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| **BIOGRAPHICAL SKETCH**  Provide the following information for all key personnel.  **DO NOT EXCEED TWO PAGES FOR EACH BIOSKETCH.** | | | | |
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| **NAME**  Todd Anthony Astorino | | **POSITION TITLE**  Principal Investigator | | |
| EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)* | | | | |
| **INSTITUTION AND LOCATION** | **DEGREE**  *(if applicable)* | | **YEAR(s)** | **FIELD OF STUDY** |
| California State University—Sacramento  Arizona State University  University of New Mexico | B.A.  M. S.  Ph.D | | 1993  1998  2001 | Biological Sciences  Exercise Science  Exercise Physiology |
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**A. Positions and Honors.**

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| 08/14 – present Professor, Department of Kinesiology, CSU—San Marcos  08/08 – 07/14 Associate Professor, Department of Kinesiology, CSU—San Marcos  08/04 – 07/08 Assistant Professor, Department of Kinesiology, CSU—San Marcos  08/01 – 05/04 Assistant Professor, Department of Exercise Science, Salisbury University |

**B. Selected peer-reviewed publications (in chronological order out of 43 publications).**

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| **Astorino TA**, Harness ET, White AC. Efficacy of acute intermittent hypoxia on physical function and health status in humans with spinal cord injury: a brief review. Neural Plasticity 2015, 409625.  Wood K, Olive B, LaValle K, Thompson H, Greer K, **Astorino TA**. Dissimilar physiological and perceptual responses between sprint interval training and high-intensity interval training. J Str Cond Res 2015 (in press).  King L, Sillers W, McCarthy K, Louis P, **Astorino TA**. Higher fat oxidation in response to treadmill walking versus cycle ergometry: a pilot study. J Sports Med Phys Fitness 2015 (in press).  **Astorino TA**, Schubert MM, Palumbo E, Stirling D, McMillan DW, Gallant R, Dewoskin R. Perceptual responses to two distinct regimens of interval training. J Str Cond Res 2015 (in press).  **Astorino TA**, McMillan DW, Edmunds RM, Sanchez E. Increased cardiac output elicits higher V̇O2max in response to self-paced exercise. Appl Physiol Nutr Metab 40(3):223-229, 2015.  White AC, Salgado R, Schneider SM, Loeppky J, **Astorino TA**, Mermier C. Does heat acclimation improve exercise capacity at altitude? A cross-acclimation model. Int J Sports Med 35(12):975-981, 2014.  **Astorino TA**, Harness ET, Witzke KA. Chronic activity-based therapy does not improve body composition, insulin-like growth factor-I, adiponectin, or myostatin in persons with spinal cord injury. J Spinal Cord Med. 2014 (in press).  Lee CL, Cheng CF, **Astorino TA**, Lee CJ, Hsin-Wei Huang HW, Chang WD. Effects of carbohydrate combined with caffeine on repeated sprint cycling and agility performance in female athletes. J Int Soc Sports Nutr 11:17, 2014.  **Astorino TA**, Schubert MM. Individual responses to completion of short-term and chronic interval training: A retrospective study. PLOS One 9:5:e97638, 2014.  Harness ET, **Astorino TA**, Knoblach S, Feather J. Change in neuroplasticity-related proteins in response to acute activity-based therapy in persons with spinal cord injury. Topics Spinal Cord Injury Rehabil 20(2):147-157, 2014.  **Astorino TA**, Harness ET, Witzke KA. Effect of chronic activity-based therapy on bone mineral density and bone turnover in persons with spinal cord injury. Eur J Appl Physiol 113(12): 3027-3037, 2013.  **Astorino TA**, Schubert MM, Palumbo E, Stirling D, McMillan DW, Cooper C, Godinez J, Martinez D, Gallant R. Magnitude and timecourse of changes in maximal oxygen uptake in response to distinct regimens of chronic interval training in sedentary women. Eur J Appl Physiol 113(9): 2361-2369, 2013.  **Astorino TA**, Schubert MM, Palumbo E, Stirling D, McMillan DW. Effect of two doses of interval training on maximal fat oxidation in sedentary women. Med Sci Sports Exerc 45(10):1878-1886, 2013.  **Astorino TA**, Martin BJ, Schachtsiek, Wong K. Caffeine ingestion and intense resistance training alter post exercise hypotension in normotensive and pre-hypertensive men. Res Sports Med 21(1): 52-65, 2013.  Schubert MM, **Astorino TA**. A systematic review of the efficacy of ergogenic aids for improving running performance. J Str Cond Res 27(6): 1699-1707, 2013.  **Astorino TA**, Allen RP, Roberson DW, Jurancich M. Effect of high-intensity interval training on cardiovascular function, VO2max, and muscular force. J Str Cond Res 26(1):138-145, 2012.  Dalleck LC, **Astorino TA**, Erickson RM, McCarthy CM, Beadell AA, Botten BH. Suitability of verification testing to confirm attainment of VO2max in middle-age and older adults. Res Sports Med 20(2): 118-128, 2012.  **Astorino TA**, Matera AJ, Basinger J, Evans M, Schurman T, Marquez R. Effects of red bull energy drink on repeated sprint performance in women athletes. Amino Acids 42(5):1803-1808, 2012.  **Astorino TA**, Cottrell T, Lozano AT, Aburto-Pratt K, Duhon J. Increases in cycling performance in response to caffeine ingestion are repeatable. Nutr Res 32(2): 78-84, 2012.  **Astorino TA**, Cottrell T, Talhami Lozano A, Aburto-Pratt K, Duhon J. Effect of caffeine on RPE and perceptions of pain, arousal, and pleasure/displeasure during a cycling time trial in endurance trained and active men. Physiol Behav 106(2): 211-217, 2012.  **Astorino TA**, Cottrell T. Reliability and validity of the Velotron Racermate™ cycle ergometer to measure anaerobic power. Int J Sports Med 33(3):205-210, 2012.  **Astorino TA**, Roupoli LR, Valdivieso BR. Caffeine does not alter RPE or pain perception during intense exercise in active women. Appetite 59(2): 585-590, 2012.  **Astorino TA**, Allen RP, Roberson DW, Jurancich M, Lewis RW, McCarthy K, Trost E. Adaptations to high-intensity training are independent of gender. Eur J Appl Physiol 111(7):1279-1286, 2011.  Harness ET, **Astorino TA**. Acute energy cost of multi-modal activity based therapy in persons with spinal cord injury. J Spinal Cord Med 34(5):495-500, 2011.  **Astorino TA**, Martin BJ, Schachtsiek L, Wong K, Ng K. Minimal effect of acute caffeine ingestion on intense resistance training performance. J Str Cond Res 25(6): 1752-1758, 2011.  **Astorino TA**, Terzi M, Roberson DW, Burnett TR. Effect of caffeine intake on pain perception during high-intensity exercise. Int J Sports Nutr Exerc Metab 21(1): 27-32, 2011.  **Astorino TA**, Martin BJ, Schachtsiek L, Wong K. Effect of acute caffeine ingestion on EPOC after intense resistance training. J Sports Med Phys Fit 51(1): 11-17, 2011.  **Astorino TA**, Roberson DW. Efficacy of acute caffeine ingestion for short-term, high-intensity exercise performance: A systematic review. J Str Cond Res 24(1): 257-265, 2010.  Robergs RA, Dwyer D, **Astorino TA**. Recommendations for improved data processing from expired gas analysis indirect calorimetry. Sports Med 40(2): 95-111, 2010.  **Astorino TA**, White AC. Assessment of anaerobic power to verify VO2max attainment. Clin Physiol Funct Imaging 30(4): 294-300, 2010.  **Astorino TA**, Terzi M, Roberson DW, Burnett TR. Effect of two doses of caffeine on muscular function during isokinetic exercise. Med Sci Sports Exerc 42(12): 2205-2210, 2010.  **Astorino TA**, White AC, Dalleck LC. Supramaximal testing to confirm attainment of VO2max in sedentary men and women. Int J Sports Med 30(4): 279-284, 2009.  **Astorino TA**, Harness ET. Substrate metabolism during exercise in the spinal cord injured. Eur J Appl Physiol 106(2): 187-193, 2009.  **Astorino TA**. Alterations in VO2max and the VO2 plateau with manipulation of sampling interval. Clin Physiol Funct Imaging 29(1): 60-67, 2009.  **Astorino TA**, Rohmann RL, Firth K. Effect of caffeine ingestion on one-repetition maximum muscular strength. Eur J Appl Physiol 102(2): 127-132, 2008.  **Astorino TA**, Tyerman N, Wong K, Harness E. Efficacy of a new rehabilitative device for individuals with spinal cord injury. J Spinal Cord Med 31(5): 586-591, 2008.  **Astorino TA**, Rohmann, RL, 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.  **Astorino TA**, 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):270-274, 2005.  **Astorino TA**, Willey J, Kinnahan J, Welch H, Larsson SM, Dalleck, LC. Elucidating factors explaining the plateau in VO2 at VO2max. Br J Sports Med 39:655-660, 2005.  **Astorino TA**, Ghiasvand F, Robergs RA. Acute hypoxia alters lactate threshold in chronic altitude residents. J Exerc Physiol 7(2):6-15, 2004.  **Astorino TA**, Tam P, Rietschel JC, Johnson SM, Sakarya CE, Freedman TP. Optimal duration of VO2max testing. J Exerc Physiol 7(6):1-8, 2004.  **Astorino TA**, Tam P, Rietschel JC, Johnson SM, Freedman TP. Changes in physical fitness parameters during a competitive field hockey season. J Str Cond Res 18(4):850-854, 2004.  **Astorino TA**. Incidence of the oxygen plateau at VO2max during exercise testing to volitional fatigue. J Exerc Physiol 3(4):1-12, 2000.  **Astorino TA**. Is the ventilatory threshold coincident with maximal fat oxidation during submaximal exercise in women? J Sports Med Phys Fit 40(3):209-216, 2000. |

**C. Research Support.**

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| 06/11 – 05/15 NIH SC3 1SC3GM095416-01 (National Institute of General Medical Sciences)  Effect of intense multi-modal training on bone mineral density, bone biomarkers,  body composition, and quality of life in persons with spinal cord injury.  07/10 – 07/12 NIH NCMRR/NINDS 5R24 HD050846 (Integrated Molecular Core for Rehabili-  tation Medicine  Effect of activity-based exercise on neuroplasticity-related proteins in persons with  spinal cord injury. co-PI with Eric Harness (PI) |