

CURRICULUM VITAE

Samuel A. E. Headley, Ph.D. ACSM-CCEP, ACSM-RCEP_{SM}, EIM-3, CSCS, FACSM
 Professor
 Exercise Science & Athletic Training
 Exercise Physiology

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10 Glenn Drive
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MARITAL STATUS:

Married
 3 children & 2 grandchildren

EDUCATION:

1986-91	Temple University, Philadelphia Ph.D. in Physical Education Area of Emphasis: Exercise Physiology Doctoral Dissertation: Effect of nonselective and selective beta adrenergic blockade and cold air exposure on the human cardiovascular system.
1984-85	King's College, London MSc in Human and Applied Physiology Masters Project: An investigation into the effect of a steroidal anti- inflammatory agent (Prednisolone) on muscle pain and damage induced by eccentric exercise.
1983-84	University College, London Preliminary Studies
1979-82	Birmingham University B.A (Honors) in Physical Education Major: Exercise Physiology

EMPLOYMENT:

2003-present	Professor of Exercise Physiology at Springfield College
2005-present	Adjunct faculty member at Holyoke Community College in the department of Science, Engineering & Math. Teaching Anatomy & Physiology
1997-2003	Associate Professor of Exercise Physiology at Springfield College
1992-1997	Assistant Professor of Exercise Physiology at Springfield College.
1993-2016	Adjunct Professor in the School of Human Service, Springfield College.
1991-1992	Assistant Professor of Health & Physical Education at Gettysburg College.
1991 (May-Aug)	Exercise Physiologist at the Haverford Community Hospital Wellness Center.
1986-1991	1986-1988 Graduate Assistant in the department of Physical Education, Temple University, Philadelphia.
1988-1990	Teaching Associate in the department of Physical Education and in the Biokinetics Research Laboratory, Temple University, Philadelphia.
1990-1991	Research Assistant in the Biokinetics Research Laboratory, Temple University, Philadelphia.
1990-1991	Biology Instructor at The Community College of Philadelphia, Philadelphia, Pennsylvania
1985-86	Physical Education Teacher at the St. Michael's School, Barbados
1982-83	Physical Education Teacher at Christ Church Foundation School, Barbados

TEACHING EXPERIENCE (4/4 load!)

Academic Courses

- Cardiopulmonary Exercise Physiology
- Electrocardiography & Graded Exercise Testing and Prescription (Undergrad & Grad)
- Exercise Testing & Prescription (Under Grad)
- Medical Physiology(Graduate)
- Exercise Biochemistry (Graduate)
- Graded exercise testing and electrocardiography (Grad)
- Seminar in Exercise Physiology (Grad)

Program Director

- Exercise Physiology at Springfield College
 - Doctoral program in Exercise Physiology
 - Master's program in Clinical Exercise Physiology
 - Master's program in Exercise Physiology (Sports Science)

PROFESSIONAL ORGANIZATIONS

American College of Sports Medicine (Member of the Board of Trustees 2021-2024)

New England Chapter of the American College of Sports Medicine.

The American Society of Nephrology

Clinical Exercise Physiology Association(<http://www.acsm-cepa.org/>) founding member

"Healthy Living for Pandemic Event Protection (HL – PIVOT) Network, Springfield, MA, USA"

Global renal exercise network (GREX) member

PROFESSIONAL ASSIGNMENTS:

Section Editor (metabolic): Journal of Clinical Exercise Physiology

Section Editor Health and Fitness Journal

Reviewer for the National Institute of Health, site visit team at Tennessee State University 1991.

Reviewer of NIH, R15 grant proposals Spring 2014

Reviewer of NIH R15 grant proposals Fall 2014

Reviewer of NIH R15 grant proposal Summer 2015

Reviewer of NIH R15 grant proposals Summer 2019

Reviewer of NIH R15 grant proposals Spring 2020

Reviewer for the VA Career Development Awards Spring 2020

Reviewer for the VA Career Development Awards Spring 2022

Reviewer for the VA Career Development Awards Summer 2024

Reviewer for American Journal of Kidney Diseases.

Reviewer for National Kidney Foundation (Advances in Chronic Kidney Disease).

Member at large of New England Chapter of the American College of Sports Medicine (NEACSM, 1999-2001)

- Chair of the Scholarship Committee of the NEACSM (2000-2001).
- Chair of the Honor Award Committee of the NEACSM (2000-2001).

Former member of the Medical Panel of the West Indies Cricket Board. Functioned as the Sport Scientist consultant.

Co-Chair of the Advocacy Committee of the Clinical Exercise Physiology Association (2008-2010)

Chair of the Registered Clinical Exercise Physiology Committee of the ACSM (2014-2015)

President of the Clinical Exercise Physiology Association (CEPA) 2016-2017

Immediate Past-President Clinical Exercise Physiology Association (CEPA) 2017-2018

PROFESSIONAL CERTIFICATIONS & HONORS:

Exercise Specialist (American College of Sports Medicine). (1993).

Fellow of the American College of Sports Medicine (May 1996)

ACSM Registered Clinical Exercise Physiologist (November 2000)

ACSM Exercise is Medicine- Level III (January 2015)

Humanics Professor at Springfield College (AY 2016-2017)

Karpovich Chair of Wellness at Springfield College (2018-2021)

Adjunct Fellow in the Institute for Healthcare Delivery and Population Science. (2020-

Fellow of the Clinical Exercise Physiology Association (Spring 2024)

PUBLICATIONS

See the following link for a listing of publications on my biography
<https://www.ncbi.nlm.nih.gov/myncbi/collections/bibliography/49116447/>

Books & Published Chapters in Books

Tighe, D & Headley S. Exercise Prescriptions for Healthy Individuals and Cardiac Patients in Pocket Guide to Stress Testing © 2019 by John Wiley & Sons

ACSM's Resource Manual for Guidelines for Exercise Testing and Prescription
 Headley SA, Wood RJ, Tighe DA. 7th ed. Swain DP, editor. Philadelphia: Lippincott Williams & Wilkins; 2014. Chapter 41, Exercise prescription for patients with comorbidities and other chronic diseases; p.682-698. 862p.

Clinical exercise physiology, Headley SA, Germain MJ.
 3rd ed. Ehrman JK, Gordon PM, Visich PS, Keteyian SJ, editors. Champaign, IL: Human Kinetics; 2013. Chapter 11, End-Stage Renal Disease; p.197-210. 757p

ACSM's Certification Review (2022), Associate Editor, Wolters Kluwer, Philadelphia

ACSM'S Guidelines for Exercise Testing and Prescription, Headley SA.
11th ed. Liguori, G editor. Baltimore, MD: Lippincott Williams & Wilkins; 2022.
Chapter 10, Exercise testing and prescription for populations with other chronic diseases
and health conditions; p.336-340

ACSM'S Guidelines for Exercise Testing and Prescription, Headley SA.
10th ed. Riebe D editor. Baltimore, MD: Lippincott Williams & Wilkins; 2018. Chapter
11, Exercise testing and prescription for populations with other chronic diseases and
health conditions; p.334-348

ACSM'S Guidelines for Exercise Testing and Prescription, Headley SA.
9th ed. Pescatello, LS editor. Baltimore, MD: Lippincott Williams & Wilkins; 2014.
Portions of chapters 9 &10; p.246-249, 296-298, 305-308.

ACSM'S Guidelines for Exercise Testing and Prescription, Headley SA.
8th ed. Thompson WR, editor. Baltimore, MD: Lippincott Williams & Wilkins; 2010.
Chapter 10, Exercise prescription for other clinical populations; p.225-266. 380p

ACSM Clinical exercise physiology, Lara GP, Mazur SM, & Headley SA Chapter 16:
Persons with Comorbidities Thompson WR, editor. Baltimore, MD: Lippincott Williams
& Wilkins; 2019

Headley, S. A. E., & Massad, S. J.(1999) Nutritional supplements for athletes (NASPE)

Published Papers

Coker, NA, Germain, MJ, Ikizler, TA, Cornelius, A, Evans, EE, O'Neill, E., Mette,
CD, Sha, F., Friedman, S., Headley, SA. Muscle Strength, Neuromuscular Function, and
Functional Measures Across Stages of Chronic Kidney Disease. BMC Nephrology (In
Press).

Opeyemi, A., Gagnon, J., Mullin, E., Headley, S. Investigating the influence of physical
activity intensity level on arterial stiffness response in hypertension: A UK Biobank
participant-based study.

Feofilaktov, VV., Smith, DM, Headley, SAE., & Myakinchenko, E.B. Aerobic-
Resistance Exercise Improves Double Pole Performance and Kinematics in Harder
Conditions in Junior Cross-Country Skiers. Aerobic-resistance exercise improves double
pole performance and kinematics in harder conditions in junior cross-country skiers
J Strength Cond Res XX(X): 000–000, 2025

Vitti S, Bruneau M, Headley SAE, O'Neill, E & Miele E, Combined ketone ester and carbohydrate solution on exercise capacity in type 2 diabetics. *Science & Sports* 40 (2025) 338—345 (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Opeyemi, A., Smith, D, & Headley, S (2024). Comparing the Impact of High-Intensity Interval Training (HIIT), Moderate-Intensity Interval Training (MIIT), and Isometric Training on Hypertension: A Comprehensive Study. *American Journal of Hypertension Research*. 2024; 9(2):15-21. Doi: 10.12691/ajhr-9-2-2.

Opeyemi, A., & Headley, S. (2024). Prevalence of Hypertension among Black Populations: A Comprehensive Review Across Africa, the Caribbean, and North America. *American Journal of Hypertension Research*. 2024, 9(2), 8-14. DOI: 10.12691/ajhr-9-2-1

Headley SA, Chapman D, Germain MJ, vans EE, Madsen KL, Miele EM, Kirton K, Loseke J, Cornelius A, Martin B, Nindl B Park H, Vaziri ND, Ikizler A, Effects of high amylose resistant starch on gut microbiota and uremic toxin levels in patients with stage G3a-G4 chronic kidney disease: a randomized trial. *Journal of Renal Nutrition* (In press)

Pack QR, Shea M, Brawner CA, Headley S, Hutchinson J, Madera H, and Keteyian SJ. Exercise Prescription Methods and Attitudes in Cardiac Rehabilitation: A NATIONAL SURVEY. *J Cardiopulm Rehabil Prev* 2022.

Shea. M., Headley, S, Mullin, E, Brawner, CA, Schilling, P, Pack, QR. Comparison of Ratings of Perceived Exertion and Target Heart Rate Based Exercise Prescription in Cardiac Rehabilitation: Randomized Controlled Pilot Study. *J. Cardiopul. Rehabil. Prev* 2022, Vol 42, (5) p 352-358

Jaramillo-Morales,J, Korucu B, Pike, M, Lipworth, L Stewart, , Headley, S.A.E., Germain, M, Begue, G, Roshanravan, B, Tuttle, K, Himmelfarb, J Robinson-Cohen, Ikizler, A, Gamboa, J. Effects of caloric restriction and aerobic exercise on circulating cell-free mitochondrial DNA in patients with moderate-to-severe chronic kidney disease. *American Journal of Physiology-Renal Physiology* 322: F68–F75, 2022.

Rickson, J, Mullin, EM, Janssen X, Maris, SA, & Headley, S.A.E. Arterial Stiffness, Total Sedentary Behavior, and Fragmentation of Sedentary Behavior in Physically Active Individuals. *Physiological Reports*. (In Press)

Rickson, J.J., Maris, S.A, & Headley, S.A. E. Isometric Exercise Training: A Review of Hypothesized Mechanisms and Protocol Application in Persons with Hypertension. *Int J Exerc Sci*, 2021, 14(2): 1261-1276,

Headley SA, Chapman DJ, Germain MJ, Evans EE,, Hutchinson J, Madsen KL, Ikizler TA, Miele EM, Kirton K,, O'Neill E, Cornelius A, Martin B, Nindl B, & Vaziri ND The effects of 16-weeks of prebiotic supplementation and aerobic exercise training on inflammatory markers, oxidative stress, uremic toxins, and the microbiota in pre-dialysis kidney patients: a randomized controlled trial-protocol paper. *BMC nephrology [BMC Nephrol]*, ISSN: 1471- 2369, 2020 Nov 26; Vol. 21 (1), pp. 517; Publisher: BioMed Central; PMID: 33243160

Pike MM, Alsouqi A, Ellis C, Headley S, Tuttle K, Wood R, Evans EE, Milch CM, Moody KA, Germain M, Stewart TG, Lipworth L, Himmelfarb J, Ikizler^a TA, Robinson-Cohen C. Supervised exercise intervention and overall activity in chronic kidney disease. *Kidney Int Rep* 2020 June Vol 5 (8) 1261-1270

Clegg DJ, Headley SA, & Germain MJ. Impact of Dietary Potassium Restrictions in Chronic Kidney Disease on Clinical Outcomes: Benefits of a Plant-Based Diet. *Kidney Medicine* 2020, Vol 2 (4) pp 476-487.

Bradley MacDonald, Ann-Marie Gibson, Xanne Janssen, Jasmin Hutchinson, Samuel Headley, Tracey Matthews and Alison Kirk. Should We Scale-Up? A Mixed Methods Process Evaluation of an Intervention Targeting Sedentary Office Workers Using the RE-AIM QuEST Framework. *International journal of environmental research and public health* [Int J Environ Res Public Health], ISSN: 1660-4601, 2019 Dec 29; Vol. 17 (1); Publisher: MDPI; PMID: 31905751

Momb BA, Headley, SAE, Matthews TD, Germain MJ. Intradialytic exercise increases cardiac power index. *J Nephrol*. 2020;9(1):e07

Aydemir N, Pike MM, Alsouqi A, Headley SAE, Tuttle K, Evans E, Moody KA, Germain M, Lipworth L, Himmelfarb J, Ikizler TA, Robinson-Cohen C. Effects of Diet and Exercise on Adipocytokine levels in Patients with Moderate to Severe Chronic Kidney Disease. *Nutrition Metabolism and Cardiovascular Disease*. Nutr Metab Cardiovasc Dis, ISSN: 1590-3729, 2020 Jul 24; Vol. 30 (8), pp. 1375-1381

Thompson S, Weibe N, Padwal RS, Gyenes, G, Headley SAE., Radhakrishnan J, and Graham M. The effect of exercise on blood pressure in chronic kidney disease: A systematic review and meta-analysis of randomized controlled trials. *PLoS One* [Internet]. 2019;36:10–6

Hayden Riley, Nitesh Ainani, Ahmad Turk, Samuel Headley, Heidi Szalai, Mihaela Stefan, Peter K. Lindenauer, & Quinn R. Pack. Smoking cessation after hospitalization for myocardial infarction or cardiac surgery: Assessing patient interest, confidence, and physician prescribing practices. *Clinical Cardiology*. 2019;1–6

Michael Bruneau Jr., Jennifer McKinnon, Michael J. Germain, Tracey Matthews, Thomas Dodge, Paul Dalton, Amanda LaCroix, Shelby Van Huysen, and Samuel Headley (2019) Effects of In-Center Resistance Training in End-Stage Renal Disease: A Pilot Study. *Journal of Clinical Exercise Physiology*: September 2019, Vol. 8, No. 3, pp. 91-96.

Maris S, Winter, C, Paolone V, Headley S (2019) Comparing the Changes in Blood Pressure after Acute Exposure to Tai Chi and Walking. *International Journal of Exercise Science* 12(3) 77-87,

Riley, H, Headley, S, Lindenauer P, Goff S, Szalai H, Gaalema D, & Pack Q (2018). Patient Perception of how Smoking Status Influences Cardiac Rehabilitation Attendance After an Acute Cardiac Hospitalization. *Journal of Cardiopulmonary Rehabilitation and Prevention* pp1-6

Headley, S Hutchinson J, Wooley S, Dempsey K, Phan K, Spicer G, Xanne Janssen, Laguilles J, & Matthews, T (2018) Subjective and objective assessment of sedentary

behavior among college employees. BMC Public Health, 18:768
<https://doi.org/10.1186/s12889-018-5630-3>

Hutchinson J, Headley S, Matthews T, Spicer G, Dempsey K, Wooley S, & Janssen X (2018) Changes in Sitting Time and Sitting Fragmentation after a Workplace Sedentary Behaviour Intervention. IJERPH, 15:1148

Jaffe DA, Hewit JK, Sawyer J, Cholewa J, Bedard AJ, Matthews TD, Thompson BA, Headley SA (2018). Effects of Short-Term Macronutrient Redistribution on Performance Parameters in Resistance Trained Males. Biomedical Journal of Scientific and Technical Research 9(2), 1-6.

Jaffe DA, Hewit JK, Cholewa J, Bedard AJ, Matthews TD, Thompson BA, Headley SA (2018). Influence of Sustained Beta-Alanine Supplementation on Body Composition and Physical Performance in College-Aged Males Seeking Military Commission. International Journal of Human Movement and Sports Sciences 6(1), 1-9. DOI: 10.13189/saj.2018.060101

Miele EM, Headley SAE. [The Effects of Chronic Aerobic Exercise on Cardiovascular Risk Factors in Persons with Diabetes Mellitus](#). Curr Diab Rep. 2017 Sep 12;17(10):97. doi: 10.1007/s11892-017-0927-7. Review. PubMed PMID: 28900818.

Ikizler TA, Robinson-Cohen C, Ellis C, Headley SAE, Tuttle K, Wood RJ, Evans EE, Milch CM, Moody KA, Germain M, Limkunakul C, Bian A, Stewart TG, Himmelfarb J. [Metabolic Effects of Diet and Exercise in Patients with Moderate to Severe CKD: A Randomized Clinical Trial](#). J Am Soc Nephrol. 2018 Jan;29(1):250-259. doi: 10.1681/ASN.2017010020. Epub 2017 Oct 16

Miele EM, Headley SA, Joubert J, Taylor BA & Wood RJ (2017) HDL particle pattern and overall lipid responses to a short term moderate intensity aerobic exercise training intervention in patients with chronic kidney disease. Clinical Kidney Journal Aug; Vol. 10 (4), pp. 524-531

Blood pressure response to acute and chronic exercise in chronic kidney disease. Headley S, Germain M, Wood R, Joubert J, Milch C, Evans E, Cornelius A, Brewer B, Taylor B, Pescatello LS. Nephrology (Carlton, Vic.). 2017; 22(1):72-78.

Pack QR, Woodbury EA, Headley SA, Visintainer P, Engelman R, Miller A, Riley H, Lagu T, & Lindenauer, PK. Ambulation Orderlies and Recovery After Cardiac Surgery: A Pilot Randomized Controlled Trial Journal of Clinical Exercise Physiology. 2017;6(3):1-8.

Headley, SA, Germain, M, Wood, R, Joubert, J, Milch, C, Evans, E, Poindexter, A, Cornelius, A, Brewer, B, Pescatello, LS, & Parker, B. (2014) Short-term aerobic exercise and vascular function in CKD stage 3: A randomized controlled trial. Am J Kidney Dis. 64(2):222-229.

Headley, SA, Germain, M, Milch, C, Pescatello, L, Coughlin, M, Nindl, BC, Cornelius, A, Sullivan, S, Gregory, S, & Wood, R (2012). Exercise Training Improves HR responses and VO_{2peak} in Predialysis Kidney Patients. Med.Sci.Sports Exerc. Vol. 44, No. 12, pp. 2392-2399.

Jones, MT, Ambegaonkar, JP, Nindl, BC, Smith, JA, & Headley, SA.(2012) Effects of unilateral and bilateral lower-body heavy resistance exercise on muscle activity and testosterone responses. *J Strength Cond Res* 26(4):1094-1100.

Wood, RJ, Gregory, SM, Sawyer, J, Milch, CM, Matthews, TD,& Headley, SAE. (2012). Preservation of fat-free mass after two distinct weight loss diets with and without progressive resistance exercise. *Metab Syndr Related Disord*. 10(3) 167-74

Gregory, SM, Headley, SA, Germain, M, Flyvbjerg, A, Frystyk, J, Coughlin, MA, Milch, CM, Sullivan, S, & Nindl, BC. Lack of circulating bioactive and immunoreactive IGF-I changes despite improved fitness in chronic kidney disease patients following 48 weeks of physical training. *Growth Hormone & IGF Research*, 21 (2011) 51-56.

Gregory, SM, Headley, SA, Wood, R.J. The effects of dietary macronutrient distribution on vascular integrity in obesity and metabolic syndrome. *Nutrition Reviews*, 69(9) (2011) 493-560. (Review)

Gregory, SG, Wood, RJ, Matthews, T, Vanlangen, D, Sawyer, J, & Headley, SA. Substrate utilization is influenced by acute dietary carbohydrate intake in active, healthy females. *Journal of Sports Science and Medicine*, 10 (published online March 1, 2011).

Headley, S. A., Henry, K., Nindl, B. C., Thompson, B. A., Kraemer, W. J., Jones, M. T. (2011). Effects of Lifting Tempo on 1 RM and Hormonal Responses to a Bench Press Protocol. *J Strength Cond Res* 25(2):406-8.

Scott, R. A., Irving, R., Irwin, L., Morrison, E., Charlton, V., Austin, K. Tladi, D., Headley, S. A., Kolkhorst, F., Pitsiladis, Y. P. (2010) ACTN3 and ACE genotypes in elite Jamaican and US sprinters. *Medicine and Science in Sports and Exercise*. 42 (1) 107-112

Goodwin, K. A., Headley, S. A., & Pescatello, L.S (2009) Exercise Prescription for the Prevention and Management of Hypertension. *American Journal of Lifestyle Medicine* (

Headley, S. A., Germain, M., Milch, C. M., Buchholz, M. P., Coughlin, M. Pescatello, L.S.(2008) The Immediate Blood Pressure Lowering Effects of Aerobic Exercise among Patients with Chronic Kidney Disease. *Nephrology* 13: 601-606.

Carlson, L. A., Headley, S. A., Debruin, J., Tuckow, A. T., Koch, A.J., Kenefick, R.W.,(2008) Carbohydrate supplementation and immune responses after acute exhaustive resistance exercise. *Int. J. Sport Nutr Exerc Metab* 18(3):247-59.

Nindl, B.C., Headley, S. A., Tuckow, A. P., Pandorf, C. E., Diamandi, A., Khosravi, M. J., Welles, R., Jones, M., Germain, M (2004). IGF-1 system responses during 12 weeks of resistance training in end-stage renal disease patients. *Growth Horm. IGF Res* 14: 245-240

Headley, S. A., Germain, M., Mailloux, P., Mulhern, J., Ashworth, B., Burris, J., Brewer, B., Nindl, B., Coughlin, M., Welles, R., & Jones, M.(2002). Resistance training improves strength and functional measures in patients with end-stage renal disease. *Am J. Kidney. Dise.* 40 (2): 355-364.

Nindl, B. C., & Headley, S. A. E. (2002). Guest editorial to accompany Hemodynamic responses to stress among black women: fitness and parental hypertension. *Med. Sci. Sports Exerc.*, 34,(7):1105.

Headley, S., Germain, M., and Braden, G. (2001). Nephrology advanced. In N. Ruderman (Ed.), *The Health Professional's Guide to Diabetes and Exercise*. American Diabetes Association.

Leung, R., Germain, M., Manos, T., Headley, S. (2001) Effect of intradialytic EXercise on urea kinetics. *Clin Exercise Physiol.* 3 (3): 144-153.

Niles, E. S., Lachowetz, T., Garfi, J., Sullivan, W., Smith, J. C., Leyh, B. P., & Headley, S. A. Carbohydrate-protein drink improves performance after recovery from endurance exercise. *Journal of Exercise Physiology*, 4, 1.
<http://www.css.edu/users/tboon2/asep/January2001.htm>

Robinson, E.M., Graham, L.B., and Headley, S. A. Sprint performance: The reliability of run to exhaustion. *Journal of Exercise Physiology*, 4, 2.
<http://www.css.edu/users/tboon2/asep/May2001.htm>

Massad, S. J., & Headley, S. A. E. (1999) Nutritional assessment: considerations for athletes. *Athletic Therapy Today.*, 4(6):6-11.

Jarvis, A.T., Felix, S.D., Sims, S., Jones, M.T., Coughlin, M., and Headley, S.A. (1999, April) Carbohydrate supplementation fails to improve the sprint performance of female cyclists. *Journal of Exercise Physiology*, 2, 2.
<http://www.css.edu/users/tboon2/asep/april99.htm>

Headley, S., Keenan, T. Manos, T. M., Phillips, K., Lachowetz, T, Keenan, H, and Mahar, M. T. (1998) Renin and hemodynamic responses to exercise in borderline hypertensives. *Ethnicity Dis.*, 8,312-318.

Felix, S. D., Manos, T. M., Jarvis, A. T., Jensen, B. E., and Headley, S. A. (1997). Swimming performance following different recovery protocols in female collegiate swimmers. *J. Swim. Res.* 12: 1-6.

Headley, S.A., Moser, D., Golan, R., Finck, A., Kendrick, Z., & Paolone, A. (1996). Cardiovascular responses to cold and β blockade. *Can. J. Physiol. Pharmacol.*, 74, 112-115.

Headley, S.A., Claiborne, J., Lottes, C., & Korba, C. (1996). Hemodynamic responses associated with post-exercise hypotension in normotensive black males. *Ethnicity Dis.*, 6, 190-201.

Ball, T. C., Headley, S., Vanderburg, P., & Smith, J. C. (1995). Carbohydrate-Electrolyte Replacement Improves Sprint Capacity Following 50 Minutes of High-Intensity Cycling. *Int. J. Sports Nutr.*, 5 151-158.

Published Abstracts

Coker NA, Futch GG, Cummings ND, O'Neill E, Evans EE, Germain MJ, Headley SAE. Force Steadiness and Functional Performance in Individuals with Chronic Kidney Disease Compared to Healthy Controls. To be presented at: ACSM National Conference 2023, Denver CO USA.

Futch GG, Headley SAE, Cummings ND, O'Neill E, Evans EE, Germain MJ, Coker NA. **Neuromuscular and Functional Performance in Individuals with Chronic Kidney Disease Compared to Healthy Controls.** Accepted for presentation at: ACSM Annual Meeting 2023, Denver, CO USA.

Headley SA, Chapman DJ, Madsen K, Evans EE, Cornelius A, Miele E, Kirton K, Loseke JD, Martin BJ, Ikizler TA & Germain MJ. Sixteen weeks of high amylose resistant starch supplementation leads to a reduction in p-cresyl-sulphate in predialysis patients. Presented at Kidney Week 2022 in Orlando

Headley SA, Hutchinson J, Thompson B, Ostroff M, Doyle-Campbell C, Cornelius A, Dempsey K, Siddall J, Miele E, Evans E, Wood B, Sirois C, Winston B, & Germain M,: The effect of a personalized multi-component lifestyle intervention program in stage 3 & 4 CKD patients. *Medicine & Science in Sports & Exercise*. 51(6):450, June 2019.

Jaffe DA, Matthews T, Paolone VJ, Headley SAE (2016). Effects of Chronic Beta-Alanine Ingestion on Physical Performance Parameters in College-Aged Males Seeking Military Commission. *Medicine & Science in Sports & Exercise*, 48(5S Suppl 1): 164.

Headley SA, Germain MJ, Wood RJ, Joubert JW, Milch CM, Parker B, Evans EE, Cornelius A, Brewer BW, Pescatello LS: Exercise Training and PostExercise Hypotension in Kidney Patients [Abstract]. *J Am Soc Nephrol* 23, 2012: 471A.

Headley S, Germain MJ, Milch CM, Pescatello LS, Coughlin M, Cornelius AE, Sullivan S, Wood RJ: Lifestyle modifications and the progression of chronic kidney disease. *J Am Soc Nephrol* Abstracts Issue 20:2009. Accessed online http://www.asnonline.org/education_and_meetings/renal_week/2009/digital-abstract.aspx

Joubert, J, Germain, M, Milch, C, Cornelius, A, Headley, S. (2011) Effect of a 48-Week Aerobic Training Program On Heart Rate Recovery In Stage 3 CKD . *Medicine & Science in Sports & Exercise*. 43(5):759

Gregory, S., Germain, M., Milch, C., Coughlin, M, Headley, S (2009) Heart rate and blood pressure recovery after GXT in CKD patients. *Medicine and Science in Sports and Exercise*, 41 (5) Suppl.

Lucas, S., Armstrong, K., Blegen, M., Wood, R., Matthews, T., & Headley, S.A. Post exercise blood pressure responses in individuals with metabolic syndrome. *Medicine and Science in Sports and Exercise*, 41 (5) Suppl.

Fournier, S, T., Germain, M., McMahon, G., Ernst, T., Gobellet, S., Lariviere, M., Paolone, V., Coughlin, M., Headley, S.A. (2009). The Lactate and Ventilatory Thresholds in CKD Patients and Healthy Individuals. *Medicine and Science in Sports and Exercise*, 41 (5) Suppl.

Irving, R., Scott, R. A., Irwin, L., Morrison, E., Charlton, V., Austin, K., Headley, S., Kolkhorst, F., Pitsiladis, Y. (2009). The Actn3 R577x polymorphism in elite Jamaican and USA sprinters. *Medicine and Science in Sports and Exercise*, 41 (5) Suppl.

Scott, R.A., Irving, R., Irwin, L., Morrison, E., Charlton, V., Austin, K., Headley, S., Kolkhorst, F., Pitsiladis, Y. (2009). Angiotensin-I converting enzyme polymorphisms in elite Jamaican and USA sprinters. *Medicine and Science in Sports and Exercise*, 41 (5) Suppl.

Headley, S. A., Germain, M. J., Milch, C. M., Pescatello L. S., Coughlin, M. A., Cornelius, A.E., Sullivan, S., Wood R.J. (to be presented at the annual meeting of the ASN in San Diego In October). Lifestyle Modifications and the Progression of Chronic Kidney Disease.

Fournier, S.T., Germain, M., Buchholz, M., Milch, C., Coughlin, M., Headley, S.A. (2008) The ventilatory threshold in CKD patients. *Medicine and Science in Sports and Exercise*, 40, (5) Suppl. Presented at the Annual ACSM meeting

Headley, S. A., Germain, M., Milch, C. M., Pescatello, L.S., Buchholz, M. P., Coughlin, M. (2007) Moderate intensity aerobic exercise leads to postexercise hypotension in CKD patients. *J. Am. Soc. Nephrol* 18(10):540A.

Headley, S. A., Germain, M. J., Mailloux, P., Mulhern, J., Ashworth, B. M., Burris, J. L., Brewer, B., Nindl, B. B., Coughlin, M., Welles, R., Jones, M. T. (2002). Resistance training improves strength and functional measures in ESRD patients. *Medicine and Science in Sports and Exercise*, Vol 34:5 S135.

Headley, S. A., Scarlett, R., Rogers, R., Bourne W., Jones, M. T., (2000). Physical fitness profile of a sample of elite Barbadian cricket players. *Medicine and Science in Sports and Exercise*, Vol 32:5 S334.

Headley, S. A., Keenan, T, Manos, T. M., Phillips, K., Lachowitz, A., Keenan, H., & Mahar, M. T. (1998). Hemodynamics and post-exercise hypotension in Caucasian and African American borderline hypertensive females. *Medicine and Science in Sports and Exercise*, Vol 30:5 (S112)

Garfi, J. Coughlin M., Jones, M. T., & Headley, S. A. (1998) Prophylactically administered naproxin sodium has no effect on delayed onset muscle soreness in males. *Medicine and Science in Sports and Exercise*, Vol 30:5 (S103)

Sims, S. T., Brewer, B., Berger, J., & Headley, S. A. (1998). Metabolic and psychological responses of women endurance runners to high volume training. *Medicine and Science in Sports and Exercise*, Vol 30:5 (S275)

Headley, S. A., Keenan, T, Manos, T. M., Phillips, K., Lachowitz, A., Keenan, H., & Mahar, M. T. (1997). Plasma renin and hemodynamic responses in Caucasian and African American borderline hypertensive females. *Medicine and Science in Sports and Exercise*, Vol 29:5 (S81)

Niles, E. S., Lachowetz T, Garfi, Smith, J., Sullivan, W., & Headley, S. (1997). The effect of a carbohydrate-protein drink on muscle glycogen resynthesis after endurance exercise. *Medicine and Science in Sports and Exercise*, Vol 29:5 (S126).

Jarvis, A. T., Felix, S. D., Sims, S. Coughlin, M., Jones, M. T., & Headley, S. A., (1997). The effect of carbohydrate feeding on the sprint performance of female cyclist following 50 minutes of high intensity exercise. Medicine and Science in Sports and Exercise, Vol 29:5 (S126).

Miodonka, K. T., Allen, K., Headley, S. A., Li, B., Redmond, C., & Manos, T. M., (1997). The psychophysiological effects of Tai Chi Chuan exercise. Medicine and Science in Sports and Exercise, Vol 29:5 (S142).

Garfi, J. Marcotte, J., Drury, D., Ritterhaus, C., & Headley, S. A. (1996). The effects of 16 weeks of cross training on resting blood pressure in firefighter recruits. Medicine and Science in Sports and Exercise, Vol 28:5

Headley, S. A., Keenan, T., Keenan, H., Fisher, M., & Paolone, V. J., (1995). Hemodynamic responses of low renin vs normal renin black males during aerobic exercise. Medicine and Science in Sports and Exercise, Vol 27:5

Paolone, V. J., Keenan, T., Keenan, H., & Headley, S. A., (1995) Hemodynamic responses of hypertensive vs normotensive black males during aerobic exercise. Medicine and Science in Sports and Exercise, Vol 27:5

Ball, T. C., Headley, S., & Vanderburg, P., (1994). Carbohydrate-Electrolyte Replacement Improves Sprint Capacity Following 50 Minutes of High-Intensity Cycling. Medicine and Science in Sports and Exercise, Vol 26, (suppl 5) : S196.

Headley, S. A., Claiborne, J., Lottes, C., & Korba, C. (1993). Post exercise blood pressure and hemodynamic responses in young black males. Medicine and Science in Sports and Exercise, Vol 25, (Suppl 5)

Headley, S., Moser, D., Golan, R., Finck, A., Kendrick, Z., & Paolone, A. (1991). Cardiovascular responses to cold and β blockade. Medicine and Science in Sports and Exercise, Vol 23, (Suppl 4): S153.

Moser, D., Headley, S., Finck, A., Golan, R., Kendrick, Z., & Paolone, A. (1991). Metabolic responses to acute cold exposure and two levels of β blockade in males and females. Medicine and Science in Sports and Exercise, Vol 23, (Suppl 4): S153

Stevens, W. C., Headley, S. & Paolone, A. (1989). Exercise, Temperature and cardiovascular system interaction during simulated weightlessness. Medicine and Science in Sports and Exercise, Vol 21, (Suppl 2): S73.

Headley, S., Newham, D. J., & Jones, D. A. (1986). The effect of prednisolone on exercise induced muscle pain and damage. Clin Sci, 70, (Suppl 13): 85P.

Durnin, C., Headley, S., Holland, R., Nyeko, C., Ridout, S., & Sayers, S. (1985). Human core temperature at various sites during rapid body heating. Journal of Physiology, 369, 194P (From The Proceedings of the Physiological Society, 11-13 July 1985).

Presentations

Can Patients with Chronic Kidney Disease Benefit from Lifestyle Modifications? The Knuttgen Lecture, a keynote speaker at the NEACSM annual meeting in Springfield Massachusetts on October 17th 2024

The Karpovich Lecture 2023.....

The Impact of Lifestyle Modifications in Persons with Chronic Kidney Disease. Presented for National Kidney Foundation-Council on Renal Nutrition of New England October 2020

The Impact of Lifestyle Interventions in Persons with Chronic Kidney Disease. Presented at the NEACSM conference in November 2019

The effect of lifestyle interventions on cardiopulmonary function in CKD patients. Presented at the MAACVPR January meeting in 2019.

The Relevance of Sedentary Behavior Reduction to the Clinical Exercise Physiologist. Presented at the New England American College of Sports Medicine Annual Meeting, Fall 2017 in Providence Rhode Island

CEPA Update. Presented with Professor Peter Ronai, at the New England American College of Sports Medicine Annual Meeting, Fall 2017 in Providence Rhode Island

Lifestyle Modifications in Chronic Kidney Disease: The Risk Factor Paradox, presented at the New England American College of Sports Medicine Annual Meeting. Fall 2013

End-stage renal disease in minority populations. Presented at the Annual Meeting of the ACSM in San Francisco, 2003.

Resistance training improves strength and functional measures in patients with end-stage renal disease. Presented at the Annual Meeting of the ACSM in St Louis, 2002

Fitness and Injury concerns of International Cricket Players: presented at the Annual Meeting of the ACSM in St. Louis, 2002.

Exercise in End-stage Renal Disease. Presented at a Renal Symposium hosted by the Council on Renal Nutrition of New England. June 2002.

Training for Cricket. Presentation to the members of the West Indies training squad in Trinidad 2001.

Exercise Considerations During Dialysis Treatment. Presented with Dr. Mike Germain at the NEACSM & NEHRSA conference in Rhode Island in October 1998.

Prescription Exercise in Chronic Diseases. Presented at the Barbados Association of Medical Practitioners Medical Education Update Conference at the Barbados Hilton in May, 1998.

Hypertension: Can exercise play a role? Presented at the annual meeting of the Midatlantic Regional Chapter of the American College of Sports Medicine in November, 1995.

The Role of Exercise in the Treatment of Hypertension in Blacks. Presented at the Roxbury Heart Center in July 1995.

The Effect of Carbohydrates on Exercise. Presented at the EDA conference in Springfield, March 1995.

Post-exercise hemodynamic responses in low renin versus normal renin black males. Presented at the 9th Interdisciplinary, International Conference on Hypertension in Blacks, in Cleveland, June 1994.

Post-exercise hemodynamic responses in hypertensive versus normotensive black males. Presented at the 9th Interdisciplinary, International Conference on Hypertension in Blacks, in Cleveland, June 1994.

Hemodynamic comparisons between black and white borderline hypertensive men. Presented at the 9th Interdisciplinary, International Conference on Hypertension in Blacks, in Cleveland, June 1994.

The role of endurance exercise in the treatment of hypertension in blacks. Presented at the New England Conference of the American College of Sports Medicine, November 1994.

Post exercise blood pressure and hemodynamic responses in young black males. Presented at the annual meeting of the American College of Sports Medicine, Seattle, Washington, 1993.

Cardiovascular responses to cold and β blockade. Presented at the annual meeting of the American College of Sports Medicine, Orlando, Florida, 1991.

RESEARCH INTERESTS

Lifestyle factors and their impact upon persons with Chronic Kidney Disease.

The impact of exercise in persons with hypertension

Hypertension in blacks

GRANTS

Ongoing Research Support

Pack (PI)

Improving outcomes from cardiac rehabilitation among older adults through exercise testing and individualized exercise intensity prescriptions.

NIH R01

Headley, coinvestigator

Completed projects

Headley (PI)

Effects of Prebiotic Supplementation and Exercise on Inflammatory Markers, Vascular

Function, Cognition, and Mental Well-being in Pre-Dialysis Kidney Patients

Germain/Headley (Co-PI)

An Intensive Lifestyle Intervention Program in CKD (Move to Health 2)

This study was designed to examine the effect of an intensive, integrated lifestyle intervention program including, nutritional, behavioral, pharmacy and exercise counseling on the compliance to these interventions of stage 3-4 CKD patients.

Supported by Relypsa

Germain/Headley (Co-PI)

An Intensive Lifestyle Intervention Program in CKD (Move to Health 1)

This study was designed to examine the effect of an intensive, integrated lifestyle intervention program including, nutritional, behavioral, pharmacy and exercise counseling on the compliance to these interventions of stage 3-4 CKD patients.

1 R15 HL096097-01 Headley (PI)

9/01/2009-8/31/2012

The effect of short-term aerobic training on arterial stiffness and blood pressure in CKD patients. NIH R15 award In this study we are examining the effect of 16 weeks of aerobic training on the stiffness of arteries in stage 3 CKD patients.

Role: PI

Ikizler (PI)

Oxidative stress in chronic kidney disease: diet & exercise study. This is a multicenter trial with Vanderbilt University as the lead site. Pending start date is March 1st 2012. In this study we are examining the effect of a 6-month diet and exercise intervention on markers of oxidative stress in 1 stage 3 CKD patients.

Role: Co-investigator

Headley (PI)

3/1/2011-12/16/2011

The effect of Max-Air Nose Cones™ on the performance of varsity players.

This study was designed to test the performance of varsity players while they wore the Max-Air Nose Cones™ either in the laboratory or during a field test.

Role: PI

Headley (PI)

3/1/2010-6/18/2010

The effect of Max-Air Nose Cones™ on ventilator parameters during incremental aerobic exercise. In this study we tested the effect of using the Max-Air Nose Cones™ on peak aerobic exercise performance of a small sample of college students.

Role: PI

Germain & Headley (PI)

1/01/06-1/31/09

Effect of lifestyle interventions on the progression of kidney disease in patients with chronic kidney disease.

progression of kidney disease in patients

This study was designed to determine the effect of a 48 week exercise training program and dietary modification on the progression of CKD in stage 2-4 CKD patients.

Role: Co PI

2005. Grant from Western New England Renal & Transplant Associates to study “The Effect of Acute Aerobic Exercise on Postexercise Hypotension and Ambulatory Blood Pressure in Patients with Chronic Kidney Disease.” \$20,000

Role: Principal investigator

2002. Grant from the Graduate Research Fund to purchase heart rate monitors for cricket research (\$ 792)

2000 Effect of a 12-week resistance training program on muscle function, functional measures, and IGF concentration in patients with renal failure. Awarded by the Massachusetts Governor's Committee on Physical Fitness and Sports. \$1000.

Role: Principal investigator

2000 Graduate research fund at Springfield College \$ 936.00

1995 Research and Professional Development Grant from Springfield College. Post-exercise blood pressure and hemodynamic responses in female hypertensives. \$3500

Role: Principal investigator

1995 Post-exercise hemodynamic responses in hypertensive vs normotensive women. Awarded by the Massachusetts Governor's Committee on Physical Fitness and Sports. \$750.

Role: Principal investigator

1993 Research and Professional Development Grant from Springfield College. Post-exercise blood pressure and hemodynamic responses in hypertensive and normotensive black men, \$2,680.

Role: Principal investigator

1993 Professional Development Grant from Springfield College\$. ACSM certification.

1992 Research and Professional Development Grant from Gettysburg College. Post exercise blood pressure and hemodynamic responses in young black males, \$2,800.

Role: Principal investigator

Service to Springfield College

- 2001 Member of the Dean's Advisory Council in the School of Physical Education.
- 2001 Site Coordinator of ACSM Exercise Specialist Examination at Springfield College
- 1999 Director of ACSM Exercise Specialist Workshop at Springfield College
- 1999 Site Coordinator for ACSM Exercise Specialist Examination at Springfield College
- 1998-2000 Member of the Faculty Grievance Board
- 1998-2000 Member of the Tenure and Promotion Committee within the School of Physical Education.
- 1997-2000 Member of the Academic Policies and Procedures Committee.
- 1994-97 Member of the Faculty Development Committee at Springfield College.
- 1994-1995 Member of the Faculty Curriculum Committee at Springfield College.
- 1995 Member of the Appleton Lippincott Committee at Springfield College.
- 1995 Member of the search committee in the Health Fitness Division at Springfield College.
- 1995 Member of the Research Review Committee for the Physical Therapy Department at Springfield College.
- 1993 Member of the search committee in the Health Fitness Division at Springfield College.

Other Activities

- Former Barbados Youth Cricket team captain (1978)
- Represented Wanderers in Division 1 cricket (1978-79)
- Warwickshire Colts in Birmingham England (1981)
- Combined schools captain in Barbados D1 cricket (1983)

