

VITAE
TERRY A. SHEPHERD, Ph.D.
Exercise Physiologist

PERMANENT ADDRESS

303 Twp. Rd. 1386
Proctorville, Ohio 45669

PERSONAL INFORMATION

Date of birth: February 28, 1953
Height: 5 ft. 10 in
Weight: 155 lb.
Marital status: Married; 3 children
Health: Excellent

ACADEMIC PREPARATION

Ph.D. University of Utah
(1987) Salt Lake City, Utah
Field Exercise Physiology
Specialization Pediatrics
Exercise Metabolism and Biochemistry

M.S. Marshall University
(1977) Huntington WV
Field Exercise Science

B.A. Marshall University
(1975) Huntington WV
Field Health and Physical Education

High School Fairland High School
(1971) Proctorville, Ohio

PROFESSIONAL EXPERIENCE

2011 – Present

Full Professor: Program Graduate Coordinator of the Marshall University Exercise Physiology program in the School of Kinesiology.

Adjunct: MU School of Physical Therapy (Teaching Exercise Physiology in the PT program)

Adjunct: University of Charleston Physician Assistant Program (Medical Physiology)

2002 – 2011

Vice President, Founder, HIT Centers Inc.

Developed a national franchise system for weight loss, fitness and athletic performance.

Created and installed clinics in the following locations:

Huntington, WV
Jacksonville, FL
Morgantown, WV
Lexington, KY
Mesa, AZ

Austin, TX
Kennesaw, GA
Cumming, GA
St. Louis, MO

These are nationally recognized clinics that revolutionized the concept of High Intensity Training. HIT Centers are the first human performance centers to place a world class exercise physiology laboratory in the middle of a 10,000-12,000 ft. training facility dedicated to the science of weight loss and athletic human performance.

Fall 2011 – Spring 2012: One year academic appointment: Marshall University

- **Program Coordinator for Exercise Science**
- **Director of the Exercise Physiology Laboratory**

Fall 2012: Tenured Full Professor, Marshall University

- **Graduate Program Coordinator for Exercise Science**
- **Director of the MU Exercise Physiology Laboratory**

Teaching:

Advanced Exercise Physiology I and II

Clinical/PT Exercise Physiology

Exercise Metabolism

Advanced Exercise Testing

Medical Physiology (PA)

Recent Service and Scholarly Activities

Master's Thesis:

Cottrill, David, **T.A. Shepherd**. "Preventing Dehydration during Military Operations in the Heat: A comparison of two established hydration protocols on cardiovascular drift during exercise in the heat" Marshall University; May 2014.

Master's Thesis:

Christian, Bethany, **T.A. Shepherd**. "The Effects Of A 30 Second Cycle Sprint Performance On Blood Lactate Concentrations Sampled From Three Sites," ESS 681, 6 credit hours. (January 11, 2011 - December 6, 2011).

Exercise Physiology Representative for the MU COHP/LJHCC Coverage Agreement. (January 27, 2012).

The COHP makes available certified exercise physiologists to participants enrolled in the PEIA weight Management Program sponsored by the LIHCC (Gilbert, WV.) to provide exercise science services to satisfy the requirements of the PEIA WMP.

Lectures:

Marshall University Family Practice Internship Program. "Exercise Prescription for Your Patients". March 7, 2012. Cabell Huntington Hospital

Marshall University Family Practice Internship Program. "Weight Loss Prescription for Your Patients". April 4, 2012. Cabell Huntington Hospital

Marshall University Family Practice Internship Program. "Weight Lifting for the Pediatric Patient". May 2, 2012. Cabell Huntington Hospital

West Virginia Association of Cardiovascular and Pulmonary Rehabilitation. "Physiological Adaptations to Cardiopulmonary Rehabilitation". May 9, 2012.

1994 – Jan. 2004 Marshall University

▪ Full Professor, Teaching

- Exercise Physiology
- Advanced Exercise Testing
- Graduate Exercise Physiology
- Energy Metabolism and Body Composition
- Anatomy and Physiology
- Fitness Evaluation Laboratory
- Principles of Training and Conditioning

- **Director, Exercise Physiology Laboratory**
 - Clinical Exercise testing for children with asthma.
 - Treatment of childhood obesity.
 - Performance enhancement testing for all sports.
 - Research projects in sport science and clinical exercise testing.
 - Teaching laboratory for fitness evaluation, exercise physiology and exercise metabolism classes.

- **Academic Advisor for the Exercise Physiology Graduate Program (Research Track)**

Master's Thesis: Robin Hampton; Crossvalidation of the Marshall Step Tests on College Aged Men and Women. Completed May, 1999.

Master's Thesis: Summerson Desmond; Cardiovascular adaptations to moderate and high intensity training. Completed, August, 1999.

Master's Thesis: Brad Gwithers; Validation of the Marshall University Step Test in 11-14 Year Old School Children. Completed, May 1998.

Master's Thesis: Joe Mcquain: Effects of Creatine on the Performance of College Football Players. Completed, May 1997.

Master's Thesis: Matt Mega. The Effects of Changes in Airway Resistance on the Performance of Trained Cyclist.

Master's Thesis: Jon Willis. The Accuracy of Field Testing Using the One Mile Run in the Public Schools. Completed May, 1997.

Master's Thesis: Tom Cappaert. The Relationship Between Resting and Submaximal Cardiovascular Measures and VO₂max in Children. Completed May, 1996.

- **Adjunct Professor for the Department of Family Practice, Marshall University Medical School**
 - Instructor in the Sports Medicine Fellowship Program.
 - Lecturer in the Family Practice Residency Program.
 - Research Consultant for the Department of Family Practice.

1990 - 1994

Associate Professor, Marshall University

Classes taught:

1987 - 1990

Assistant Professor, Marshall University

1984 - 1987

Graduate Assistant at the University of Utah Human Performance Laboratory.

1983 - 1984

Full-time instructor at Marshall University in Exercise Science.

1975 - 1977

Graduate Assistant at the Marshall University Human Performance Laboratory.

RESEARCH, SCHOLARSHIP, AND RESEARCH PARTICIPATION

Grants:

Shepherd, T.A., Alternatives to the President's Physical Fitness Test. Development of new tests and norms for the state of West Virginia. Grant from the Department of Education office of Health Schools. 1996, \$20,000.00

Shepherd, T.A., Development of a Glucose Loading Point for Competitive Type I Diabetics. Marshall University Faculty Summer Research Grant. 1995, \$2000.00

Shepherd, T.A., Development of a computerized animated feedback exercise system for children. Marshall University Faculty Summer Grant. 1993, \$2000.00

Shepherd, T.A. Indices of Anaerobic Metabolism in Highly Trained Collegiate Runners. Marshall University Faculty Summer Grant. 1989, \$2000.00

Shepherd, T. A. Cardiac Dimensions of Highly Trained Prepubescent Runners. Awarded by the University of Utah Graduate Research Committee, 1986 - 1987. \$4,500.00

Eisenman, P.A., Shepherd, T.A., Johnson, S.C. Cardiac Dimensions of Highly Trained Prepubescent Runners. University of Utah Faculty Research Grant Committee, 1987, \$5000.00

Shepherd, T.A., Eisenman, P.A., Johnson, S.C. Cardiac Dimensions of Highly Trained Prepubescent Runners. Awarded by the Dean's Incentive Grant, 1986, \$4,000.00

Papers and Abstracts Accepted For Publication

Hayes, R.M., Maldonado, D., Gossett, T., Shepherd, T., Mehta, S.P. Flesher, S.L. Developing and Validating a Step Test of Aerobic Fitness in Elementary School Children. Pediatric Physiotherapy. Printed in an advance online version – to be in print this year (2019).

Gilliland, A., Timmons, M., Harris, J., Shepherd, T.A., Buchanan, G. S., Decker, N., and Giangarra, C. ECG Measurement Parameters of Athletes Are Reliable When Made With A Smartphone Based ECG Device. Marshall Journal of Medicine Volume 4; Issue 2, 2018

Gossett, Tyler, Shepherd, Terry, Powell, Robert (2017). Validation of A Multi-staged Step Test for Measuring Fitness As A Clinical Vital Sign. (Abstract) Medicine & Science in Sports & Exercise. Vol. 49(5S):299, May 2017.

Shepherd, T.A. Technology and Training. Inside USA Diving. Spring, 1998

Rodbell, B.L., T. Shepherd, W. Taylor, and W.P. Marley, FACSM (1998). Bicarbonate Loading and Performance Enhancement in Half Mile Sprinting. (Abstract) Medicine and Science in Sports and Exercise. Vol. 30, #5. Supplement.

Swain, D. P., Wilcox, J.P., Shepherd, T.A. Does Heart Rate Deflection Represent The "Anaerobic Threshold? (Abstract). Medicine and Science in Sports and Exercise. Vol. 24(5), May 1992. Supplement page 123.

Shepherd, T.A., Eisenman, P.A., Johnson, S.C., Ruttengerg, H., Shultz, B., Adams, T.D., and Zupan, M.F. Cardiac Dimensions of Highly Trained Prepubescent Boys. (Abstract) Medicine and Science in Sports and Exercise Vol. 20(2), April 1988. Supplement page 53.

Zupan, M.F., Eisenman, P.A., and Shepherd, T.A. Physiological Responses to Nordic Tracking and Skating in Elite Cross-Country Skiers. (Abstract) Medicine and Science in Sports and Exercise. Vol. 20(2), April 1988. Supplement page 81.

Chmeler, R., Shultz, B., Ruhling, R.O., Zupan, M. F., & Shepherd, T.A., and Fitt, S. A physiologic Profile Comparing Female Professional and University Ballet and Modern Dancers. The Physician and Sports Medicine, vol 16, No.7, July, 1988.

Chmeler, R., Fitt, S., Shultz, B., Ruhling, R.O., & Shepherd, T.A. (1987). body Composition and the Comparison of Measurement Techniques in Different Levels and Styles of Dancers. Dance Research Journal, July-August, 1988. page 37.

Papers Published in Non-Refereed Journals

Shepherd, T.A. Hyperthermia and Fluid Consumption in long Distance Runners. The Wasatch Runner. Aug. 1985, Vol. 4 Page 6.

Shepherd, T.A. Water Intoxication and Fluid Consumption in Long Distance Runners. The Wasatch Runner. Sept. 1985. Vol. 5 page 22.

Shepherd, T.A., Eisenman, P.A., and Johnson, S.C. University of Utah and Triangle Training Implement Innovative Program to Introduce Up-And-Coming Motocrossers to Sports Sciences That Can Enhance Performance. Triangle Training Inc. Magazine, Oct., 1986. page 10

Unpublished Papers and Reports

Shepherd, T.A., Eisenman, P.A., Johnson, S.C., Ruhling, R.O., And Zupan, M.F. The University of Utah Exercise Physiology Laboratory Manual. Sept. 1986.

Shepherd, T.A. The effects of Superhydration on the Work Performance of Long Distance Runners. Unpublished Masters Thesis, April 20 1977.

Shepherd, T.A. (1987). Cardiac Dimensions of Highly Trained Prepubescent Boys. Unpublished Doctoral Dissertation. June 1, pp. 1 - 106.

Selected Academic Papers and Presentations

Hayes, R.M., Maldonado, D., Gossett, T., Shepherd, T., Mehta, S.P. Flesher, S.L. Developing and Validating a Step Test of Aerobic Fitness in Elementary School Children. Pediatric Academic Societies May 6th 2017.

Gossett, Tyler, Shepherd, Terry, Powell, Robert. Validation of a Multi-staged Step Test for Measuring Fitness as a Clinical Vital Sign. Medicine and Science in Sports and Exercise 49(5S): 299, May 2017

Shepherd, T.A. Conditioning of the Pediatric Athlete. 19th Annual Family Medicine Weekend and Sports Medicine Conference. Huntington, WV. November 13, 2005.

Shepherd, T.A. Using Nutrition and Exercise to Tilt the Energy Balance Equation. West Virginia Association of Cardiovascular and Pulmonary Rehabilitation. May 10, 2000.

Shepherd, T.A. Alternatives to the One Mile Run Fitness Tests for the Public Schools. Midwest District AAHPERD, Milwaukee, Wisconsin. Sept. 18, 1997

Shepherd, T.A. "Challenge to Strive for a Healthy Future" a presentations to the West Virginia Healthy Schools Physical Education Mountain Summit. Canaan Valley State Park, June 28, 1995.

Shepherd, T.A. "Exercise Physiology as a model for understanding Physiology, Biochemistry and other Science Application" a presentation to the first year medical students at the Marshall University School of Medicine. June 6, 1995.

Shepherd, T.A., "Basic science application for cardiology fellows; using cardiovascular adaptations to exercise as a model" a presentation to the Cardiology Fellows for the Marshall University School of Medicine (St. Mary's Hospital: Huntington, WV). April 11, 1995.

Smilley, D., Shepherd, T.A., "A case study using dietary and exercise therapy for weight reduction" a poster presentation at the West Virginia Dietetic Association convention (Huntington WV) April 21, 1995.

Shepherd, T.A., "A lifetime of Activity" a paper presented at the Annual Meeting for the West Virginia Home Economics Association. (Morgantown, WV). March 25, 1995.

_____, "Exercise and Diet in the Treatment of Childhood Obesity" a paper presented at the Midwest American Alliance of Health, Physical Education, Recreation and Dance Convention (Chicago, Illinois). Feb. 10, 1995.

_____, "High Intensity Training and Competition in the childhood population - "Good or Bad?" a paper presented at the Midwest American Alliance of Health, Physical Education, Recreation and Dance Convention (Chicago, Illinois). Feb. 10, 1995.

_____, "Overweight Adolescents" a paper presented at the 6th annual West Virginia Chapter of the American Academy of Family Physicians. (Huntington WV). Nov. 13, 1992

_____, "Cardiovascular Benefits of Exercise" a paper presented at the Annual Scientific Sessions of the American Heart Association, West Virginia Affiliate (Charleston, WV). June, 1991

Swain, D. P., Wilcox, J.P., Shepherd, T.A. "Does Heart Rate Deflection Represent The "Anaerobic Threshold"?" a paper presented at the National Convention for Medicine and Science in Sports and Exercise. Vol. 24(5), May 1992.

Shepherd, T.A., "Assessment of Body Composition in High School Wrestlers" a paper presented at the American Alliance of Health, Physical Education, Recreation and Dance State Convention (Davis, WV). Oct. 1991.

_____, "Basketball Specificity Conditioning: Weights and Running" a paper presented at the American Alliance of Health, Physical Education, Recreation and Dance State Convention (Huntington, WV). Sept. 27, 1990.

_____, "Sports Nutrition and Performance Enhancement" a paper presented to the 4th annual West Virginia Chapter of the American Academy of Family Physicians. (Huntington WV). Nov. 30, 1990.

_____, "Cardiac Dimensions of Highly Trained Prepubescent Boys" a paper presented as a free communication at the National Convention for Medicine and Science in Sports and Exercise. (Dallas, Texas). May 27, 1988.

Zupan, M.F., Eisenman, P.A., and Shepherd, T.A. "Physiological Responses to Nordic Tracking and Skating in Elite Cross-Country Skiers" a poster presentation at the National Convention for Medicine and Science in Sports and Exercise. (Dallas, Texas). May 28, 1988.

Eisenman, P.A., & Shepherd, T.A. "The Effect of Superhydration on the Work Performance of Long Distance Runners" a paper presented at the Midwest American Alliance of Health, Physical Education, Recreation and Dance Convention (Madison, Wisconsin) 1979.

Shepherd, T.A. "The Effect of a Structured Aerobic Exercise Program on the Fitness Level of Elementary School Children" (Morgantown, WV) Nov. 1988.

_____, "Sudden Death Among Long Distance Runners and Other Athletes" a paper presented at the Snowbird Conference for the Utah Association of Nurse Practitioners (Salt Lake City, Utah). May, 1986.

_____, "Children in Sport; a New Emphasis in the Care and Prevention of Injuries" a presentation for the Huntington Pediatric Grand Round at St. Mary's Hospital (Huntington WV) Oct. 1987.

_____, "Exercise Physiology Applications to Family Practice Physicians" a paper presented to the West Virginia Association Sports Medicine Convention. (Huntington, WV) Oct. 1988.

_____, "Sports Medicine Applications to Little League Baseball" a similar presented to the coaches of District 11 Little League Association (Ohio District 11). 1988, 89, 90, 91, 92, 93, 94, 95.