CHRISTINE M. MERMIER

EDUCATION

- 2003 **Ph.D.** Exercise Science- University of New Mexico, Albuquerque, NM. Dissertation Topic: The Effect of Whole-Body Cooling on Exercise Performance in Patients with Generalized Myasthenia Gravis
- 2000 Completed doctoral comprehensive exams with distinction, Exercise Science-University of New Mexico, Albuquerque, NM.
- 1989 **M.S.** with distinction, Exercise Science University of New Mexico, Albuquerque, NM.
- 1980 **B.U.S.** with distinction, major: History/Anthropology, Minor: Spanish, University of New Mexico, Albuquerque, NM.
- 1975-77 Simon's Rock College, Great Barrington, MA Liberal Arts studies.

AWARDS/GRANTS

- 1989 Outstanding Student Employee, Department of Art & Art History, University of New Mexico.
- 1998 College of Education grant for student research \$500.00
- 2001 RPT grant- \$1000.00
- 2002 General Clinical Research Center grant \$10,000.00
- 2003 Individual Professional Research Staff Award, Department of Internal Medicine, University of New Mexico

LANGUAGES

French, Spanish

PROFESSIONAL EXPERIENCE

2003-Present Health Sciences-Associate Scientist I, Employee Health Promotion Program,

Exercise Physiology Laboratories, Department of Internal Medicine, University of New Mexico, Albuquerque, NM.

- 2003-Present Lecturer, Department of Physical Performance and Development, College of Education, University of New Mexico, Albuquerque, NM
- July, 2005-Present Member, Committee #3, University of New Mexico's School of Medicine, Human Research Review Committee
- 1990 2003 **Physiology Laboratory Coordinator**, Employee Health Promotion Program, Exercise Physiology Laboratories, University of New Mexico, Albuquerque, NM.
- 1989-91 **Exercise Physiologist & Instructor**, New Heart Cardiac Rehabilitation Program, Albuquerque, NM
- 1989-90 **Research Assistant,** New Mexico Tumor Registry, University of New Mexico, Albuquerque, NM
- 1988-89 **Coordinator and Fitness Leader**, Adult Fitness Program, University of New Mexico, Albuquerque, NM

Special projects & assignments:

- 2008 Interim manager, Employee health Promotion Program, Jan-June, 2008
- 2002-present Faculty advisor University of New Mexico cycling team.
- 1999 2000 Data coordinator for research grant: Omron study of active adults.
- 1993 present Editorial Board of EHPP Newsletter
- 1993 Interim Director of Center for Exercise & Applied Human Physiology
- 1991 Co-coordinator of physiological assessment and consultation project for the New Mexico State Police.

TEACHING EXPERIENCE

Guest Lecturer for classes including Occupational Therapy, Beginning Exercise Physiology, Physical Therapy 695 (Sports Medicine, Cardiovascular Physiology, Pulmonary Physiology), Physical Disabilities & Causes, Exercise Stress Testing, Tests & Measurements, Body Composition, EKG Interpretation.

Instructor, PE-P 530, Laboratory Procedures, College of Education, University of New Mexico, Spring 2001.

Presenter Monthly in-service seminars for Center for Exercise staff and students. Subjects include cardiac medications, ECG interpretation, safety of exercise testing, exercise prescription. 1995-present.

Guest lecturer "Exercise Prescription". Bimonthy seminar for Family Practice rotation of University of New Mexico Medical students, January 1995-1999.

Instructor, PE-P 209, Fundamentals of Human Performance, College of Education, University of New Mexico, Fall semester, 1996

Instructor, Technical rock climbing classes (private), July 1988-1994.

WORKSHOPS

Body Composition Assessment for Children Workshop presented to staff of Centers for Indian Youth, Albuquerque, New Mexico, 1992.

Body Composition Assessment Workshop, presented to staff and community members involved in fitness testing, at the University of New Mexico, 1991.

PROFESSIONAL ACTIVITIES

Committee member: School of Medicine Human Research Review Committee (Committee #3). Appointed July 28, 2005.

Examiner: American Society of Exercise Physiologists national certification exam, March 29, 2006.

Reviewer: medicine and Science in Sports and Exercise- 2008

Reviewer: Journal of Dance Medicine and Science, 2006-present

Reviewer: Journal of Sports Science and Medicine, 2005-present

Reviewer- International Journal of Sports Medicine 1998-1999

Reviewer- British Journal of Sports Medicine and Journal of Sports Science, 2002-2003

Reviewer- Journal of Exercise Physiology_{online}, 2005-present

Certification Site Director- American College of Sports Medicine Health/Fitness Instructor exam and certification 1999-2005

Team Leader for development of practical exam for the American Society of Exercise Physiologist certification exam, 2000.

PUBLICATIONS

Journal Articles

Jason Siegler, **Christine Mermier**, Fabiano Amorim, Ric Lovell, Matt Greig, Lars McNaughton. "Effects of Sports Drinks Supplements on Performance and Thermoregulatory Responses of Soccer Players." *Journal of Sports Science and Medicine* 6(S10): 35, 2007.

Active and Passive Recovery & Acid-Base Kinetics Following Multiple Bouts of Intense Exercise to Exhaustion. J. C. Siegler, J. Bell-Wilson, **C. Mermier**, E. Faria, and R.A. Robergs. International Journal of Sport Nutrition & Exercise Metabolism, Volume 16, Pp 92-107, 2006.

Body Composition in Dancers: A Review. M. Virginia Wilmerding, Molly M. McKinnon, & Christine M. Mermier. Journal of Dance Medicine & Science, Volume 9, No. 1, 2005.

"Preliminary Results: Effect of Whole-Body Cooling in Patients with Myasthenia Gravis". **C.M. Mermier**, S.M. Schnieder, A.B. Gurney, M.V. Wilmerding-Pett, H.M. Weingart. Medicine and Science in Sports and Exercise, Vol 38, No. 1, pp 13-2006.

"Comparison of DXA, Siri's 2-C, and Lohmans's Db-Mineral Models for Estimating the Body Fat of Physically Active Adults" Ann L. Gibson, Vivian H. Heyward, **Christine M. Mermier**, Jeffrey M. Janot, M.Virginia Wilmerding. International Journal of Sport Nutrition and Exercise Metabolism, Volume 14, No. 6, December, 2004.

"Body Composition Analysis in Dancers: Methods and Recommendations". M. Virginia Wilmerding, Ph.D., Ann L. Gibson, Ph.D. **Christine M. Mermier**, M.S., Kathryn Allison Bivins. Journal of Dance Medicine and Science, Volume 7, No. 1, 24-31, 2003.

"Effects of Limb-Length Discrepancy on Gait Economy and Lower-Extremity Muscle Activity in Older Adults" Burke Gurney, PhD, PT, **Christine Mermier**, MS, Robert Robergs, PhD, Dennis Rivero, MD. The Journal of Bone and Joint Surgery, Volume 83-A, Number 6, June 2001

"Physiological and anthropometric determinants of sport climbing performance" C.M. Mermier, J. M. Janot, D.L. Parker, J. Swan, R.A. Robergs. British Journal of Sports Medicine, 34, 359-366, 2000.

"Predictive accuracy of OMRON Body Logic analyzer in estimating relative body fat of adults". A.L. Gibson, V. H. Heyward, **C.M. Mermier**. International Journal of Sport Nutrition, 10, 216-227, 2000.

"Blood glucose and glucoregulatory hormone responses to solid and liquid carbohydrate ingestion during exercise." R.A. Robergs, S.B. McMinn, **C.M. Mermier**, G. Leadbetter III, B. Ruby, C. Quinn. International Journal of Sport Nutrition, 8(1), 1998, pp. 70-83.

"Energy expenditure and physiological responses during indoor rock climbing". **C.M. Mermier,** R.A. Robergs, S. McMinn, V.H. Heyward. British Journal of Sports Medicine, 31(3), 1997, p. 224-228.

"Oronasal Distribution of Ventilation at Different Ages". D.S. James, W.E. Lambert, **C.M. Mermier**, C.A. Steidley, T.W. Chick, J.M. Samet. Archives of Environmental Health, 52(2), 1997, p. 118123.

"Cross-training between cycling and running in untrained females". B. Ruby, R. Robergs, G. Leadbetter, **C. Mermier**, T. Chick, D. Stark, Journal of Sports Medicine and Physical Fitness, 36(4) 1996, p. 246-254.

"Hell on Two Wheels: A Crash Course in the Politics of Pedaling" C.M. Mermier, T. Saimons. NuCity, November 8-14, 1994.

"Evaluation of the Relation of Heart Rate to Ventilation for Epidemiolgic Studies", C. Mermier, J. Samet, W. Lambert, T. Chick, Archives of Environmental Health, 48(4), 1993, p 263-270.

"Sources of Variability in Posterior Rhinomanometry". D.S. James, W.E. Lambert, C.A. Steidley, T.W. Chick, **C.M. Mermier**, J.M. Samet, Annals of Otology, Rhinology & Laryngology, 102(8), 1993, p 631-638.

"Assessment of Heart Rate As a Predictor of Ventilation". J.M. Samet, W.E. Lambert, D.S. James, **C.M. Mermier**, T.W. Chick. Health Effects Institute Research Report Number 59, May, 1993, p. 19-55

Abstracts

"The University of New Mexico's World of Wellness Rapid Redesign: Using Cutting Edge Practices to Create a Culture of Wellness at a University". Nicholas J. Spezza II, Carolyn J.C. Thompson, Christine Mermier. Presented at CoCHP 2007 National Prevention and Health Promotion Summit, Washington, D.C., November 27-29, 2007.

"The Influence of Glycerol Ingestion on Physical Performance and Thermoregulatory Responses during Soccer Training Sessions." Jason Siegler; Christine Mermier; Fabiano Amorim. Medicine & Science in Sports & Exercise. 39(5) Supplement:S577, May 2007.

"Effects of sports drinks supplements on performance and thermoregulatory responses of soccer players." Siegler, J. ; Mermier, C. ; Amorim, F.T. ; Lovell, R. ; Greig, M. ; Mcnaughton, L. . In: VI World Congress on Science and Football, 2007, Antalya/Turkey. Journal of Sports Sciences and Medicine, 2007. v. 6. p. 35-36.

"Body Fat Values of Collegiate Athletes: An Update". Christine Mermier, Keren Bentzur, M. Virginia Wilmerding, Molly McKinnon, Ann Gibson. Medicine & Science in Sports & Exercise. 38(5) Supplement:S246, May 2006.

"Accumulate Oxygen Deficit & pH Recovery during Multiple Bouts of Intense Exercise". Jason C. Siegler, Jenna Bell-Wilson, Christine Mermier, Erik Faria, Robert Robergs, Christopher Dunbar. Medicine & Science in Sports & Exercise. 38(5) Supplement:S517, May 2006.

"Comparison Of Laboratory Methods For Estimating Relative Body Fatness Of Physically Active And Ethnically Diverse Men" Gibson, Ann L. Heyward, Vivian H.; Janot, Jeffrey M.; Wilmerding, M V. ; Mermier, Christine M.; Faria, Erik W. Medicine & Science in Sports & Exercise. 37(5) Supplement:S301, May 2005.

Active And Passive Recovery & Acid-base Kinetics Following Multiple Bouts Of Intense Exercise. Siegler, Jason C.; Bell-Wilson, Jenna; Mermier, Christine; Faria, Erik; Robergs, Robert. Medicine & Science in Sports & Exercise. 37(5) Supplement:S103, May 2005.

"Laboratory Method Comparisons for Estimating Relative Body Fatness of Physically Active and Ethnically Diverse Women". A. Gibson, V.H. Heyward, C.M. Mermier, J.M. Janot, E.W. Faria, M.V. Wilmerding. Medicine and Science in Sports and Exercise, p S72-S73, Vol 36(5), Abstract 496, May, 2004.

"Accuracy of the ACSM Walking Equation at Altitude". L.C. Dalleck, C.A. Vella, L. Kravitz, C.M. Mermier, R.A. Robergs. Medicine and Science in Sports and Exercise, S193 Vol 35(5), Abstract 1076, May, 2003.

"A Comparison of Fuel Utilization During graded Walking Under Hyperoxia and Normoxia Conditions". C.A. Vella, L.C. Dalleck, L. Kravitz, C.M. Mermier, R.A. Robergs. Medicine and Science in Sports and Exercise, S86 Vol 35(5), Abstract 469, May, 2003.

"Comparative Accuracy of Six Bioelectrical Impedance Analysis Equations in Predicting FFM of Physically Active Women". A.L. Gibson, J.M. Janot, J. Chavez, C.M. Mermier, M.V. Wilmerding, V.H. Heyward. Medicine and Science in Sports and Exercise, S146 Vol 35(5), Abstract 813, May, 2003.

"Heart Rate and Rating of Perceived Exertion Correlation During Graded Walking: Normoxia Versus Hypoxia". C.A. Vella, L.C. Dalleck, L. Kravitz, C.M. Mermier, R.A. Robergs. Medicine and Science in Sports and Exercise, S294, (1655), May, 2002.

"Comparison of Tanita and Omron Bioimpedance Estimates of Relative Body Fatness for Physically Active Women". A.L.Gibson, V.H. Heyward, J.M. Janot, J. Chaves, J.Schiller, M.V. Wilmerding, C.M. Mermier. Medicine and Science in Sports and Exercise, S106, (595), May, 2002.

"Comparison of two body composition assessment methods and prediction equations for adult female dancers". E. Pederson, V. Wilmerding, C. Mermier, V. Heyward, A.

Gibson. International Association of Dance Medicine and Science, 1-3 November, 2001, Alcala, Spain. Presented by V. Wilmerding.

"Body Composition Assessment of Physically Active Adults: Hydrodensitometry vs. Air Displacement Plethysmography (BOD POD)". J. Janot, A. Gibson, E. Faria, C. Mermier, V. Wilmerding, V. Heyward. Medicine and Science in Sports and Exercise, S16, (87), May, 2001.

"Body Composition Assessment of Physically Active Adults: Hydrodensitometry vs. Dual-Energy X-Ray Absorptiometry", A.L. Gibson, J.M. Janot, M.V. Wilmerding, C.M. Mermeir, V.H. Hewyard. Medicine and Science in Sports and Exercise, S174 (990), May, 2001.

"Predictive Accuracy of Omron Body Logic Analyzer in Estimating Body Fat of Adults". A.L. Gibson, V.H. Heyward, C.M. Mermier. Medicine and Science in Sports and Exercise, 31(5), Supplement, 1999.

"Anthropometric Variables that Explain Rock Climbing Performance". C.M. Mermier, J. Janot, D.L. Parker, J. Swan, R.A. Robergs. Medicine and Science in Sports and Exercise, 31(5), Supplement, 1999.

"The Relationship Between Muscular Strength and Endurance and Rock Climbing Performance". J. Janot, C.M. Mermier, D.L. Parker, J. Swan, R.A. Robergs, Medicine and Science in Sports and Exercise, 31(5), Supplement, 1999.

"Effects of Combined Step Aerobic and Resistance Training in Children on Cardiorespiratory Endurance and Strength". S.O. Roberts, R.A. Robergs, L. Stolarczyk, C.M. Mermier, D. Maes, R. Scales, S. Griffin, Medicine & Science in Sports and Exercise, S26(5), 1994, p. S83. (presented by S.O. Roberts)

"Sources of Variability for Optical Density Measures". V.H. Heyward, K.A. Jenkins, C.M. Mermier, L.M. Stolarczyck, Medicine & Science in Sports and Exercise, S25(5), 1993, p. S60. (presented by K.A. Jenkins & C.M. Mermier)

"Similar Ergogenic Benefit Between Solid and Liquid CHO During Prolonged Cycling". R.A. Robergs, S. McMinn, C.M. Mermier, C.M. Quinn, L.J. White, B.C. Ruby, Medicine & Science in Sports and Exercise, S25(5), 1993, p. S142.

"Fitness Evaluations of Police Officers". S. McMinn, R.A. Robergs, T. MacLean, K. Skemp, C.M. Mermier, G.W. Leadbetter, B.C. Ruby, Sports Medicine, Training and Rehabilitation, 3(3), 1992, P. 225 (presented by S. McMinn)

"Indirect Calorimetry During Rock Climbing". C.M. Mermier, R.A. Robergs, C. Keaty, S.B. McMinn. Southwest American College of Sports Medicine meeting, San Diego, Sports Medicine, Training and Rehabilitation, vol. 4, 1992, p. 146; (presented by Christine Mermier).

"The Effects of Solid versus Liquid Carbohydrate Feedings on Fuel Metabolism and Performance During Prolonged Cycling, S.B. McMinn, R.A. Robergs, B.C. Ruby, C.M. Mermier, G.W. Leadbetter, C. Quinn, Southwest American College of Sports Medicine meeting, San Diego, Sports Medicine, Training and Rehabilitation, vol. 4, 1992, p. 140; (presented by Brent Ruby and Christine Mermier).

"Cross Training Between Running and Cycling in Previously Sedentary Females", B.C. Ruby, R.A. Robergs, G.W. Leadbetter, C.M. Mermier, K.A. Skemp, Southwest American College of Sports Medicine meeting, San Diego, 1991; Sports Medicine, Training and Rehabilitation, 3(3), 1992, p. 221 (presented by Brent Ruby).

PRESENTATIONS

"How to Run an Exercise Physiology Lab", American Society of Exercise Physiologists annual meeting, March 30, 2006

Invited Lecturer for the New Mexico Dietetic Association annual meeting, April 1, 2004. Presentation title "Body Composition Review"

"The effect of whole-body cooling on physical performance in patients with generalized myasthenia gravis" Exercise Science Seminar, UNM, November, 2001.

"Anthropometric and physiological determinants of sport rock climbing: preliminary data" Exercise Science Seminar, UNM, October, 1999.

"Indirect Calorimetry During Rock Climbing", slide presentation, Twelfth Annual Meeting of the Southwest Chapter of the American College of Sports Medicine. San Diego, November, 1992 (presented by Christine Mermier)

"Physiological Effects of Step Aerobics Training", slide presentation; International Dance and Exercise Research Symposium, Las Vegas, NV; 1992, (presented by Len Kravitz).

"Estimates of Ventilation from Heart Rate in Ambulatory Subjects", slide presentation, American Thoracic Society, 1992, (presented by William Lambert).

PROFESSIONAL ORGANIZATIONS

American College of Sports Medicine (ACSM) S.W. Regional Chapter, American College of Sports Medicine American Society of Exercise Physiologists (ASEP)

CERTIFICATIONS

Basic Life Support & First Aid Instructor, American Safety & Health Institute, (certified February, 2008)

Heartsaver/First Aid Instructor – American Heart Association (certified April, 2007) Functional Capacity testing – Medigraph- (certified August, 2006) Exercise Physiologist, Certifed, ASEP (certified 2000) Certified Exercise Specialist, ACSM (certified1998) Health & Fitness Instructor, ACSM (certified 1996) Advanced Cardiac Life Support (certified 1998) First Aid, American Red Cross (re-certified 2000) Cardiopulmonary Resusitation, American Red Cross (re-certified 2001) Defensive Driving, University of New Mexico, Occupational Safety and Health (certified April, 1997) NIOSH spirometry testing- November, 1997