Iain Hunter

PERSONAL INFORMATION

Associate Professor
120D RB
Brigham Young University
Department of Physical Education
Provo, UT 84602

Phone: 801-422-1434, Fax: 801-422-0555
E-mail: iain_hunter@byu.edu

EDUCATION

Doctor of Philosophy, Health and Human Performance, August 2001
Biomechanics Laboratory with Dr. Gerald A. Smith
Oregon State University, Corvallis, Oregon 97331

Master of Education, Physical Education, August 1997
Brigham Young University, Provo, Utah 84602

Bachelor of Arts, Math Education, April 1996
Physical Education Minor
Brigham Young University, Provo, Utah 84602

PROFESSIONAL EXPERIENCE

Current Employment

Assistant Professor, Brigham Young University, 2001-present
Graduate and Undergraduate Biomechanics

Previous Employment

Instructor, Graduate Teaching Assistant, Oregon State University, 1997-2001
Biomechanics

Graduate Research Assistant, Biomechanics Laboratory, Brigham Young University, 1996-1997

CITIZENSHIP

University Assignments

Exercise Science Program Committee (department committee), 2001-present
National Women in Sports Day Committee (college assignment), Jan-Feb 2004
Chair of search committee for biomechanics hire (department assignment), Dec 2003-Apr2004
EXCS 139 (jogging) class coordinator (department assignment), Sep 2003-present
Wellness Program Running Seminar, 2-day seminar to faculty and staff, June 2004
ORCA Grant Evaluation Committee (college assignment), Jan 2005-2008
BYU Running Club Advisor (department club), Jan 2006-present
Department Travel Committee (department committee), 2005-2007
Department Travel Committee Chair (department committee), 2007-2009
Program Chair for Exercise Science (department committee), 2009-present

Professional Organization Membership

American Society of Biomechanics, 2004-present
American College of Sports Medicine (National and Regional), 2001-present

Professional Organization Service

American Society of Biomechanics, Communications Committee Member, 2006-present
NCAA Rules Committee Consultant, Determination of altitude adjustments for distance races in track and field, 2003-present
USA Track and Field, Biomechanist for elite athletes in steeplechase, 1996 to 2005
USA Track and Field, Biomechanist for elite athletes in hammer throw, 2001 to present
USA Track and Field, Biomechanics for elite athletes in distance running (including steeplechase), 2005 to present
US Air Force, Determination of altitude adjustments for the 1 ½ mile fitness test, 2003
Dartfish Advisory Board, Test and provide input for using DartTrainer software for data analysis, April 2006 to present.

Community Service

Varsity Coach, Boy Scouts of America, 2002-2005
First Counselor Young Men's Presidency (Church Calling), 2005-2006
Volunteer indoor soccer coach-Provo Parks and Recreation, 2003-2006
Elder's Quorum President (Church Calling), 2006-present
Head Timer-Annual Boy Scout/Young Women Track Meet 2004-present

Reviewer

Lippincott, Williams, & Wilkins. Reviewed three chapters from: Principles of Biomechanics & Motion Analysis by Iwan W. Griffiths. Published in 2005.
Journal of Athletic Training
Sports Biomechanics
Medicine and Science in Sports and Exercise
International Journal of Sports Science and Medicine

Other
Dartfish Advisory Board (Dartfish is a sport video analysis company that asked me to be on a board to provide feedback and recommend improvements to help in student learning). There are 10 professors from around the country on this board. 2006-present

TEACHING

Courses Taught

Winter 2009	EXSC 362 (2 sections) EXSC 365	8 credits
Fall 2008	EXSC 362 (2 sections) EXSC 365	8 credits
Spring 2008	EXSC 362	3 credits
Winter 2008	EXSC 362 (2 sections)	6 credits
Fall 2007	EXSC 362 (2 sections)	6 credits
Spring 2007	EXSC 662	2 credits
Winter 2007	EXSC 362 EXSC 365	5 credits
Fall 2006	EXSC 362 (2 sections) EXSC 365	8 credits
Spring 2006	EXSC 663	2 credits
Winter 2006	EXSC 362 EXSC 365	5 credits
Fall 2005	EXSC 362 (2 sections) EXSC 365	8 credits
Summer 2005	EXSC 662	2 credits
Winter 2005	EXSC 362 EXSC 365	5 credits
Fall 2004	EXSC 362 (2 sections) EXSC 365	8 credits
Summer 2004	PE 663	2 credits
Winter 2004	PE 362 PE 365 (2 sections)	7 credits
Fall 2003	PE 139 PE 362 PE 365 (2 sections)	8 credits
Winter 2003	PE 362 PE 365 (2 sections)	7 credits
Summer 2003	PE 662	2 credits
Fall 2002	PE 362 PE 365 (2 sections) PE 139	8 credits
Winter 2002	PE 362 PE 365 (2 sections)	7 credits
Summer 2002	PE 362	2 credits
Fall 2001	PE 362 PE 365 (2 sections)	7 credits

Creative Works

Created website for EXSC 362 and EXSC 365 with class notes, homework assignments, sample problems, grade information, and reading assignments. (http://biomech.byu.edu)

Student Research Opportunities

2001-2004 Every term an optional term project for students is to be a research assistant for current research projects being conducted in biomechanics. This gives, on average, 15 students per term the opportunity to become involved in research.

2002-2003 Four students were involved in filming and analyzing steeplechase and hammer throw events in Pennsylvania, California, and Hungary at five different track and field meets (including US Nationals and the World Athletics Final). One publication is already in print and two are in review.

2004-2005 A mentoring environment grant was awarded providing 14 undergraduates research experience in analyzing the steeplechase. Four of them traveled to California with me to film events and all were involved in analysis.

2004-present Undergraduates and graduates have received pay for helping in analysis of various track and field events. This was funded by USA Track and Field.
Over 15 students have worked with me on various research projects and been involved in presentation and writing for publication as undergraduates.

2007-present As a result of our new Vicon motion capture system, 7 undergraduates and one graduate student are now involved in measuring various characteristics of running technique among our men's and women's track teams. One master's thesis and multiple presentations and publications have been completed as a result of this work.

Graduate Student Committee Service (chair of committee)

Doctoral

Graduated: Susie Konz

Master's

Current: Kyle Grossarth, Jill Camerena, Jesse Tukuafu, Sarah Ingebretsen
Graduated: Aared Sampson, Ruthann Cunningham (in review), Tyler Bushnell (published, Sports Biomechanics), Erin Robinson, Laurence Bollschweiler (in preparation, Sports Biomechanics), Andrew Tegeder (published, International Journal of Sports Science and Coaching), Suzanna Logan (in review, Journal of Sports Science and Medicine)

Graduate Student Committee Service (member of committee)

Doctoral

Current:
Graduated: Carlos Ugrinowitsch, Ulrike Mitchell, Eric Strong, Wayne Johnson, Neil Noakes, Matthew Gage

Master's

Current:

Graduated: Tracy Bertagna, Robert Adams, Josh Baker, Wesley Moss, Staci Reynolds, Deja Stevenson, Benjamin Rae, Anthony Clah, Nina Mortensen, William Nelson, Manu Peeni, Rachel Rife, Aaron Stites, David Pendegrass, Kira Pope, Micah Alba, Travis Epperson

Undergraduate Research Assistants

2008-2009	Travis Clyde, Jocelyn Gardner, Carrie Robinson
2007-2008	Travis Clyde, Bobby Brigman, Jocelyn Gardner, Carrie Robinson
2006-2007	Lance Bergeson, Brad Roberts, Richard Leake, Garner Meads, Andrew Martin, Jocelyn Gardner, Jesse Tukuafu, Christian Hand, Jaron Miner, Carrie Robinson
2005-2006	Bryan Lindsay, Richard Leake, Sara Cropper, Garner Meads
2004-2005	Kathryn Andersen, Bryan Lindsay, Richard Leake, Jason Dorais, Garrett Welch, Tanner Bushnell, Blake Clifton, Tyler Bushnell, Ruthann Cunningham, Danielle Bousha, Sally Jo Koberlein, Joel Sumner, Suzanna Logan, Andrew Tegeder, Jason Bell
2003-2004	Kathryn Andersen, Bryan Lindsay
2002-2003	Kelly Lee, Megan Schorr, Erin Nasson, Blake Clifton, Richard Winder, Kristen Monson, Mike King
2001-2002	Kelly Lee, Matthew Palmer, Michael Lemme, Megan Schorr, Erin Nasson, Blake Clifton

Honors Thesis Advisor

2008-2010	Lee J Hinkle
2007-2008	Elise Livengood
2006-2007	Scott Blanchard
2004-2005	Jamie Jensen
2003-2004	Richard Winder

RESEARCH

Publications

1. Hunter I. (2000). Determining the appropriate specifications for the women's steeplechase water jump pit. Track Coach, 150, 4799-4801.
   *This article helped the international and national governing bodies of track and field determine the dimensions of the water jump barrier and pit for women's steeplechase (the event became an official international event in 2006).

2. Hunter I & Killgore G. (2002). Release velocity and angle in men's and women's hammer throw, Track Coach, 162, 5180-5182.

3. Hunter I, (2003). A new approach to modeling vertical stiffness in heel-toe distance runners, Journal of Sports Science and Medicine, 2, 139-143.

4. Hunter I. (2005). The effect of venue on the distance of a hammer throw. Research Quarterly in Exercise and Sport, 76(3), 347-351.

5. Hunter I & Bushnell TD. (2006). Steeplechase barriers affect women less than men. Journal of Sports Science and Medicine, 5(2), 318-322.

6. Linford CW, Hopkins JT, Schulthies SS, Feland JB, Draper DO, & Hunter I. (2006). Effects of neuromuscular training on the reaction time and electromechanical delay of the peroneus longus muscle, Archives of Physical Medicine and Rehabilitation 5(2), 333-339.

7. Hopkins JT, Hunter I & McLoda T. (2006). Effects of ankle joint cooling on peroneal short latency response. Journal of Sports Science and Medicine, 5(2), 333-339.

8. Hopkins JT, Hunter I & Feland JB. (2006). A comparison of voluntary and involuntary measures of electromechanical delay. International Journal of Neuroscience, 107(5), 597-604.

9. Midgley W, Hopkins JT, Feland JB, Merrill G, & Hunter I. (2007). The effects of ankle bracing on dynamic restraint characteristics of the ankle in volleyball players. Clinical Journal of Sports Medicine, 17(5), 343-348.

10. Hunter I, Hopkins JT, & Casa D. (2006). Core Body Temperature Before and After Cross-Country Racing after Warming Up with an Ice Vest. Journal of Athletic Training, 41(4), 371-374.

11. Hopkins, J.T., Pak, J., Robertshaw, A., Feland, J.B., Gage, M., & Hunter, I. (2008). Whole body vibration does not alter dynamic restraint characteristics of the peroneus longus. International Journal of Sports Medicine, 29, 424-428.

12. Hunter I & Smith GA. (2007). Preferred and Optimal Stride Frequency, Stiffness and Economy, European Journal of Applied Physiology, 100(6), 653-662.

13. Bushnell TD & Hunter I. (2007). Technique differences between sprinters and distance runners at equal and maximal velocities. Sports Biomechanics, 6(3), 261-268.

14. Mitchell UH, Myrer JW, Hopkins JT, Hunter I, Feland JB, & Hilton SC. (2007). Acute Stretch Perception Alteration Contributes to the Success of the PNF "Contract Relax" Stretch. The Journal of Sport Rehabilitation, 16(2), 85-92.

15. Hunter I & Hensen P. (2008). Reading Fully Automatic Timing Images. Track Coach, 182, 5823-5826.

16. Feland JB, Hopkins JT, Hunter I, & Johnson W. (2008). Hamstring stretching using a whole body vibration platform, British Journal of Sports Medicine, 42, 523.

17. Hunter I, Lindsay BK, & Anderson KR. (2008). Gender differences and biomechanics in the 3000m steeplechase water-jump, Journal of Sports Science and Medicine, 7(2), 218-222.

18. Tegeder A, Hunter I, Mack G, & Hilton S. (2008). Long-Distance Interval Training Following Pre-Cooling with an Ice Vest. International Journal of Sports Science and Coaching, 3(2), 269-275.

19. Judge L, Hunter I, & Gilreath E. (2008). Using Sport Science to Improve Coaching: A Case Study of the American Record Holder in the Women's Hammer Throw, International Journal of Sports Science and Coaching, 3(4), 373-348.

20. Hopkins JT, Fredericks D, Guyon PW, Parker S, Gage M, Feland JB, & Hunter I. (2009). Whole body vibration does not potentiate the stretch reflex, International Journal of Sports Medicine, 30, 124-129.

21. Roberts B, Hunter I, Hopkins JT, Feland JB. (2009). The short-term effect of whole body vibration training, International Journal of Exercise Science, 2(4), 264-268.

22. Mitchell UH, Myrer JW, Hopkins JT, Hunter I, Feland JB. (2009). Neurophysiological reflex mechanisms lack of contribution to the success of PNF stretches, Journal of Sport Rehabilitation, 18(3), 343-357.

23. Miller KC, Mack GW, Knight KL, Hopkins JT, Draper DO, Fields PJ, Hunter I. (2009). Reflex inhibition of electrically-induced muscle cramps in hypohydrated humans, Medicine and Science in Sports and Exercise, IN PRESS.

24. Johnson AW, Myrer JW, Hunter I, Feland JB, Hopkins JT, Draper DO, Egget D. (2010). Whole-body vibration strengthening compared to traditional strengthening during

physical therapy in individuals with total knee arthroplasty, Physiotherapy Theory and Practice, 26(1), 1-11.

Manuscripts in Review

1. Logan S, Hunter I, Hopkins JT, & Feland JB. Ground reaction forces in spikes and running shoes, Sports Biomechanics.

Research in Progress

Optimal technique for performance in the steeplechase water jump

Steeplechase performance among males and females

Running economy

Optimal hammer throwing technique

Running technique of collegiate and elite distance runners

Invited Presentations

1. Hunter, I. and Shane, P. Biomechanical analysis of male steeplechasers in the 1998 USA Track and Field Championships, USATF Steeplechase Convention, Ogden, Utah, August 1998.

2. Hunter, I. Analysis of release velocity and angle in the women's hammer throw from the 2002 USATF Championships, USATF Hammer Throw Summit, Olympic Training Center, Chula Vista, CA, November 2002.

3. Hunter, I., and Konz, S.M. Kinematical changes in technique with increases in running speed, USATF Elite Distance Camp, Olympic Training Center, Chula Vista, CA, December 2002.

4. Hunter, I. The effect of venue on the distance of a hammer throw, USATF Hammer Throw Summit, Olympic Training Center, Chula Vista, CA, November 2002. (Duplicated presentation as it was invited here and presented at a the American Society of Biomechanics, September 2003)

5. Hunter, I. & Shane, P. Analysis of men's and women's steeplechase at the 2003 USATF Nationals. USATF Hammer Throw Summit, Olympic Training Center, Chula Vista, CA, December 2003.

6. Hunter, I. & Konz, S. Acceleration of the hammer head and path of the orbit in hammer throwing. USATF Hammer Throw Summit, Olympic Training Center, Chula Vista, CA, October 2004.

7. Hunter, I. Determinants of success in the 3000 m steeplechase water jump. USATF Steeplechase Summit, Olympic Training Center, Chula Vista, CA, December 2004.

8. Hunter, I & Konz, S. Optimizing release angle and velocity for performance in the hammer throw. National Throws Summit, Columbus, OH, November 2005

9. Hunter I & Konz S. Optimal release parameters in the hammer throw. USATF Annual Meeting. Las Vegas, NV December 2006.

10. Hunter I. Hip to hammer separation in the hammer throw. USATF Annual Meeting. Las Vegas, NV, December 2007.

11. Hunter I. & Bollschweiler, L. Optimal performance in the 3000m steeplechase. USATF Steeplechase Summit, Chula Vista, CA, December 2007.

12. Hunter I. Release parameters in the hammer throw. USATF Coaches Education Summit, Las Vegas, NV, December 2008.

13. Hunter I. Running economy in the distance races of the 2008 Olympic Trials. USATF Coaches Education Summit, Las Vegas, NV, December 2008.

The USATF meetings are with elite athletes and coaches from around the country with the purpose of qualifying for the Olympic Games and earning Olympic medals. It is an honor to be involved in this work. There are only four other biomechanics professors involved in this work among various events.

Professional Presentations

1. Hunter, I. and Smith, G.A. The effect of a near-maximal effort one-hour run on preferred and optimal stride rate. Sixth IOC World Congress on Sport Sciences, St. Louis, MO, May 2002.

2. Lee, K. and Hunter, I. (2003). Self-optimization of stride length among experienced and inexperienced distance runners. Medicine and Science in Sports and Exercise, 35(5), S88.

3. Hunter, I. The Effect of venue on the distance of a hammer throw. American Society of Biomechanics, Toledo, OH, September 2003.

4. Hunter, I. and Feland, B. Effect of wind resistance on the distance of a drive in golf, Southwest American College of Sports Medicine, Las Vegas, NV, November 2003.

5. Nasson, E. and Hunter, I. Economization of Stride Length in Level and Uphill Distance Running, Southwest American College of Sports Medicine, Las Vegas, NV, November 2003.

6. Russell, K.L., Strong, E., and Hunter, I. Bone mineral density among sprinters and distance runners, Southwest American College of Sports Medicine, Las Vegas, NV, November 2003.

7. Hunter, I. & Bushnell, T.D. Analysis of Steeplechase Hurdling Strides, American College of Sports Medicine, Indianapolis, IN, June 2004.

8. Trowbridge, C.A., Winder, R.P., Hunter, I., and Ricard, M. Gender Differences in Knee Torques and Angles During Different Cutting Tasks, National Athletic Trainers Association Annual Meeting and Clinical Symposium, Baltimore, MD, June 2004.

9. Hagar, R., Bertagna, T, Prusak, K, & Hunter, I. The Effects of Multi-View Video Modeling and Skill Acquisition on Learning the Tennis Serve, American College of Sports Medicine, Indianapolis, IN, June 2004.

10. Bushnell, T.D. & Hunter, I. Technique Differences Between Sprinters and Distance Runners at Equal and Maximal Speeds, American College of Sports Medicine, Nashville, TN, June 2005.

11. Andersen, K.R. & Hunter, I. Gender Differences in the 3000m Steeplechase Water-Jump, American College of Sports Medicine, Nashville, TN, June 2005.

12. Feland, J.B., Hopkins, J.T, & Hunter, I. Acute Changes in Hamstring Flexibility Using a Wholebody- Vibration Platform with Static Stretch. American College of Sports Medicine, Nashville, TN, June 2005.

13. Hunter, I. & Hopkins, J.T. A Comparison of Vertical Stiffness Calculation Methods, American College of Sports Medicine, Nashville, TN, June 2005.

14. Lindsay, B.K. & Hunter, I. Predictors of Success in the 3000m Steeplechase Water Jump, International Society of Biomechanics, Cleveland, OH, August 2005.

15. Tegeder, A.R., Hunter**,** I., & Martini, E. Utilizing the Nike Ice Vest in Distance Running Training, American College of Sports Medicine, Denver, CO, June 2006.

16. Ricard, M.D., Ugrinowitsch, C., Hilton, S., Parcell, A.C, Hunter**,** I., Knight, K., & Tricoli, V. Effects of the Rate of Force Development on Fatigue Onset and Location, American College of Sports Medicine, Denver, CO, June 2006.

17. Hopkins, J.T., Feland, J.B., & Hunter**,** I. A Comparison of Voluntary and Involuntary Measures of Electromechanical Delay, American College of Sports Medicine, Denver, CO, June 2006.

18. Feland, J.B., Hopkins, J.T., & Hunter**,** I. Effect of Acute Exposure to Whole-Body-Vibration on Vertical Jump in Senior Athlete Volleyball Players, American College of Sports Medicine, Denver, CO, June 2006.

19. Mitchell, U.H., Myrer, J.W., Hopkins, J.T., Hunter**,** I., Feland, J.B., & Hilton, S.C. Reciprocal Inhibition, Successive Inhibition, Autogenic Inhibition, or Stretch Perception Alteration: Why do PNF Stretches Work?, American College of Sports Medicine, Denver, CO, June 2006.

20. Hunter**,** I., Tegeder, A.R., & Martini, E. Core Body Temperature During Cross Country Racing with the Nike Ice-Vest, American College of Sports Medicine, Denver, CO, June 2006.

21. Hunter, I., & Dallon, J. Applications of the peronnet-thibault model of running performance, American Society of Biomechanics, Blacksburg, VA, September 2006.

22. Logan, S., Hunter, I., Feland, J.B., Hopkins, J.T., & Parcell, A.C. Ground reaction forces between running shoes, racing flats, and distance spikes in runners, American Society of Biomechanics Annual Meeting, Palo Alto, CA, August 2007.

23. Roberts, B., Hunter, I., Thiebaud, R., & Bishop, M. The short-term effect of whole body vibration training on collegiate sprint athletes, American Society of Biomechanics Annual Meeting, Palo Alto, CA, August 2007.

24. Laurence Bollschweiler, Iain Hunter, J. Brent Feland, & J. Ty Hopkins. Technique differences among male and female intermediate hurdlers and steeplechasers, American Society of Biomechanics Annual Meeting, Ann-Arbor, MI, August 2008.

25. Hunter I, Robinson C, & Clyde T. Maximizing velocity in the hammer throw, American Society of Biomechanics Annual Meeting, State College, PA, August 2009.

26. Ingebretsen S, Hunter I, Cunningham R, & Willis J. Barrier clearance in the 3000m steeplechase, American Society of Biomechanics Annual Meeting, State College, PA, August 2009.

27. Tukuafu J, Hunter I, Cunningham R, & Willis J. Biomechanical parameters and mile performance, American Society of Biomechanics Annual Meeting, State College, PA, August 2009.

28. Willis J & Hunter I. Ground contact time in steeplechase hurdling, American Society of Biomechanics Annual Meeting, State College, PA, August 2009.

Published Abstracts

1. Hunter, I. and Smith, G.A. (2000). Effect of fatigue on preferred and most economical stride frequency in treadmill running. Archives of Physiology and Biochemistry, 108 1/2, 42.

2. Lee, K. and Hunter, I. (2003). Self-optimization of stride length among experienced and inexperienced distance runners. Medicine and Science in Sports and Exercise, 35(5), S88.

3. Palmer, M. and Hunter, I. (2003). Determinants of stride length in distance running. Medicine and Science in Sports and Exercise, 35(5), S88.

4. Hunter, I. The Effect of venue on the distance of a hammer throw. American Society of Biomechanics, Toledo, OH, September 2003. http://www.asb-biomech.org/abstracts.html

5. Hunter, I. & Bushnell, T.D. (2004). Analysis of steeplechase hurdling strides, Medicine & Science in Sports & Exercise, 36(5), S169.

6. Hagar, R., Bertagna, T, Prusak, K, & Hunter, I. (2004). The effects of multi-view video modeling and skill acquisition on learning the tennis serve, Medicine & Science in Sports & Exercise, 36(5), S203.

7. Andersen, K.R., Hunter, I., and Koberlein, S.J. (2005). Gender differences in the 3000m steeplechase water-jump, Medicine & Science in Sports & Exercise, 37(5), S122.

8. Bushnell, T.D. & Hunter, I. (2005). Technique differences between sprinters and distance runners at equal and maximal speeds, Medicine & Science in Sports & Exercise, 37(5), S122.

9. Hunter, I. & Hopkins, J.T. (2005). A comparison of vertical stiffness calculation methods, Medicine & Science in Sports & Exercise, 37(5), S345.

10. Feland, J.B., Hopkins, J.T, & Hunter, I. (2005). Acute changes in hamstring flexibility using a wholebody- vibration platform with static stretch, Medicine & Science in Sports & Exercise. 37(5), S410.

11. Lindsay, B.K. & Hunter, I. (2005). Predictors of Success in the 3000m Steeplechase Water Jump, International Society of Biomechanics, Cleveland, OH, August. http://www.asb-biomech.org/abstracts.html

12. Tegeder, A.R., Hunter**,** I., & Martini, E. (2006). Utilizing the Nike Ice Vest in Distance Running Training, Medicine & Science in Sports & Exercise. 37(5), S466.

13. Ricard, M.D., Ugrinowitsch, C., Hilton, S., Parcell, A.C, Hunter**,** I., Knight, K., & Tricoli, V. (2006). Effects of the Rate of Force Development on Fatigue Onset and Location, Medicine & Science in Sports & Exercise. 37(5), S443-S444.

14. Hopkins, J.T., Feland, J.B., & Hunter**,** I. (2006). A Comparison of Voluntary and Involuntary Measures of Electromechanical Delay, Medicine & Science in Sports & Exercise. 37(5), S263.

15. Feland, J.B., Hopkins, J.T., & Hunter**,** I. (2006). Effect of Acute Exposure to Whole-Body-Vibration on Vertical Jump in Senior Athlete Volleyball Players, Medicine & Science in Sports & Exercise. 37(5), S240.

16. Mitchell, U.H., Myrer, J.W., Hopkins, J.T., Hunter**,** I., Feland, J.B., & Hilton, S.C. (2006). Reciprocal Inhibition, Successive Inhibition, Autogenic Inhibition, or Stretch Perception Alteration: Why do PNF Stretches Work?, Medicine & Science in Sports & Exercise. 37(5), S66.

17. Hunter**,** I., Tegeder, A.R., & Martini, E. (2006). Core Body Temperature During Cross Country Racing with the Nike Ice-Vest, Medicine & Science in Sports & Exercise. 37(5), S58-S59.

18. Hunter, I., & Dallon, J. (2006). Applications of the peronnet-thibault model of running performance, Blacksburg, VA, September. http://www.asbweb.org/conferences/conferences.html

19. Laurence Bollschweiler, Iain Hunter, J. Brent Feland, and J. Ty Hopkins. Technique differences among male and female intermediate hurdlers and steeplechasers, Ann-Arbor, MI, August 2008. http://www.asbweb.org/conferences/conferences.html

20. Hunter I, Robinson C, & Clyde T. (2008). Maximizing velocity in the hammer throw, State College, PA, August 2009. http://www.asbweb.org/conferences/conferences.html

21. Ingebretsen S, Hunter I, Cunningham R, & Willis J. (2008). Barrier clearance in the 3000m steeplechase, College, PA, August 2009. http://www.asbweb.org/conferences/conferences.html

22. Tukuafu J, Hunter I, Cunningham R, & Willis J. (2008). Biomechanical parameters and mile performance, State College, PA, August 2009. http://www.asbweb.org/conferences/conferences.html

23. Willis J & Hunter I. (2008). Ground contact time in steeplechase hurdling, State College, PA, August 2009. http://www.asbweb.org/conferences/conferences.html

Creative Works

2008-Created online tutorials for software used in my class.
http://biomech.byu.edu/exsc362(hunter)/termproject.html

2007-Created booklets for seven female hammer throwers that have opportunities to make the 2008 US Olympic Team. These 36 page booklets included individualized reports on how their body positioning compares with other international elite athletes and provides suggestions for improvement.

2007-Created a webpage for elite steeplechase athletes focusing on optimal technique and training for the event. http://biomech.byu.edu/steeplechase

2006-Recreated course webpages for EXSC 365 and 362. http://biomech.byu.edu

2003-Created Dartfish training videos for steeplechase athletes and coaches (distributed by USATF).

2003-Compiled video for hammer throw athletes and coaches (distributed by USATF).

2002-Created DVD for hammer throw athletes and coaches (distributed by USATF). This DVD has all throws from USA Nationals indexed with a menu to navigate which athlete and which throw wants to be viewed with the distance of each throw displayed on screen.

2001-Created course webpages for EXSC 365 and 362.

External Funding

2009-$4100 USA Track and Field* (this included an international trip helping the USA Track & Field Team in preparation for the World Championships in Berlin, Germany)
2009-$4000 USA Track and Field
2008-$5500 USA Track and Field* (this included an international trip helping the USA Olympic Team in preparation for Beijing)
2008-$4000 USA Track and Field
2007-$3150 MindPix Corp
2007-$900 USA Track and Field*
2007-$4000 USA Track and Field
2006-$850 USA Track and Field*
2006-$3000 USA Track and Field
2006-$2250 USA Track and Field*
2005-$3000 USA Track and Field
2005-$500 USA Track and Field*
2004-$3500 USA Track and Field
2004-$1550 USA Track and Field*
2003-$500 USA Track and Field*
2003-$4470 USA Track and Field*
2002-$1290 USA Track and Field*

* Proprietary funding came in the form of travel expenses for me and students to collect and present data.

Internal Funding

2005-Faculty Fellowship $1820
2004-Mentoring Environment Grant $14,150
2003-Faculty Fellowship $7500
2002-Faculty Fellowship $2182

Consulting

Sports Scientist for USA Track & Field, 1996-present

Responsibilities: Film, analyze, and present data from professional track and field meets annually

HONORS AND AWARDS

Finalist for Prince Alexandre de Merode Award. International Olympic Committee Scientific Congress, St. Louis, MO, 2002

- This award is for new researchers. I was in the top three who completed oral presentations.

2009 5k Lab Challenge team champions at the American Society of Biomechanics Annual Conference

- With me as the advisor and two students (Ruthann Cunningham and Sarah Ingebretsen), we won the team title for this annual race which brings some good attention to BYU as a graduate program in exercise science.

2009 St George Marathon Champion

- Being the biggest marathon in Utah, this brought some positive attention to BYU and our program. The television and newspaper interviews made a point of me being a professor of exercise science at BYU. I also wore a BYU uniform to run the race and wore BYU clothing on the awards stand.