Advising Evaluation Committee; (Member), Publicity Committee; (Member), Sports Medicine Committee

1984-1985 - Member, Graduate Committee; (Member), Kinesiological Sciences Committee; (Member), Sports Medicine Committee

1983-1984 - Member, Graduate Committee; (Member), Kinesiological Sciences Committee; (Member), Teaching and Advising Committee

1982-1983 - Member, Human Subjects Committee; (Member), Teaching and Advising Evaluation Committee; (Member), Ad Hoc Committee on Ph.D. Student program review; (Member), Search Committee for Exercise Physiology position

# **Campus Service – College**

- 2015-2016 Member of Search Committee, UMD Research Development Officer, Strategic Corporate Research Relationship, Office of the Vice President of Research
- 2015-2016 Member, Search Committee for Chair of Epidemiology and Biostatistics
- 2013-2014 Member, STEM Facilities Committee
- 2011-2012 Member, Search Committee for the Dean of the School of Public Health
- 2008-2011 Chair, School of Public Health Executive Committee for the Faculty Senate
- 2007–2008 Member, Search committee for Research Coordinator, School of Public Health

- 2006-2007 Chair, Search Committee for Associate Dean for Research, School of Public Health
- 2005–2006 Member, College APT Committee
- 2004-2005 College APT Committee
- 2003–2004 College APT Committee
- 1997 Chair, College Planning & Advisory Committee, Plan of Organization Committee, (Chair) Graduate Committee, (Chair), College Research Committee, (Chair), Media Committee, (member)
- 1996 Chair, College Planning and Advisory Committee, Plan of Organization, (Chair), Graduate Committee, (Chair), College Research Committee, (Chair)
- 1995 College Planning and Advisory Committee, College Research Committee (Chair)
- 1992-1993 Chair, College Research Committee
- 1991-1992 Member, College Planning and Advisory Committee, College Research Committee, (member)
- 1990–1991 Member, Ad hoc Publicity Committee
- 1986-1987 Member, ad hoc committee for College name change
- 1985–1987 Educational Policies Committee, Elected member

# **Campus Service – University**

- 2016 ROTC Faculty Selection Committee
- 2016-2019 Member, Athletic Council
- 2016 Member, Search Committee, Corporate Relations Coordinator (Lockheed Martin Corp.) Office of Vice President for Research
- 2013-2015 Chair, Provost/Senate APT Task Force Committee
- 2014-Ongoing Member, Intellectual Property Committee
- 2014 Member, (MNC) Neuro Imaging Center Search Committee
- 2015-2016 Member, Flagship 2020 Commission
- 2015-Ongoing Member, Cole Committee Center for Sports Medicine and Human Health and Performance
- 2015-Ongoing Brain and Behavior Institute Member of Steering Committee
- 2015-2016 Member, Banneker Key Selection Committee
- 2013-2014 Chair, Senate/Provost Task Force to Review Appointments, Promotions, and Guidelines and Policies
- 2012-Ongoing Member, Council of Associate Deans for Faculty Affairs, (Member),
- 2014-201 Member, University Research Council chaired by Vice President for Research, Patrick O'Shea
- 2012-2013 Member, Campus committee to review Open Access policy (Chaired by Dean of Libraries, Pat Steele)
- 201 Chair, Campus Appointments, Promotion, and Tenure (APT) Committee
- 2009-2010 Member, Advisory committee to the Provost (Nariman Farvardin) on campuswide budget reallocation
- 2008-2009 Member, Executive Committee of campus-wide Neuroscience and Cognitive Sciences (NACS) Program
- 2007-2010 Member, Campus Appointments, Promotion, and Tenure committee
- 2005-2006 Member, University-wide APT appeals committee

- 2000-2002 Graduate Committee, Neural and Cognitive Sciences Program
- 1998-1999 Search Committee Neural and Cognitive Sciences Program
- 1991- Faculty Senator, (Spring, 1991)
- 1991 1992, University Senate Plan of Organization Review Committee
- 1984 University of Maryland Rugby Club, Faculty Advisor
- 1982 Member, University Speakers Bureau, 1982-present

# Other Non-University Committees, Memberships, Panels, etc.

- 2016-19 National Academy of Kinesiology President Elect
- 2015-2016 National Academy of Kinesiology Executive Committee Secretary Treasurer
- 2008 Society for Neuroscience, Membership ID: 100053965
- 2003-Present Fellow, National Academy of Kinesiology
- 2002-Present Gerontological Society of America [I included this]
- 2000-Present (National Association for Sport and Physical Education-sport psychology academy, exercise physiology academy); (Research Consortium) Eastern District Association of AAHPERD
- 1999 Cognitive Neuroscience Society
- 1988-1994 Member, American Psychological Association APA Division 47, Exercise and Sport Psychology (Applied)
- 1986-Present American College of Sports Medicine
- 1986-Present Mid-Atlantic Regional Chapter of the American College of Sports Medicine
- 1986-1994 Association for the Advancement of Applied Sport Psychology
- 1985 International Society for Sport Psychology
- 1984-1994 National Strength and Conditioning Association
- 1981-Present Society for Psychophysiological Research
- 1981-1982 Canadian Association of Sport Sciences
- 1981-1982 American Psychological Association and Eastern Psychological Association (student member)
- 1976-Present North American Society for the Psychology of Sport and Physical Activity
- 1976-1992 American Alliance of Health, Physical Education, Recreation and Dance

# **External Service and Consulting**

# Community Engagements, Local, State, National, International

- 2016 External Advisory Council for Strategic Planning Initiative of Indiana University School of Public Health at Bloomington
- 2014 present, Brain Health Consortium, Department of Army, Office of Army Surgeon General
- 2014 Executive board member-at-large, National Academy of Kinesiology, 2012-2014
- 2011 Awards Committee, National Academy of Kinesiology, 2008 2011, Member
- 2002-2003 Past-president, Mid-Atlantic Regional Chapter of the American College of Sports Medicine
- 2001-20022 President, Mid-Atlantic Regional Chapter of the American College of Sports Medicine, ,

- 2001-2002 Past-president, North American Society for the Psychology of Sport and Physical Activity
- 2002 Annual meeting of the North American Society for the Psychology of Sport and Physical Activity, Hunt Valley Marriott, Baltimore, MD, Conference Organizer
- 2000-2001 President, North American Society for the Psychology of Sport and Physical Activity
- 2000-2001, President-elect, Mid-Atlantic regional chapter of the American College of Sports Medicine
- 2001 Free communications session, meeting of the American College of Sports Medicine. Baltimore, MD, Moderator
- 2001 Symposium (Attention, skill development, and brainwave changes during sports training), North American Society for the Psychology of Sport and Physical Activity. St. Louis, MO, Moderator
- 2001 Annual meeting of the North American Society for the Psychology of Sport and Physical Activity. St. Louis, MO, Panel participant on job opportunities in academia to the graduate student meeting
- 2001 Annual meeting of the Mid-Atlantic Chapter of the American College of Sports Medicine, Fernwood, PA, Conference Organizer
- 1999-2000 President-elect, 2000 North American Society for the Psychology of Sport and Physical Activity
- 1999-2000 Vice President, Mid Atlantic Regional Chapter of the American College of Sports Medicine,
- 1999-2000 Abstract Reviewer, (1992-Dallas, 1993-Seattle, 1995-Indianapolis, 1996-Cincinnati), Annual Meetings of the American College of Sports Medicine,
- 2000 Symposium (Exercise and cardiovascular health), Mid-Atlantic chapter of the American College of Sports Medicine, Split Rock, PA, Moderator
- 1999 Member of NASPSPA Committee for membership retention and promotion
- 1997 Mid Atlantic American College of Sport Medicine, State College, Pennsylvania, Speaker, career opportunities in sport psychology
- 1995 Meeting site coordinator for Mid-Atlantic Regional conference of the American College of Sports Medicine
- 1994 Annual meeting of the North American Society for the Psychology of Sport and Physical Activity, Clearwater, FLA, Program coordinator for the Sport psychology section
- 1991 American College of Sports Medicine, Orlando, Florida, Moderator (free communications session) Effects of exercise on anxiety and stress reactions
- 1990 Capital Sports Focus Editorial Board; Baltimore Sports Focus Editorial Board
- 1990 McGill University Faculty of Graduate Studies and Research, Consultant, (grants reviewer)
- 1989 Conference co-organizer and host: Aerobic Exercise, Psychophysiology and Mental Health, College Park, MD, (April 28-29, 1989)
- 1989 Moderator: Grant writing in sport psychology, national meeting of the Association for the Advancement of Applied Sport Psychology, Seattle, WA, Symposium presented
- 1988 Defining the Body of Knowledge and Developing a Curriculum for Graduate
  Education in Exercise and Sport Psychology, North American Society for the Psychology of
  Sport and Physical Activity. Knoxville, Tennessee, Participant in panel discussion, Presented

- 1988 Session on Biofeedback: Research and Application to Sport, Association for the Advancement of Applied Sport Psychology, Moderator
- 1988 Running and Fitness Editorial Board (ARFA), Washington, D.C.
- 1988 Reviewer for the Sports Medicine Council's Research Committee of the United States Olympic Committee. This review panel dealt with grant proposals on overtraining and recovery from training in Olympic athletes. Chairman: Jack H. Wilmore, University of Texas
- 1987-1988 Reviewer, abstracts for the sport psychology free communications section abstracts International meeting of the American College of Sports Medicine. Dallas, Texas,
- 1987-1988 Member of sport psychology program committee, International meeting of North American Society for the Psychology of Sport and Physical Activity. Knoxville, Tennessee.
- 1988 International meeting of the North American Society for the Psychology of Sports and Physical Activity. Knoxville, Tennessee, 1987-1988, Reviewer, abstracts for free communications section
- 1988 North American Society for the Psychology of Sport and Physical Activity. (Chairman, Michael Wade), 1987-1988, Member of the executive officer nominating committee
- 1988 Sport Psychology Academy of the American Alliance of Health, Physical Education, Recreation and Dance, Member of the subcommittee to award the Outstanding Dissertation on behalf
- 1987 Grant reviewer for the Research Award Program of the City University of New York. (Title of Project: Exercise intensity and causal influences on psychological stress reduction). Supervisor-Dr. Erica Friedman
- 1987 National Strength and Conditioning Association National Meeting, Las Vegas, Nevada, Moderator, session on Training Specificity
- 1987 Reviewer of forthcoming text, Aging and Motor Behavior, Editor, A.C. Ostrow
- 1986 National Meeting of the Association for the Advancement of Applied Sport Psychology., Jekyll Island, Georgia, Moderator, session on Health Psychology
- 1986 American Alliance of Health, Physical Education, Recreation and Dance, National Meeting. Cincinnati, Ohio, Moderator, Research Consortium session on Psychophysiology in Sport and Exercise
- 1985 Association for the Advancement of Applied Sport Psychology, Selected committee member, Health Psychology Committee
- 1985 American Alliance of Health, Physical Education, Recreation and Dance, Member of the Subcommittee to award the Outstanding Dissertation Award on behalf of the Sport Psychology Academy
- 1985 Policy development in sport management, Text reviewer for Prentice-Hall Inc: Vanderzwagg, H.
- 1985 Text reviewer for AAHPERD publications: The Psychology of Sport and Games by Svoboda and Vanek (review solicited by Ray Ciszek)
- 1984 Selected to a national panel of sport psychologists to examine the future of the subdiscipline of sport psychology
- 1981 Statistical consultant for various research projects conducted at other universities: a) The comparative effectiveness of differential strength training techniques using Nautilus and University equipment. (Project supervisor: Gary Schwartz, Head Coach, Penn State Women's Track Team) (b) Cohesion, satisfaction and performance in intercollegiate field hockey.

- (Project supervisor:Dr. Jean Williams, Associate Professor of Physical Education, University of Arizona)
- Note: symposium chair for numerous national meetings of American College of Sports
  Medicine (ACSM) and the North American Society for the Psychology of Sport and Physical
  Activity (NASPSPA) since 2002 present

# Consultancies (to local, state and federal agencies; companies; organizations)

- 2003 Consultant, Junior Tennis Champions Center, College Park, MD, 2001-2003
- 2003 Consultant, Washington Capitals of the National Hockey League, 1991-2003
- 1991 Consultant, Washington Wizards basketball club of the National Basketball Association, 1989-91
- 1990 Consultant, Professional Baseball Boston Red Sox AAA franchise, Pawtucket, Rhode Island
- 1988 Frank Costello's Elite Athlete Training Center, Crofton, Maryland, Member, Board of Directors, 21114
- 1985 Ohio University Intercollegiate Athletic Department (Varsity Football Program), 1982-85
- 1984 National Rifle Association of America, Education and Training Division, Washington, D.C., 1979-84
- 1984 Partners in Health
- 1984 Energetic Express
- 1983 Virginia Commonwealth University Athletic Department (Varsity Basketball Program)
- 1983 Montgomery County Department of Adult Education
- 2009 2014 Health and Wellness committee of USA Football (Indianapolis, IN), Member
- 1995 National Strength Professionals Association, 700 Russell Avenue, Gaithersburg, MD, Present, 20877 (NSPA Advisory Board)
- 1986 Present, National Center for Health Promotion and Preventive Medicine,
- 1988 Present Mid-Atlantic Fitness Networking Association, P.O. Box 5158, Herndon, Virginia 22070
- 1986 Present, National Sports Performance Association, Inc., Strath Haven Drive, 20550, Gaithersburg, Maryland 20879
- 1983 Present, Athletic Training Consultants, Inc., P.O. Box 396, Bowie, Maryland 20715-0396