

CURRICULUM VITAE

Todd A. Astorino, Ph. D

Associate Professor, Department of Kinesiology
College of Arts and Sciences
California State University, San Marcos
333 S. Twin Oaks Valley Rd
San Marcos, CA 92096-0001
Phone: (760) 750-7351
Email: astorino@csusm.edu
Webpage: <http://www.csusm.edu/astorino.html>

EDUCATION

Ph. D. Health, Physical Education, and Recreation
Dissertation “Effect of Graded Hyperoxia on VO₂max and Acid-Base Balance during Exercise Testing to Volitional Fatigue.”
Minor: Physiology and Statistics
University of New Mexico, Albuquerque, NM, May 2001

M. S. Exercise Science
Thesis “Is the Ventilatory Threshold Coincident with Maximal Fat Oxidation during Submaximal Exercise?”
Arizona State University, Tempe, AZ, May 1997

B. A. Biological Sciences
California State University—Sacramento, Sacramento, CA, May 1993

EMPLOYMENT HISTORY

Assistant Professor, Department of Kinesiology, CSU—San Marcos, San Marcos, CA
August 2004 - present

Director and Assistant Professor, Exercise Science Program, Salisbury University,
Salisbury, MD August 2001 – May 2004

PROFESSIONAL MEMBERSHIP AND RECOGNITION

American College of Sports Medicine (ACSM) 1997 - present

American Society of Exercise Physiologists (ASEP) 1999 – present

Fellow, American Society of Exercise Physiologists, 2006 - present

Moderator, Professional Session, Mid-Atlantic ACSM meeting, November, 2002

PROFESSIONAL CERTIFICATION

Certified Health and Fitness Instructor, American College of Sports Medicine

Certified Exercise Physiologist, American Society of Exercise Physiologists

First Aid and CPR Certification, American Red Cross

ACADEMIC AND PROFESSIONAL EXPERIENCE

Boards

Member, Board of Directors, American Society of Exercise Physiologists, 2005 – present.

Academic Committees

Member, Academic Senate, CSU—San Marcos, 2005 – 2007.

Member, Community of Scholars, College of Arts and Sciences, CSU—San Marcos, 2007 – present.

Member and co-Chair, Institutional Review Board, CSU—San Marcos, 2005 – 2008.

Chair, Institutional Review Board, CSU—San Marcos, 2008-2010.

Member, Student Affairs Committee, Salisbury University, Fall 2003

Chair, Data Collection Committee, Healthy U™ of DelMarva, 2003 - 2005

At-Large Member, University Curriculum Committee, Salisbury University, Spring 2002

Member, Department of Physical Education Assessment, Salisbury University, Fall 2002

Member, Salisbury University Student Research Conference, 2001 - 2004

Search Committees

Search Committee Member, Kinesiology faculty (2), 2007 – 2008.

Search Committee Member, MSW Director, CSU—San Marcos, 2006.

Search Committee Member, HHS Dean, CSU—San Marcos, 2006.

Search Committee Member, Kinesiology Chair, CSU—San Marcos, March - April 2005.

Search Committee Member—Health Education, Salisbury University, June 2003

RESEARCH

Published Manuscripts in Peer-Reviewed Journals

1. **Astorino, T. A.**, White, A. C., & Dalleck, L. C. Efficacy of Supramaximal Exercise to Confirm VO₂max Attainment in the Sedentary. *Int J Sports Med* (in press).

2. **Astorino, T. A.** Alteration in VO_2 max and the Oxygen Plateau with Manipulation of Sampling Interval. *Clin Physiol Funct Imaging* (in press)
3. **Astorino, T. A.**, Tyerman, N., Harness, E, & Wong, K. Efficacy of a New Rehabilitative Device for Exercise in the Spinal Cord Injured. *J Spinal Cord Med.* 31:6-11, 2008.
4. **Astorino, T. A.**, Rohmann, R. L., & Firth, K. Effect of Caffeine Ingestion on One-Repetition Maximum Muscular Strength. *Eur J Appl Physiol.* 102:127-132, 2008.
5. **Astorino, T. A.**, Rohmann, R. L., Firth, K., & Kelly, S. Caffeine-induced Changes in Cardiovascular Function During Intense Resistance Training. *Int J Sports Nutr Exerc Metab.* 17(5): 468-477, 2007.
6. **Astorino, T. A.** & McGill, W. Health-related Data from a Community Risk Reduction Program—Healthy U™. *Ca J Health Prom.* 4(3): 1-9, 2006.
7. **Astorino, T. A.**, Willey J., Kinnahan J., Welch H., Larsson S. M., & Dalleck L. C. Elucidating Factors Explaining the Plateau in VO_2 at VO_2 max *Br J Sports Med.* 39: 655-60, 2005.
8. **Astorino, T. A.**, Brazil C, Marrocco A, Gross S, Kneessi R, Icenhower M, & Johnson D. Is Running Performance Enhanced with Creatine Serum Ingestion? *J Str Cond Res* 19(4): 270-74, 2005.
9. **Astorino, T. A.**, Tam, P., Rietschel, J. C., Johnson, S. M., & Freedman, T. P. Changes in Physical Fitness Parameters during a Competitive Field Hockey Season *J Str Cond Res.* 18(4): 850-54, 2004.
10. **Astorino, T. A.**, Tam, P., Rietschel, J. C., Johnson, S. M., Sakarya, C. E., & Freedman, T. P. Optimal Duration of VO_2 max Testing. *J Exerc. Physiol.* 7(6):1-8, 2004.
11. **Astorino, T. A.**, Ghiasvand, F., & Robergs, R. A. Acute Hypoxia Alters Lactate Threshold in Chronic Altitude Residents. *J Exerc Physiol.* 7(2):6-15, 2004.
12. **Astorino, T. A.**, & Robergs, R. A. Effect of Hyperoxia on Cardiovascular Function and Acid-Base Balance: A Review *J Exerc Physiol.* 6(2):8-20, 2003.
13. **Astorino, T. A.** Is the Ventilatory Threshold Coincident with Maximal Fat Oxidation during Submaximal Exercise? *J Sports Med Phys Fit.* 40(3):209-16, 2000.
14. **Astorino, T. A.**, & Kravitz, L. R. Glycogen and Resistance Training Performance. *Idea Personal Trainer.* 11(7), 2000.
15. **Astorino, T. A.**, Robergs, R. A., Ghiasvand, F., Marks, D. W., & Burns, S. Incidence of the Oxygen Plateau at VO_2 max during Exercise Testing to

Volitional Fatigue. *J Exerc Physiol.* 3(4):1-12, 2000.

Manuscripts in Review

1. Changes in VO₂max, Running Economy, and Injury Status During a Competitive Season
2. Substrate Metabolism During Exercise in the Spinal Cord Injured.

Manuscripts in Preparation

1. Re-examination of “Criteria” to Confirm VO₂max Attainment: a review
2. Efficacy of Caffeine Ingestion for High-intensity Exercise: is it ergogenic?
3. Effect of Physical Rehabilitation to Slow Bone Loss in the Spinal Cord Injured

BOOK CHAPTERS

1. Nutritional and Ergogenic Aids for Athletic Performance. In Robergs RA. *EXERCISE PHYSIOLOGY: An Electronic Text and Learning Experience.* (1st Ed), March 2008. www.nexsis.org.
2. Caffeine: Is it Ergogenic for Athletes? In *Advances in Strength and Conditioning.* Nova Publishers, 2008.

Published Research Abstracts

1. **Astorino, T. A.**, Tyerman, N., Harness, E., & Wong, K. Efficacy of a New Exercise Device for the Spinal Cord Injured. *Med Sci Sports Exerc.* S1719, 2008.
2. Martin, B. J., Volland, L., Rohmann, R. L., Wong, K., & **Astorino, T. A.** Changes in Cardiovascular Function in Response to Acute Caffeine Ingestion during Intense Resistance Training. *Med Sci Sports Exerc.* 39(5): S2382, 2008.
3. **Astorino, T. A.**, Martin, B. J., Volland, L., Rohmann, R. L., & Wong, K. Effect of Caffeine Intake on EPOC after Resistance Training. *Exper Biol.* 685.2, 2008.
4. **Astorino, T. A.**, Rohmann, R. L., & Firth, K., Effect of Acute Caffeine Ingestion on One-Repetition Maximum Muscular Strength. *Med Sci Sports Exerc.* 39(5): S699, 2007.
5. **Astorino, T. A.**, & Dalleck, L. C. Identifying Determinants of the Plateau in VO₂ at VO₂max. *Med Sci Sports Exerc* 38(5): S2651, 2006.
6. **Astorino, T. A.**, Rietschel, J. C., Tam, P., Taylor, K., Freedman, T., & Sakarya, C. E. Reinvestigation of Optimal Duration of VO₂max. ASEP Annual Meeting, Sacramento, CA, April, 2003.

7. **Astorino, T. A.** & Robergs, R. A. Limitations to VO₂max: What We Know and What We Don't. ASEP Annual Meeting, Sacramento, CA, April, 2003.
8. **Astorino, T. A.** & Robergs, R. A. Influence of Time-Averaging on the Change in VO₂ at VO₂max. *Med Sci Sports Exerc* 33(5): S891, 2001.
9. **Astorino, T. A.**, Robergs, R. A., Ghiasvand, F., Marks, D. W., & Burns, S. Comparison of the Ventilatory Threshold Obtained from Ventilatory Equivalents and V-Slope Method. *Med Sci Sports Exerc.* 32(5): S77, 2000.
10. **Astorino, T. A.**, Robergs, R. A., Ghiasvand, F., Marks, D. W., & Burns, S. Incidence of the Oxygen Plateau during Exercise Testing to Volitional Fatigue. *J Exerc Physiol.* 9(S1), 1999.
11. **Astorino, T. A.**, Orri, J., Lockner, D., Jenkins, K., & Heyward, V. H. Comparison of the Body Caliper and Harpenden Caliper for Measuring Skinfold Thicknesses of Children. *Med Sci Sports Exerc.* 31(5): S33, 1999.
12. Robergs, R. A., Ghiasvand, F., Burns, S., **Astorino, T. A.**, & Marks, D. W. Determination of Lactate Threshold Using Three Different VO₂max Protocols. (Abstract) *J Exerc Physiol.* 9(S5), 1999.

Oral/Poster Presentations

1. **Astorino, T. A.** "Acute caffeine Ingestion and Exercise Performance." Southwest Chapter, American College of Sports Medicine, Mission Valley, CA, 2008.
2. White, A., Schmeiser, K., Law, C., Meyer, A., Denham, C., Houx, J., & **Astorino, T. A.** "Supramaximal Testing to Confirm VO₂max Attainment in the Untrained," Southwest Chapter, American College of Sports Medicine, Mission Valley, CA, 2007.
3. Stafford A., McGhee D., Ernisse R., Bazarnik C., Sanchez J., Giannaris B., Witzke, K., & **Astorino, T. A.** "Prediction of Peak Anaerobic Power from Physiological Parameters of the Lower Extremities." Southwest Chapter, American College of Sports Medicine, Mission Valley, CA, 2007.
4. Astorino, T. A. "Comparison of Two Commonly-used Methods to Confirm Attainment of VO₂max." Southwest Chapter, American College of Sports Medicine, Mission Valley, CA, 2007.
5. Astorino, T. A., Rohmann, R. A., Firth, K., Kelly S. "Effect Of Acute Caffeine Ingestion On One-Repetition Maximum Muscular Strength." Southwest Chapter, American College of Sports Medicine, Mission Valley, CA, 2006.
6. Rohmann, R. A., **Astorino, T. A.**, Firth, K., Kelly, S. Effect Of Acute Caffeine Ingestion On Cardiovascular Function During Resistance Training." Southwest Chapter, American College of Sports Medicine, Mission Valley, CA, 2006.

7. Astorino, T. A. "Deterioration in Health Status of Professional Athletes in Retirement." IART Conference, San Diego, CA, June, 2006.
8. Astorino, T. A. "Examination of Running Economy and Run Performance in Collegiate Cross-Country Athletes," ASEP Annual Meeting, Albuquerque, NM, March, 2006.
9. Astorino, T. A. "Elucidating Determinants of the Plateau in Oxygen Consumption at $VO_2\text{max}$," ASEP Annual Meeting, Albuquerque, NM, March, 2006.
10. Marks, D. W. & **Astorino, T. A.** " VO_2 Plateau Detection Using Whole Body VO_2 During Cycle Ergometry," SWACSM Annual Meeting, Las Vegas, NV, November, 2005.
11. Astorino, T. A. "Effectiveness of a Community Risk Reduction Program—Healthy U™ of DelMarva. ASEP Annual Meeting, Minneapolis, MN, April 2005.
12. Astorino, T. A. "Data From a Community Risk Reduction Program—Healthy U™ of DelMarva. SWACSM Annual Meeting, Las Vegas, NV, October, 2004.
13. Astorino, T. A. "No Ergogenic Effect of Runners Advantage Serum on Running Performance" ASEP Annual Meeting, Indianapolis, IN, April, 2004.
14. Astorino, T. A. "Elucidating Factors Contributing to the VO_2 Plateau at $VO_2\text{max}$." MARCACSM Annual Meeting, Bushkill, PA, October, 2003.
15. Astorino, T. A. "Maximal Oxygen Uptake: The What, How, and Why." University of Texas at Arlington, February, 2003.
16. Astorino, T. A. "Reinvestigation of Optimal Duration of $VO_2\text{max}$." MARCACSM Annual Meeting, Bushkill, PA, November, 2002.
17. Johnson, S. M., Rietschel, J., Tam, P., Taylor, K., Freedman, T., Sakarya, C. E., & **Astorino, T. A.** "Measuring Various Physical Fitness Components of Field Hockey Athletes." MARCACSM Annual Meeting, Bushkill, PA, 2002.
18. Astorino, T. A. "Effect of Graded Hyperoxia on $VO_2\text{max}$, Blood Gases, and Acid-Base Balance." MARCACSM Annual Meeting, Bushkill, PA, November, 2001.
19. Astorino, T. A. "Influence of Time-Averaging on the Change in VO_2 at $VO_2\text{max}$." National ACSM meeting, Baltimore, MD, 2001.
20. Astorino, T. A. "Effect of Graded Hyperoxia on $VO_2\text{max}$ and Acid-Base Balance during Exercise Testing to Volitional Fatigue." College of Education Graduate School Colloquium, The University of New Mexico, April, 2001.

21. Astorino, T. A. "Incidence of the Oxygen Plateau during Exercise Testing to Volitional Fatigue." Graduate Student Research Faire, The University of New Mexico, September, 2000.
22. Astorino, T. A. "Incidence of the Oxygen Plateau during Exercise Testing to Volitional Fatigue." National ASEP Meeting, Albuquerque, NM, 1999.
23. Astorino, T. A. "Incidence of the Oxygen Plateau during Exercise Testing to Volitional Fatigue." SWACSM Annual Meeting, San Jose, CA, 1999.
24. Astorino, T. A. Is the Ventilatory Threshold Coincident with Maximal Fat Oxidation during Submaximal Exercise? SWACSM Annual Meeting, Las Vegas, NV, 1997.

Presentations to Lay Audiences

- Astorino, T. A. "Kinesiology and Elite Athletics." LIFE at Mira Costa, August 15, 2008.
- Astorino, T. A. "Shared Exercise for Couples." *Women's Health*, Interview, June 8, 2006.
- Astorino, T. A. "Effects of Exercise on Debilitating Diseases." Radio Interview, Boston, MA, March 17, 2006.
- Astorino, T. A. "Submaximal Exercise Testing to Determine Maximal Oxygen Consumption," Men's Health Symposium, CSU—San Marcos, October 2005.
- Astorino, T. A. "Fitness," *SELF*TM Magazine Interview, October 17, 2005.
- Astorino, T. A. "Ten Truths of Fitness: Tips to Help Exercisers Lose Weight and Keep it Off," WEBMDTM Interview, July 12, 2005.
- Astorino, T. A. "The Power of Regular Exercise to Reduce Chronic Disease Risk." SHAPEDOWNTM meeting, Salisbury, MD, April, 2004.
- Astorino, T. A. "Physiological Adaptations to a Walking and Exercise Program." Ocean Pines, MD, April, 2003.
- Astorino, T. A. "Benefits of Exercise and Weight Loss." Peninsula Regional Medical Center, Women and Wellness, October, 2002.
- Astorino, T. A. "Physiological Adaptations to a Walking Program." Wicomico County Nurses, June, 2002.
- Astorino, T. A. "Physiological Adaptations to a Walking Program." Wicomico County Department of Health, February, 2002.

Astorino, T. A. "Applicability of Polar Heart Rate Monitors in College Fitness Classes." Salisbury University, January, 2002.

Astorino, T. A. "Physiological Benefits of Resistance Training." Delmar Fire Department, Delmar, MD, January, 2002.

SPONSORED PRESENTATIONS--students

Fierro, M. "The Effect of Caffeine Intake on Maximal Treadmill Exercise Performance." Student Research Conference, CSUSM, March 2007.

Firth, K. "Effect of Caffeine Ingestion on One-Repetition Maximum Muscular Strength." Student Research Conference, CSUSM, March 2007.

MacFarlane, E. "Substrate metabolism in Fed and Fasted State in Females during Low to Moderate Intensity Exercise." Student Research Conference, CSUSM, March 2007.

Tyerman, N. "Acute Exercise Responses of the Spinal Cord Injured (SCI) on the Flexiciser." Student Research Conference, CSUSM, March 2007.

Bullert, B. "Do Percent Body Fat and Leg Length Affect Broad Jump Performance?" SWACSM Annual Meeting, Las Vegas, NV, November 2005.

Brazil, C & Johnson, D. "Creatine Serum and Running Performance." Salisbury University Student Research Conference, Salisbury, Md, 2004.

Flores, J & Jackson, T. "Ginseng as an Ergogenic Aid." Salisbury University Student Research Conference, Salisbury, Md, 2004.

Howe, P & Swift, R. "Resistance Training in Children: Is it Safe?" Salisbury University Student Research Conference, Salisbury, Md, 2004.

Hanratty, J. "Creatine as an Ergogenic Aid." Salisbury University Student Research Conference, Salisbury, Md, 2004.

Willey, J. "Altitude and Exercise Performance." Salisbury University Student Research Conference, Salisbury, Md, 2003.

Welch, H. "Gatorade as an Ergogenic Aid: Does It Work?" Salisbury University Student Research Conference, Salisbury, Md, 2003.

Marrocco, A. "The Physiology of the Steeplechase." Salisbury University Student Research Conference, Salisbury, Md, 2003.

Tam, P. "Type II Diabetes in Aboriginal Australians." Salisbury University Student Research Conference, Salisbury, Md, 2003.

Root, R., Whalen, K., & Gombos, C. "Ephedrine, the Weight Loss Supplement: Is It Safe?" Salisbury University Student Research Conference, Salisbury, Md, 2003.

Handschuh, S. "Mitral Valve Prolapse." Salisbury University Student Research Conference, Salisbury, Md, 2003.

Johnson, S. M. "Ephedrine as a Supplement." Salisbury University Student Research Conference, Salisbury, Md, 2002.

Freedman, T. "Creatine, the Power Supplement: Fact or Fiction." Salisbury University Student Research Conference, Salisbury, Md, 2002.

Rietschel, J. & Taylor, K. "So How Fit are You?: The Concept of VO₂max." Salisbury University Student Research Conference, Salisbury, Md, 2002.

GRANTSMANSHIP (Primary Investigator except where indicated)

1. Grant Proposal Seed Money, "Effect of Acute Caffeine Ingestion on Magnitude of Post-Exercise Oxygen Consumption after Intense Resistance Training," CSU—San Marcos, 6/28/07, \$1,000.00.
2. Christopher Reeve Foundation, "Efficacy of Intense, Multimodal Training to Enhance Bone Mineral Density, Body Composition, and Quality of Life in Individuals with Spinal Cord Injury," 6/13/07, \$70,400.00 (not funded).
3. National Science Foundation CCLI Grant, "Incorporating More Active Learning and Student-Centered Instruction in an Undergraduate Exercise Physiology Lab," 5/07/07, \$127,554.00 (not funded).
4. Supplemental UPD/RSC Grant, "Effect of Acute Caffeine Intake on Cardiovascular Function during Resistance Training," CSU—San Marcos, 3/29/07, \$742.05.
5. IRA Grant, "Supporting Student Presentations at Scientific Meetings," CSU—San Marcos, 3/16/07, \$1,166.40 (not funded).
6. IRA Grant, "Use of Heart Rate Monitors to Examine Exercise Intensity in Activity Courses," CSU—San Marcos, 3/16/07, \$2,478.25 (not funded).
7. General Nutrition Corporation, Pittsburgh, PA, "Effect of Acute Caffeine Ingestion on Magnitude of Post-Exercise Oxygen Consumption after Intense Resistance Training" 02/01/07, \$6,412.80 (not funded).
8. UPD/RSC Grant, "Effect of Acute Caffeine Ingestion on Magnitude of Excess Post-Exercise Oxygen Consumption After Resistance Training" CSU—San Marcos, 1/31/07, \$3,961.00 (funded for \$2,481.00).

9. California Lottery Grant, “Maximizing the Ability to Teach Body Composition and Related Health Risks” CSU—San Marcos, 1/31/07, \$3,726.86. (funded for \$840.75).
10. Flexiciser™ International Corporation, Efficacy of a Movement Therapy Device in the Spinal Cord Injured, 7/24/06, \$15,000.00 (funded for \$7,500.00).
11. UPD/RSC Grant, CSU—San Marcos, 01/31/06, \$980.00.
12. California Lottery Grant, “Ensuring Better Teaching and Scholarship in Kinesiology Via Purchasing of Necessary Equipment” CSU—San Marcos, 1/31/06, \$3,434.86.
13. Faculty Center Travel Grant, CSU—San Marcos, 01/03/06, \$500.00.
14. Office of Community Service Learning Engaged Department Grant, CSU—San Marcos, 10/1/05, \$1,000.00 (not funded).
15. California Lottery Grant, “Ensuring Better Teaching of Kinesiology Labs Via Purchasing of Necessary Equipment,” CSU—San Marcos, 7/25/05, \$5,285.00.
16. University Professional Development/RSC Grant, “Examination of VO₂ Plateau in Children,” 5/8/05 \$2,000.00.
17. Internal (Seed Money) Grant for Equipment for “Lunchtime Walking Program,” CSU—San Marcos, 11/30/04 \$1,011.32.
18. Maryland Department of Health (co-investigator), “Implementation of ShapeDown™ in Children of Historically Unhealthy Residents” 12/20/03 \$40,000.00.
19. Muscle Marketing USA, Valencia, CA “Effect of Runner’s Advantage™ Creatine Serum on Running Performance in Endurance-trained Athletes.” 9/30/03 \$7,000.00.
20. Life Fitness Academy: Michael L. Pollock Memorial Research Grants “Effectiveness of a Community-based Coalition on Chronic Disease Risk Factors and Wellness in lower-shore Residents.” \$5,000.00 (not funded).
21. Salisbury University Foundation Grant, Salisbury University, 2002, \$360.00
22. Salisbury University Foundation Grant, Salisbury University, 2001, \$225.00.
23. Research, Product, and Travel Grant, The University of New Mexico, 2000, \$600.00.
24. Student Research Allocations Committee, The University of New Mexico, 2000, \$400.00.

25. College of Education Research Grant, The University of New Mexico, 2000,
\$200.00.