

CURRICULUM VITAE

Michael J. Carper, Ph.D.

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EDUCATION

The University of Kansas – Lawrence, Kansas, December 2003

Doctor of Philosophy in Education – An emphasis in Exercise/Applied Physiology

Mentor: Dr. Michael P. Godard, Ph.D.

Dissertation Title: The effects of differing temperatures on glycogen replenishment in trained female and male cyclists following moderate intensity exercise.

The University of Kansas – Lawrence, Kansas, May 2002

Master of Science in Education: An emphasis in Exercise/Applied Physiology

Mentor: Dr. Jeffrey A. Potteiger, Ph.D., FACSM

Thesis Title: Lower leg anterior compartment pressure response prior to, during, and following chronic creatine supplementation.

William Jewell College – Liberty, Missouri, July 1994

Bachelor of Arts: Exercise Science

Advisor: Dr. Gwen Scottsdale, Ph.D.

PROFESSIONAL EXPERIENCE

Pittsburg State University – College of Education - Department of Health, Human Performance, and Recreation. Pittsburg, KS

- **Associate Professor of Exercise Science** 08/18 – Present
- **Director, Applied Physiology Laboratory** 05/14 – Present
- **Program Director, Exercise Science Program** 05/14 – Present
- **Assistant Professor of Exercise Science** 08/12 – 08/18

Washington University School of Medicine – Department of Internal Medicine – Division of Endocrinology, Metabolism, and Lipid Research. St. Louis, MO

- ***National Institutes of Health T-32 Post-Doctoral Fellow*** 03/06 – 05/08
Mentors: Dr. Sasanka Ramanadham, Ph.D.
Dr. Kevin E. Yarasheski, Ph.D.
Dr. Carlos Bernal-Mizrachi, M.D.

Pennington Biomedical Research Center – Health and Performance Enhancement Division, Department of Skeletal Muscle Metabolism, Baton Rouge, LA

- ***National Institutes of Health T-32 Post-Doctoral Fellow*** 05/04 – 10/05
Mentors: Dr. Matthew W. Hulver, Ph.D.
Dr. Eric Ravussin, Ph.D.

East Carolina University – Human Performance Laboratory, Department of Exercise and Sports Sciences, College of Health and Human Performance and Department of Physiology, Brody School of Medicine, Greenville, NC

- **Experimental and Applied Sciences (EAS) - Post-Doctoral Fellow** 08/03 – 05/04
Mentor: Dr. Robert C. Hickner, Ph.D.

The University of Kansas – Applied Physiology Laboratory, Lawrence, KS

- **Graduate Research Assistant** 08/98 – 08/03
 - **Project Coordinator:** National Athletic Trainers Association Research Grant
Mentor: Dr. Jeffrey Potteiger, Ph.D.
 - **Project Co-coordinator:** American Heart Association Research Grant
Mentor: Dr. Jeffrey Potteiger, Ph.D.
 - **Project Coder:** National Institutes of Health Grant (DK 56303):
Mentor: Dr. Joseph Donnelly, Ph.D. and Dr. Cheryl Gibson, Ph.D.
- **Student Laboratory Director** 08/01 – 05/02
 - Responsibilities: ordering supplies, ensuring laboratory equipment functionality, and laboratory facility maintenance.

Research Medical Center – Department of Cardiology, Kansas City, MO

- **Cardiac Rehabilitation Specialist** 02/97 – 02/98
 - **Phase I and Phase II Cardiac Rehabilitation Specialist**
Mentor: Dr. Jeffrey Roitman, Ed.D. – Director of Cardiac Rehabilitation

TEACHING EXPERIENCE

Pittsburg State University – College of Education – Department of Health, Human Performance, and Recreation, Pittsburg, KS

- **Assistant Professor** 08/12 – 8/18
- **Associate Professor** 08/20 – Present
 - Clinical Exercise Physiology
 - Physiology of Exercise I and II
 - Exercise Testing and Prescription
 - Introduction to Exercise Science Research Methods
 - Research Project in Exercise Physiology
 - Techniques and Instrumentation in Exercise Physiology – Laboratory
 - Exercise Metabolism
 - Skeletal Muscle Physiology
 - Advanced Exercise Physiology
 - Exercise Biochemistry

The University of Kansas – School of Education – Department of Health, Sport, and Exercise Sciences, Lawrence, KS

- **Graduate Teaching Assistant** 01/99 – 06/03
 - Introduction to Exercise Science
 - Exercise Physiology
 - Practical Aspects of Aerobic and Resistance Training
 - Physical Conditioning
 - Laboratory Techniques in Exercise Physiology

PROFESSIONAL ORGANIZATIONS

- The Obesity Society – Professional Member
- Central States Chapter – American College of Sports Medicine, Professional Member
- The American Physiological Society – Professional Member
- American College of Sports Medicine – Professional Member
- National Strength and Conditioning Association – Professional Member

SCHOLARSHIP

REFEREED (PEER REVIEWED) PUBLICATION

1. Brin, H.N., Sigmund, B.G., Dicks, N.D., DeShaw, K.J., Walch, T.J., **Carper, M.J.**, and Barry, A.M. The Effects of High-Intensity Functional Training (HIFT) on the Perceptions of Exercise in Middle-Aged Females: A Pilot Study. *International Journal of Exercise Science*. **Submitted and Under Peer Review**
2. Brin, H.N., Perumal, M.D., Kopp, S.R., Hutchenson, E.L., Dicks, N.D., Walch, T.J., **Carper, M.J.**, and Barry, A.M. Comparable Levels of Objectively Measured Physical Activity and Cardiorespiratory Fitness in Firefighters from Two Mid-West Fire Departments. *Journal of Occupational and Environmental Medicine*. **Submitted and Under Peer Review**
3. Dicks, N.D., Brin, H.N., Perumal, M.D., Kopp, S.R., Hutchenson, E.L., **Carper, M.J.**, Walch, T.J., and Barry, A.M. An Occupational Specific VO₂max Protocol for Structural Firefighters: An Update. *Journal of Occupational and Environmental Medicine*. July 2022. doi: [10.1097/JOM.0000000000002650](https://doi.org/10.1097/JOM.0000000000002650)
4. DeBlauw, J.A., Drake, N.B., Kurtz, B.K., Crawford, D.A., **Carper, M.J.**, Wakeman, A., and Heinrich, K.M. High-Intensity Functional Training Guided by Individualized Heart Rate Variability vs. Predetermined Prescription Resulted in Similar Cardiovascular, Body, and Fitness Improvements. *Journal of Functional Morphology and Kinesiology*. December 2021. doi: [10.3390/jfmk6040102](https://doi.org/10.3390/jfmk6040102)
5. Barry, M.A., Lyman, K.L., Dicks, N.D., McGeorge, C.R., **Carper, M.J.**, and Walch, T.J. Firefighters are More Physically Active On-duty Compared to Off-duty. *International Journal of Environmental Research and Public Health* 2020; 17(24). doi: [10.3390/ijerph17249380](https://doi.org/10.3390/ijerph17249380)
6. Crawford, D.A., Heinrich, K.M., Drake, N.B., DeBlauw, J., and **Carper, M.J.** Heart Rate Variability Mediates Motivation and Fatigue Throughout a High-Intensity Exercise Program. *Applied Physiology, Nutrition, and Metabolism*. July 2019. doi: [10.1139/apnm-2019-0123](https://doi.org/10.1139/apnm-2019-0123).
7. Crawford, D.A., Drake, N.B., **Carper, M.J.**, DeBlauw, J., and Heinrich, K.M. Validity, Reliability, and Application of the Session-RPE Method for Quantifying Training Loads during High Intensity Functional Training. *Sports*, 2018, 6(3), 84. doi: [10.3390/sports6030084](https://doi.org/10.3390/sports6030084).
8. Crawford, D.A., Drake, N.B., **Carper, M.J.**, DeBlauw, J., and Heinrich, K.M. Are Changes in Physical Work Capacity Induced by High-Intensity Functional Training Related to Changes in Associated Physiologic Measures? *Sports* 2018, 6(2), 26; doi: [10.3390/sports6020026](https://doi.org/10.3390/sports6020026).
9. Drake, N., Smeed, J., **Carper, M.J.**, and Crawford, D.A. Effects of Short-Term CrossFit™ Training: A Magnitude-Based Approach. *Journal of Exercise Physiology* 2017; 20(2):111-133. ISSN: [10.979751](https://doi.org/10.979751)
10. **Carper M.J.**, Richmond S.R., Whitman S.A., Acree L.D., Godard M.P. Muscle Glycogen Restoration in Females and Males Following Moderate Intensity Cycling Exercise in Differing Ambient Temperatures. *Journal of Exercise Physiology* 2013;16(4):1-18. ISSN: [10.979751](https://doi.org/10.979751)
11. Potteiger, J.A., Claytor, R.P., Hulver, M.W, Hughes, M.R., **Carper, M.J.**, Richmond, S.R., Thyfault, J.P. Resistance exercise and aerobic exercise when paired with dietary energy restriction both reduce the clinical components of metabolic syndrome in previously physically inactive males. *European Journal of Applied Physiology*. 2012 Jun; 112(6):2035-44. doi: [10.1007/s0042-011-2174-y](https://doi.org/10.1007/s0042-011-2174-y).

12. Hickner, R.C., Kemeny, G., Clark, P.D., Galvin, V.B., McIver, K.L., Evans, C.A., **Carper, M.J.**, and Garry, J.P. *In vivo* nitric oxide suppression of lipolysis in subcutaneous abdominal adipose tissue is greater in obese than lean women. *Obesity* 20(6):1174 (2012). doi: [10.1038/oby.2011.91](https://doi.org/10.1038/oby.2011.91)
13. Richmond SR, Whitman SA, Acree LA, **Carper MJ** and Godard MP. Power output in trained male and female cyclists during the Wingate Test with increasing flywheel resistance. *Journal of Exercise Physiology* 2011;14(5):46-53. ISSN: [10.979751](https://doi.org/10.979751)
14. **Carper, M.J.**, Richmond, S.R., S. Zhang, K.E. Yarasheski, and S. Ramanadham. HIV-protease inhibitors suppress fatty acid oxidation in skeletal muscle by reducing fatty acid transport. *Biochimica et Biophysica Acta – Molecular and Cell Biology of Lipids*. 1801 (2010) 559-566. Doi: [10.1016/j.bbalip.2010.01.007](https://doi.org/10.1016/j.bbalip.2010.01.007).
15. Zhang, S, **Carper, M.J.**, Lei, X., Cade, W.T., and Ramanadham, S. Protease inhibitors Used in the Treatment of HIV+ induce β -cell apoptosis via the mitochondrial pathway and compromise insulin secretion. *American Journal of Physiology: Endocrinology and Metabolism*. 296(4): E925- E935, 2009. doi: [10.1152/ajpendo.90445.2008](https://doi.org/10.1152/ajpendo.90445.2008).
16. **Carper, M.J.**, S. Zheng, J. Turk, and S. Ramanadham. Skeletal muscle group VIA phospholipaseA₂ (iPLA₂ β): Expression, and role in fatty acid oxidation. *Biochemistry*. 2008 Nov, 18;47(46):12241-9. doi: [10.1021/bi800923s](https://doi.org/10.1021/bi800923s).
17. **Carper, M.J.**, W.T. Cade, M. Cam, S. Zhang, A. Shalev, K.E. Yarasheski, and S. Ramanadham. HIV-protease inhibitors induce expression of suppressor of cytokine signaling-1 (SOCS-1) in insulin-sensitive tissue and promote insulin resistance and type 2 diabetes. *American Journal of Physiology: Endocrinology and Metabolism* 294(3) E:558-67, 2008. doi: [10.1152/ajpendo.00167.2007](https://doi.org/10.1152/ajpendo.00167.2007).
18. Gibson, C.A., Bailey, B.W., **Carper, M.J.**, LeCheminant, J.D., Kirk, E.P., Huang, G., DuBose, K., and Donnelly, J.E. Author contacts for retrieval of data for a meta-analysis on exercise and diet restriction. *International Journal of Technology Assessment in Health Care*, Cambridge, Vol. 22, Iss. 2, (Apr 2006) 267-70. doi: [10.1017/S0266462306051105](https://doi.org/10.1017/S0266462306051105)
19. Hulver, M.W., Berggren, J.R., **Carper, M.J.**, Miyazaki, M., Ntambi, J.J., Hoffman, E.P., Dohm, G.L., Houmard, J.A., and Muoio, D.M. Elevated Stearoyl-CoA desaturase-1 Expression in Skeletal Muscle Contributes to Abnormal Fatty Acid Partitioning in Obese Humans. *Cell Metabolism*, Vol. 2, 251-261, October 2005. doi: [10.1016/j.cmet.2005.09.002](https://doi.org/10.1016/j.cmet.2005.09.002).
20. Thyfault, J.P., Hulver, M.W., Richmond, S.R., **Carper, M.J.**, and J.A. Potteiger. Postprandial Metabolism in Resistance Trained and Sedentary Males. *Medicine and Science in Sports and Exercise*. 2004; 36(4). doi: [10.1249/01.mss.0000121946.98885.f5](https://doi.org/10.1249/01.mss.0000121946.98885.f5).
21. Thyfault, J.P., **Carper, M.J.**, Richmond, S., Hulver, M.W., and J.A. Potteiger. Effects of liquid carbohydrate ingestion on markers of anabolism following high intensity resistance exercise. *Journal of Strength and Conditioning Research*, 2004. 18(1): p. 174-9. doi: [10.1519/1533-4287\(2004\)018<0174:eolcio>2.0.co;2](https://doi.org/10.1519/1533-4287(2004)018<0174:eolcio>2.0.co;2).
22. Luebbers, P. E., Potteiger, J.A., Hulver, M.W., Thyfault, J.P., **Carper, M.J.**, and Lockwood, R.H. Effects of plyometric training and recovery on vertical jump performance and anaerobic power. *Journal of Strength and Conditioning Research*, 2003; 17(4): 704-9. doi:[10.1519/15334287\(2003\)017<0704:eoptar>2.0.co;2](https://doi.org/10.1519/15334287(2003)017<0704:eoptar>2.0.co;2).
23. Potteiger, J.A., Carper, M.J., Randall, J C., Magee, L.J., Jacobsen, D.J., and Hulver, M.W. Changes in lower leg anterior compartment pressure before, during, and after creatine supplementation. *Journal of Athletic Training* 2002; 37(2): 157-163. ISSN: [10.626050](https://doi.org/10.626050)

NON-REFEREED PUBLICATIONS

1. **Carper, M.J.** The Physical Education Teacher and Physical Fitness Testing. KAPHERD Journal, Vol. 88, No.2, p. 65. Fall 2016

2. Dickey, H.D., Gordon, L., and **Carper, M.J.** Childhood Obesity: Spreading Awareness. *KAPHERD Journal*, Vol. 87, No. 1., p. 59. Spring 2015.

REFEREED CONFERENCE PROCEEDINGS

1. Cornell, C., Crawford, D.A., **Carper, M.J.**, and Barry, A.M. Changes in Fat Free Mass, Cardiorespiratory Fitness, and Grip Strength Across College Students. (2019) **International Journal of Exercise Science: Conference Proceedings 11 (6), 16.**
2. White, D., Crawford, D.A., Drake, N.B., DeBlauw, J., **Carper, M.J.**, and Heinrich, K.M. (2019) Are Changes in Physical Work Capacity Related to Changes in Associated Physiologic Measures? **International Journal of Exercise Science: Conference Proceedings 11 (6), 73.**
3. Drake, N.B., **Carper, M.J.**, and Crawford, D.A. Effect of Heart Rate Variability-Guided Prescriptions on the Fitness Outcomes of High Intensity Functional Training. (2019) **International Journal of Exercise Science: Conference Proceedings 11 (6), 25.**
4. DeBlauw, J.A., Crawford, D.A., Drake, N.B., **Carper, M.J.**, and Heinrich, K.M. Quantifying Training Loads During High Intensity Functional Training: Session-RPE Method. (2019) **International Journal of Exercise Science: Conference Proceedings 11 (6), 22.**
5. Madison, L.C., Drake, N.B., Shoemake, C., DeBlauw, J., **Carper, M.J.**, and Crawford, D.A. "Grit" Does Not Mediate Performance During Maximal Exercise Tests. (2019) **International Journal of Exercise Science: Conference Proceedings 11 (6), 48.**
6. Crawford, D.A., Drake, N.B., and **Carper, M.J.** Perceived Exertion As A Monitoring Strategy During CrossFit®: Useful or Useless? (2018) Board #62, May 30. **Medicine & Science in Sports & Exercise 50 (5S), 176.**
7. Madison, L.C., Brown, K.J., Drake, N.B., Crawford, D.A., and **Carper, M.J.** (2017) Development and Validation of the Gorilla Run Test. **International Journal of Exercise Science: Conference Proceedings: 11 (5), 6.**
8. Crawford, D.A., Smeed, J, and **Carper, M.J.** (2017). Three Weeks of Crossfit® Training Does Not Contribute to Overtraining Syndrome in Recreationally Trained Males: A Pilot Study. **International Journal of Exercise Science: Conference Proceedings: 11 (4), 34.**
9. Brown, K.J., Crawford, D.A., and **Carper, M.J.** (2016). Predicting Maximal Oxygen Consumption (VO₂max) From Anaerobic Treadmill Test Time. **International Journal of Exercise Science: Conference Proceedings: 11 (4), 9.**
10. Heinz, J., Lester, S., Crawford, D.A., and **Carper, M.J.** (2017). The Effects of Acute Niacin Supplementation on Resting Heart Rate and Blood Pressure in College-Aged Males. **International Journal of Exercise Science: Conference Proceedings: Vol. 11: Iss. 4, Article 41.**
11. Dickey, H.D., Gordon, L., Williamson, K., Leiker, M., and **Carper, M.J.** (2014). Comprehensive Fitness Assessment in College-Aged Males and Females: Incidence of Overweight, Obesity, and Cardiovascular Risk. **International Journal of Exercise Science: Conference Proceedings: Vol. 11: Issue 2, Article 17.**
12. **Carper, M.J.**, Zhang, S., Cade, W.T. and Ramanadham, S. Prolonged Exposure to HIV Protease Inhibitors (PIs) Induces Pancreatic Islet Beta-cell Death and Dysfunction. Conference Paper. **10th International Workshop on Adverse Drug Reactions and Lipodystrophy.** Volume 13, January 2008.
13. **M.J. Carper**, K.E. Yarasheski, P.W. Hruz, and S. Ramanadham. HIV Protease Inhibitors Impair Palmitate Oxidation in L6 Myotubes and 3T3-L1 Adipocytes. **American Diabetes Association 67th Scientific Sessions.** Presentation number 1437-P. 2007.
14. **M.J. Carper**, K.E. Yarasheski, S. Zhang, S. Smith, A. Bohrer, and S. Ramanadham. Indinavir exposure decreases liver stearoyl-CoA desaturase-1 gene expression in Zucker fa/fa rats. **8th International Workshop on Adverse Drug Reactions and Lipodystrophy in HIV.** Programme and Abstracts, L41, 2006.

15. Trevaskis, J., Hulver, M.W., **Carper, M.J.**, Butler, A. Mealnocortin Receptors and the Development of Insulin Resistance in the Obese State. **Obesity Research**, 2004.
16. **Carper, M.J.**, Davis, J.M., Hickner, R.C., MacDonald, K.G., Tanenberg, R.J., Pories, W.J., Barakat, H.A. Plasma ghrelin in African American and Caucasian American women in response to a high fat meal. **Diabetes**, 2004.
17. **Carper, M.J.**, Whitman, S.A., Richmond, S.R., Acree, L.S., Olson, B.D., and Godard, M.P. Muscle glycogen restoration in trained female and male cyclists following moderate intensity exercise. **Medicine and Science in Sports and Exercise**, 36:5, Supplement, 2004.
18. Whitman, S.A., **Carper, M.J.**, Richmond, S.R., and Godard, M.P. Effects of Progressive Proprioceptive Balance Training on Stability Performance in Elderly Females. **Medicine & Science in Sports and Exercise**, 2003.
19. Gibson, C.A., **Carper, M.J.**, Huang, G., LeCheminant, J.D., Bailey, B.W., Kirk, E.P., Hulver, M.W., Tran, Z.V., FACSM, and Donnelly, J.E., FACSM. Author contacts for retrieval of data for a meta-analysis on exercise and diet restriction. **Medicine and Science in Sports and Exercise**, 35: 5, Supplement, 2003.
20. Godard, M.P., Richmond, S.R., **Carper, M.J.**, Acree, L., Whitman, S.A., Markuly, L., and Cox, J. Reliability testing of the Wingate anaerobic power test using trained male and female cyclists. **Medicine and Science in Sports and Exercise**, 35:5, Supplement, 2003.
21. Potteiger, J.A., Thyfault, J.P., Hulver, M.W., **Carper, M.J.**, Ramos,R. Supplemental electrolyte replacement does not significantly influence blood urinary electrolyte concentrations following dehydrating exercise. **Medicine and Science in Sports and Exercise**, 34:5 Supplement, 2002.
22. Thyfault, J.P., Hulver, M.W., **Carper, M.J.**, Potteiger, J.A. The effects of liquid carbohydrate on markers of anabolism following high intensity resistance exercise. **Medicine and Science in Sports and Exercise**, 34:5, S300, 2002.
23. **Carper, M.J.**, J.P. Thyfault, M.W. Hulver, J.A. Potteiger. Comparison of resistance training versus endurance training on insulin and blood lipids in overweight males. **Medicine and Science in Sports and Exercise**, 34:5, S197, 2002.
24. **Carper, M.J.**, Potteiger, J.A., J.C. Randall, D.J. Jacobsen, L.M. Magee, Hulver, M.W., and Thyfault, J.P. Lower leg anterior compartment pressure response prior to, during, and following chronic creatine supplementation. **Medicine and Science in Sports and Exercise**, 33:5, S207, 2001.
25. Thyfault, J.P., Hulver, M.W., **Carper, M.J.**, Acosta, J., and Potteiger, J.A. The effects of 6-months of aerobic exercise or high intensity resistance exercise on body mass and body composition in overweight middle-aged men. **Medicine and Science in Sports and Exercise**, 33:5, S305, 2001.

PRESENTATIONS

1. Brin H.N., Sigmund B.G., Dicks N.D., Miller D.J., **Carper M.J.**, Barry A.M. The Effects of Varying Restrictive Breathing Apparatuses on Cardiorespiratory Function in College-aged Individuals. **National Strength and Conditioning Conference**. July 6th-9th, 2022. New Orleans, LA. Poster Presentation.
2. Brin H.N., Roy C.M., Sigmund B.G., Dicks N.D., DeShaw K.J., **Carper M.J.**, Covert-Miller L.M., Walch T.J., Barry A.M. The Effects of High-Intensity Functional Training on Perceptions of Exercise in Middle-Aged Females. **National American College of Sports Medicine Conference**. May 31st – June 3rd, 2022. San Diego, CA. Slide Presentation.
3. Brin, H.N., Roy, C.L., Sigmund, B.G., Dicks, N.D., DeShaw, K.J., **Carper, M.J.**, Covert-Miller, L.M., Walch, T.J., and Barry, A.M. The Effects of High-Intensity Functional Training on Perceptions of Exercise in Middle-Aged Females. **Central States Chapter of the American College of Sports Medicine Conference**. March 3-4. 2022. Fayetteville, AR

4. Barry, A.M., Perumal, M.D., Kopp, S.R., Hutcheson, E.L., and **Carper, M.J.** Comparison of Physical Activity and Cardiorespiratory Fitness in Midwest Firefighters. **National American College of Sports Medicine Conference.** May 2020. San Francisco, CA.
5. Perumal, M.D., Kopp, S.R., Hutcheson, E.L., **Carper, M.J.**, Walch, T.J., Dicks, N.D., and Barry, A.M. Relationship Among Physical Activity Intensities, Obesity, and Cardiorespiratory Fitness in Career Firefighters. **National American College of Sports Medicine Conference.** May 2020. San Francisco, CA.
6. Hutcheson, E.L., Perumal, M.D., Kopp, S.R., **Carper, M.J.**, Walch, T.J., Dicks, N.D., and Barry, A.M. A Comparison of Physical Activity and Cardiorespiratory Fitness in Midwest Firefighters. **Central States Chapter of the American College of Sports Medicine Conference.** October 24-25, 2019. Broken Arrow, OK.
7. Brin, H.N., Kopp, S.R., Hutcheson, E.L., Perumal, M.D., Barry, A.M., and **Carper, M.J.** Percent Body Fat Predicts Estimated VO₂MAX in College-Aged Individuals. **Central States Chapter of the American College of Sports Medicine Conference.** October 24-25, 2019. Broken Arrow, OK.
8. Barry, A.M., Perumal, M.D., **Carper, M.J.**, Walch, T.J., and Dicks, N.D. A Comparison of Physical Activity and Cardiorespiratory Fitness in Midwest Fire Department. **International Association of Fire Chiefs Conference.** August 5 – 8, 2019. Atlanta, Georgia.
9. Kopp, S., Crawford, D.A., **Carper, M.J.**, and Barry, A.M. Changes in Fat Free Mass, Cardiorespiratory Fitness, and Grip Strength Across College Students. **Pittsburg State University Research Colloquium.** April, 2019. Pittsburg State University.
10. Perumal, M.D., Barry, A.M., **Carper, M.J.**, and Crawford, D.A. An Agreement Between the Parvo TrueOne 2400 and Vacu-Med Vista Mini CPX Metabolic Carts. **Pittsburg State University Research Colloquium.** April, 2019. Pittsburg State University.
11. **Carper, M.J.** The Epidemiological Evidence of Cardiometabolic Risks in College-Aged Population: A Cross Sectional Investigation. **Bohan Lecture and Research Symposium. University of Kansas Diabetes Institute.** Accepted Presentation. April 20, 2017.
12. Brown, K.J., Crawford, D.A., and **Carper, M.J.** Predicting Maximal Oxygen Consumption (VO₂max) from Anaerobic Treadmill Test Time. **Central States Chapter of the American College of Sports Medicine Conference,** Fayetteville, AR. October 2016.
13. Three Weeks of CrossFit® Training Does Not Contribute to Overtraining Syndrome in Recreationally Trained Males: A Pilot Study. Crawford, D.A., Smeed, J., and **Carper, M.J.** **Central States Chapter of the American College of Sports Medicine Conference,** Fayetteville, AR. October 2016.
14. Dickey, H., Sawrey, R., Sawrey, J., Heinz, J., Crawford, D.A., and **Carper, M.J.** The Epidemiological Evidence of Overweight, Obesity, and Cardiometabolic Disease Risk Factors in College-Aged Subjects: A Cross-Sectional Investigation. **Central States Chapter of the American College of Sports Medicine Conference,** Fayetteville, AR. October 2016.
15. Heinz, J., Lester, S., Crawford, D.A., and **Carper, M.J.** The Effects of Acute Niacin Supplementation on Resting Heart Rate and Blood Pressure in College-Aged Males. **Central States Chapter of the American College of Sports Medicine Conference,** Fayetteville, AR. October 2016.
16. Dickey, H.D., Gordon, L., Williamson, K., Leiker, M., and **Carper, M.J.** Comprehensive fitness assessments in college-aged males and females: incidence of overweight, obesity, and cardiovascular risk. **American College of Sports Medicine – Central States Chapter,** Overland Park, KS. October 2014.
17. **Carper, M.J.**, Muoio, D.M., Houmard, J.A., Dohm, G.L., Hulver, M.W. PPAR-gamma and human intramyocellular lipid accumulation. **3rd International Symposium on PPARs Efficacy and Safety, From Basic Science to Clinical Applications,** Monte Carlo, March 22, 2005.

18. **Carper, M.J.**, Davis, J.M., Hickner, R.C., Tanenberg, R.J., MacDonald, K.G., Pories, W.J., and Barakat, H.A. Plasma ghrelin levels in African American and Caucasian American women in response to a high fat meal. **Department of Internal Medicine 18th Annual Research Day**. Brody School of Medicine, East Carolina University, Greenville, NC, May 5th, 2004.
19. Gibson, C.A., **Carper, M.J.**, Huang, G., LeCheminant, J.D., Bailey, B.W., Kirk, E.P., Hulver, M.W., Tran, Z.V., FACSM, and Donnelly, J.E., FACSM. Author contacts for retrieval of data for a meta-analysis on exercise and diet restriction. **American College of Sports Medicine National Conference**, San Francisco, CA, May 30, 2003.
20. **Carper, M.J.**, Whitman, S.A., Richmond, S.R., and Godard, M.P. Effects of progressive balance training on stability performance in elderly females. **American College of Sports Medicine Central States Chapter Conference**, Kansas City, MO, October 11, 2002.
21. **Carper, M.J.**, Gibson, C.A. Planning and Processing of meta-analytical research. **American College of Sports Medicine Central States Chapter Conference**, Kansas City, MO, October 19, 2001.
22. Thyfault, J.P., Hulver, M.W., **Carper, M.J.**, Acosta, J., and J.A. Potteiger. The effects of aerobic exercise or high intensity resistance exercise on body mass and body composition in overweight middle-aged men. **American College of Sports Medicine National Conference**, Baltimore, MD, June 3, 2001.
23. Hulver, M.W., Thyfault, J.P. **Carper, M.J.**, and J.A. Potteiger. The effects of 6-months of aerobic exercise vs. resistance exercise on resting metabolism. **American College of Sports Medicine National Conference**. Baltimore, MD, May 31, 2001.
24. Thyfault, J.P., Hulver, M.W., **Carper, M.J.**, Acosta, J., and J.A. Potteiger. The effects of 6-months of aerobic exercise or high intensity resistance exercise on body mass and body composition in overweight middle-aged men. **American College of Sports Medicine Central States Chapter Conference**. Kansas City, MO, October 20, 2000.

INVITED PRESENTATIONS

1. **Carper, M.J.** Importance of Physical Activity in Later Life. Lions Club of Pittsburg. April 2016
2. **Carper, M.J.** Exercise Science Program. Career Explorations Course – Pittsburg State University. February 2014.
3. **Carper, M.J.** Exercise Science: What We Do. Southeast Kansas Education Center – Superintendent’s Forum. January 2014.
4. **Carper, M.J.** Skeletal Muscle’s Role in Obesity. Summer Health Series – Department of Health, Human Performance and Recreation. July 2013.
5. **Carper, M.J.** and Leiker, M. Informational session regarding the new Exercise Science Program at State University. Pittsburg Rotary Club. April 2013.
6. **Carper, M.J.** Performance Enhancers. Department of Health, Sport, and Exercise Sciences: Seminar in Health, Sport, and Exercise Science, June 17, 2001, and October 10, 2002.

GRANTS AND CONTRACTS

1. **Carper, Michael J. (Principal)** and Boffey, A. David (Co-Principal). Applied Physiology Laboratory and Human Performance Laboratory Equipment for Undergraduate Education and Research. *January 2022*. College of Education and Department of Health, Human Performance, and Recreation. **Funded: \$11,201.00**
2. **Carper, M.J. (Principal)**. Applied Physiology Laboratory Equipment for Undergraduate Education and Research. College of Education, Tango M2 Blood Pressure Device. *September 2020*. **Funded: \$4,345.00**.
3. **Carper, M.J. (Principal)**. Halle Brin (Undergraduate Research Assistant). Evaluation of Task-Specific Fitness in Law Enforcement Officers. Kansas Idea Network of Biomedical Research Excellence

- (K-INBRE) to support an undergraduate Exercise Science (University Scholar) student's research project. *August 2019. Funded: \$2,000.00*
National Institutes of Health (NIH) Block Grant; K-INBRE Undergraduate Research Office (URO); Pass through Entity (PTE) University of Kansas Medical Center Research Institute, Inc. Federal Award No.: 2P20GM103418-19, Subaward No.: 1000961127
4. Barry, A.M. (Co-P.I.), and **Carper, M.J. (Co-P.I.)**. Pritchett Trust Grant. Applied for Woodway XL Treadmill for use in the Applied Physiology Laboratory for Exercise Science students. *May 2019. Not Funded: \$22,000.00*
 5. **Carper, M.J. (Principal)**, White, Dreu (Grad Student). Applied Physiology Laboratory Equipment for Graduate Student Research Project. College of Education, Dual Force Platform System. *April 2018. Not Funded: \$21,995.00.*
 6. Applied Physiology Laboratory Equipment for Undergraduate Education and Research, ParvoMedics Metabolic Measurement System and Woodway Treadmill. **Carper, M.J. (Principal)**. College of Education. September 2017 **Funding Request: \$53,800.00. Funded April 2018, \$28,850.00**
 7. **Carper, M.J. (P.I.)**. Plasmafuge-6 Centrifuge, Electrical Stimulation/Ultrasound Combination, and Monark Wingate Ergometer for use in the Applied Physiology Laboratory as research tools for student research projects. College of Education Technology Fund. *October 2016. Funded: \$14,034.54.*
 8. **Carper, M.J. (P.I.)**. CritSpin – StatSpin Hematocrit Analyzer to determine hydration status for use in the Applied Physiology Laboratory as a research tool for students. College of Education Technology Fund. *January 2016. Funded: \$1,700.00.*
 9. **Carper, M.J. (P.I.)**. Comparison of strength gains in one set versus three sets of incline bench press. Pittsburg State University Independent Faculty Research Project Program. *February 2, 2015. Funded: \$2,000.00.*
 10. **Carper, M.J. (P.I.)**. Just Jump Vertical Jump and Power Output Platform for use in the Applied Physiology Laboratory as a research tool for students. Department of Health, Human Performance, and Recreation. *February 2015. Funded: \$600.00.*
 11. **Carper, M.J. (P.I.)**. PowerTec Workbench Multi System for use in the Applied Physiology Laboratory as a research tool for students. Department of Health, Human Performance, and Recreation. *March 2014. Funded: \$1,750.00.*
 12. **Carper, M.J. (P.I.)**. The effects of an 8-week exercise program on measures of health-related fitness in overweight and obese children. Kansas Health Foundation Recognition Grant. *March 2014. \$24,750 – Not funded.*
 13. **Carper, M.J. (P.I.)**. Dual Energy X-ray Absorptiometry Unit for Use in the Applied Physiology Laboratory as a Research Tool for Exercise Science Students. College of Education Technology Fund. *December 2012 - 2013. Funded: \$56,000.00.*
 14. **Carper, M.J. (P.I.)**. SigmaPlot 12.3 and EndNote 5 software programs used as teaching tools for students in the Exercise Science Program. College of Education Technology Fund. *December 2012. Funded: \$2,708.00.*
 15. Ramanadham, S., **Carper, M.J.**, and Yarasheski, K.E. “A novel methodology to measure and quantify substrate oxidation in human tissues and cell culture systems.” Washington University Institute of Clinical and Translational Sciences. Development of Novel Clinical and Translational Methodologies. Pilot and Collaborative Translational and Clinical Studies. *December 2007. Not funded – \$10,000.*
 16. **Carper, M.J. (P.I.)**. **The role of peroxisome proliferator-activated receptor gamma in skeletal muscle lipid accumulation.** Pennington Biomedical Research Center Postdoctoral Fellow Pilot Project Grant. *October 2004 – October 2005. Funded: \$ 2,500.00.*

17. **Carper, M.J. (P.I.),** and Godard, M.P. **The effects of differing temperatures on glycogen replenishment in trained female and male cyclists following moderate intensity exercise.** Gatorade Sports Science Institute, *August 1, 2002*. Funded for October 2002 – July 2003. **Funded: \$500.00.**
18. Potteiger, J.A., **Carper, M.J. (Student P.I.),** Randall, J.C., Magee, L.J., Hulver, M.W., Kuphal, K.E., and Thyfault, J.P. **The effects of creatine supplementation on anterior compartment syndrome.** National Athletic Trainers Association. *September 1999 – August 2001*. **Funded: \$25,000.00**

PROFESSIONAL HONORS / AWARDS

1. **General Education Review – Leadership Team Recognition–** Pittsburg State University. Sp 2019
2. **Pittsburg State University, Graduate and Continuing Studies – Outstanding Undergraduate Research Mentor.** Sp 2017
3. **Pittsburg State University Honors College –** Recognized by Heather Jensen (student) for being an inspiration and mentor to her success at PSU. Sp 2016
4. **Pittsburg State University, College of Education – Excellence in Teaching Award** AY 2014–15
5. **Pittsburg State University Honors College –** Recognized by Jayson Williamson (student) for being an inspiration and mentor to his success at PSU. Sp 2015
6. **Washington University T-32 Training Grant, Post-Doctoral Training Award;** National Institute of Health Institutional T-32 Award; Ruth L. Kirschstein National Research Service Award, DK007296 Mar. 2006 – Dec. 2007
7. **Pennington Biomedical Research Center Postdoctoral Fellow Pilot Project Grant.** “The role of peroxisome proliferator-activated receptor gamma in skeletal muscle lipid accumulation.” Oct. 2004 – Oct. 2005
8. **Pennington Biomedical Research Center T-32 Training Grant, Post-Doctoral Training Award,** “Obesity: from genes to man”; Postdoctoral Training Award; National Institute of Health Institutional T-32 Award; Ruth L. Kirschstein National Research Service Award, DK64584. Aug. 2004 – Oct. 2005
9. **Most Outstanding Doctoral Dissertation:** School of Education - University of Kansas Fall 2004
10. **Doctoral Student Award Recipient:** American College of Sports Medicine – Central States Chapter, Fall 2003

JOURNAL REVIEWER

1. **International Journal of Environmental Research and Public Health** AY 2019 – Present
 - <https://www.mdpi.com/journal/ijerph>
2. **Nutrients** AY 2019 – Present
 - <https://www.mdpi.com/journal/nutrients>
3. **Sports** AY 2019 – Present
 - <https://www.mdpi.com/journal/sports>
4. **Kansas Assoc. for Health, Phys. Ed., Recreation and Dance Journal** AY 2015 – 2016
 - http://www.kahperd.org/professional_development/journal

EDITORIAL BOARDS

1. **Editorial Board, Special Issues Editor –** Nutrients AY 2021 – Present
 - Special Issue Title: The Effects of Electrolyte Supplementation on Human Performance and Health
2. **Associate Editorial Reviewer –** J. of Adv. in Obesity, Weight Mangmnt, and Control 03/15 – 03/17

CERTIFICATIONS / WORKSHOPS

- **Certified Dual-energy X-ray Absorptiometry Technician** – Hologic Sp 2020
- **Certified Dual-energy X-ray Absorptiometry Technician** – Hologic Fall 2013
- **Proposal and Grant Development Workshop** – Pittsburg State University Fall 2012
- **Iowa Board of Educational Examiners Certification** – Certified Substitute Teacher Fall 2010
- **Heartland Area Education Agency Professional Development Program** Su 2009
- **Professional Development Program** – Washington University School of Medicine Sp/Fall 2007
- **Methods of In Vivo Metabolism Research** - Washington University School of Medicine Fall 2007
- **Grant Writing Workshop** - Washington University School of Medicine Sp 2007
- **Certified Radiation Safety Course:** Certified to work with radioactive materials (¹⁴C, ³²P, ³H, ¹²⁵I)
- **Molecular Biology Techniques Workshop** - Duke Molecular Workshops, Division of Maternal Fetal Medicine, Duke University Fall 2003

SERVICE/VOLUNTEER WORK

- **Southeast Kansas Humane Society** – Volunteer AY 2019 – Present
- **George Nettle’s Elementary School Site Council** – Member AY 2018 – Fall 2021
- **Faculty Prof. Development Day** – Presenter – Update on Gen. Edu. Reform AY 2016 – Fall 2018
- **Program Head** - Exercise is Medicine on Campus Su 2016 – Fall 2018
- **Faculty Professional Development Day** – Presenter – Incidence of Obesity on Campus Fall 2016
- **Provost’s Reading Group** – Discussions of General Education Reform Spring 2016
- **St. Pius X Catholic Student Center** - Board of Directors Sp 2015 – Sp 2016
- **St. Mary’s-Colgan Elementary School Carnival** – Obstacle course design Sp 2014 – Sp 2016
- **Our Lady of Lourdes Parish** – Health and Wellness Committee AY 2013 – 2016
- **Our Lady of Lourdes Parish** – Clean up grounds Sp 2013-14
- **St. Mary’s-Colgan School** – Reading comprehension of elementary students AY 2013 – Fall 2016
- **Faculty Professional Development Day** – Presenter - Canvas Advising Fall 2013
- **Central States Chapter of Am. College of Sports Med** – Abstract Reviewer Fall 2013, 2017, 2021
- **Gorilla Invitational Wheelchair Basketball Tournament** – Hospitality suite Fall 2013
- **Live Well Crawford County** – Support healthy lifestyles, Crawford Co., KS Su 2013 – 2016
- **GetFit TRYathlon** – Bicycle safety for children competing in triathlon Su 2013
- **Faculty Sponsor** – The Exercise Science Society AY 2012 - Present
- **Upward Bound, Crowder College** – Professional careers in Exercise Science AY 2012 – 2016
- **American Red Cross** – Unload supplies for local blood drive Fall 2012

RESEARCH PROJECTS

1. **The Effects of High-Intensity Functional Training on Perceptions of Exercise in Middle-aged Females** 08/21 – 05/22
 - H. Brin (Graduate Student P.I.)
 - A.M. Barry, Ph.D. (P.I.)
 - **M.J. Carper, Ph.D. (Co-P.I.)**
 - Laura Covert-Miller, Ph.D. (Co-P.I.)
 - Nathan Dicks, Ph.D., (Co-P.I., Concordia College)
 - Kathryn DeShaw, Ph.D. (Co-P.I., Loras College)
 - Tanis Welch, Ph.D. (Co-P.I., University of North Dakota)
 - Bailey Sigmund (Undergraduate Research Associate)

2. **Evaluation of Task-Specific Fitness Levels in Law Enforcement Officers** 09/19 – 3/20
 - **M. Carper, Ph.D. (P.I.)** (*Project was interrupted by the onset of COVID-19*)
 - A.M. Barry, Ph.D., (Co-P.I.)
 - Nathan Dicks, Ph.D., (Co-P.I., Concordia College)
 - Halle Brin, (Undergraduate Student P.I.)
 - Evan Hutcheson, (Undergraduate Research Associate)
 - Mohan Perumal, (Graduate Research Associate)
3. **Evaluation of Fitness Levels in Local Firefighters** 02/19 – 5/20
 - A.M. Barry, Ph.D. (P.I.)
 - **M.J. Carper, Ph.D. (Co-P.I.)**
 - Nathan Dicks, Ph.D., (Co-P.I., Concordia College)
 - Halle Brin, (Undergraduate Student P.I.)
 - Evan Hutcheson, (Undergraduate Student Research Associate)
 - Mohan Perumal (Graduate Student Research Associate)
4. **Comparison of High Intensity Interval Training (HIIT) and Continuous Aerobic Training on Maximal Oxygen Consumption (VO₂max) in Healthy Adults** 09/16 – 9/17
 - **M. Carper, Ph.D. (P.I.)**
 - D. Crawford, Ph.D. (Co-P.I.)
 - Jessica Heinz (Undergraduate P.I.)
5. **Predicting VO₂max from anaerobic treadmill test time.** 09/16 – 09/17
 - **M. Carper, Ph.D. (P.I.)**
 - D. Crawford, Ph.D. (Co-P.I.)
 - Kylie Brown (Undergraduate and Graduate P.I.)
6. **The epidemiological evidence of overweight, obesity, and cardiometabolic disease risk factors in college-aged subjects: A cross-sectional investigation** 03/14 – 3/15
 - **M. Carper, Ph.D. (P.I.)**
 - Richard Sawrey (Undergraduate P.I.)
 - Scott Lester (Graduate Student Research Associate)
 - Kylie Brown (Graduate Student Research Associate)
 - Caitlyn White (Undergraduate Research Associate)
7. **Comprehensive Fitness Evaluations** 08/12 – 08/13
 - **M. Carper, Ph.D. (P.I.)**
 - Multiple Undergraduate and Graduate Student Research Associates
8. **Body Composition of College-Aged Males and Females Using Dual Energy X-ray Absorptiometry** 04/14 – 05/15
 - **M. Carper, Ph.D. (P.I.)**
 - Multiple Undergraduate and Graduate Student Research Associates
9. **Comparison of Strength Gains in One Set vs Three Sets of Incline Bench Press** 10/14 – 10/16
 - **M. Carper, Ph.D. (P.I.)**
 - Joel Lauer (Undergraduate P.I.)
10. **Muscle Adaptation in the Biceps Brachii via Unilateral Training in College-Aged Males** 11/14 – 11/16
 - **M. Carper, Ph.D. (P.I.)**
 - Heather Laurent (Undergraduate P.I.)
11. **Comparison of Static versus. Dynamic Stretching on Vertical Jump Height in College Baseball Players** 02/15 – 02/16
 - **M. Carper, Ph.D. (P.I.)**
 - W. Luke Bordewick (Undergraduate P.I.)

12. **Effects of Acute Niacin Supplementation on Heart Rate and Blood Pressure** 02/15 – 02/16
- **M. Carper, Ph.D. (P.I.)**
 - Scott Lester (Graduate Student P.I.)
 - Jessica Heinz (Undergraduate Student Research Associate)
13. **Correlation Between Types of Pitches Thrown by Pittsburg State University Pitchers and the Results of Those Pitches** 03/15 – 03/16
- **M. Carper, Ph.D. (P.I.)**
 - Andrew Kreiling (Undergraduate P.I.)

MASTER’S THESIS/PROJECTS

1. **Halle Brin, B.S.** Master’s in Health Human Performance, and Recreation May 2022
- **Thesis Title:** The Effects of High-Intensity Functional Training (HIFT) on the Perceptions of Exercise in Middle-Aged Females: A Pilot Study
 - **Thesis Committee:**
 - i. Allison Barry, Ph.D. – Chair
 - ii. **Mike Carper, Ph.D.**
 - iii. Nathan D. Dicks, Ph.D.
 - iv. Laura Covert-Miller, Ph.D.
2. **Mohan Perumal, B.S.** Master’s in Health, Human Performance, and Recreation May 2021
- Non-thesis Project
 - i. Allison Barry, Ph.D. – Chair
 - ii. **Mike Carper, Ph.D.**
3. **Nick Drake, B.S.,** Master’s in Health, Human Performance, and Recreation May 2018
- **Thesis Title:** Effects of Heart Rate Variability-Guided Prescription on the Physiological Outcomes of CrossFit® Training.
 - **Thesis Committee:**
 - i. Derek A. Crawford, Ph.D. – Chair
 - ii. **Mike Carper, Ph.D.**
 - iii. David Miller, Ph.D.

DOCTORAL DISSERTATIONS/SCHOLARLY PROJECTS

1. **Trevor Harvey, BSN-DNP,** Doctor of Nursing Practice, Pittsburg State University Fall 2020
- **Scholarly Project Title:** Educational Needs Regarding Concussion in Youth Athletes
 - **Project Committee:**
 - i. Amy Hite, DNP, FNP-BC, ONC – Chair
 - ii. **Mike Carper, Ph.D.**
 - iii. Barbara McClaskey, RNC, MN, APRN-C, Ph.D.
2. **Reilly Tackett, BSN-DNP,** Doctor of Nursing Practice, Pittsburg State University Spring 2019
- **Scholarly Project Title:** Provider Awareness Associated with Lifestyle Interventions and Adult Obesity. May 2019.
 - **Project Committee:**
 - i. Trina Larery, DNP, APRN-BC, FNP-C - Chair
 - ii. **Mike Carper, Ph.D.**

3. **Jeffrey M. Wadell**, Doctor of Nursing Practice, Pittsburg State University December 2017
- **Scholarly Project Title:** Improving Obesity Management in Primary Care
 - **Project Committee:**
 - i. Kristi Frisbee, DNP, RN – Chair
 - ii. **Mike Carper, Ph.D.**
 - iii. Tina Larery, DNP, APRN-BC, FNP-C

NEW FACULTY MENTOR

- | | |
|---------------------------|-------------------|
| 1. Derek Crawford, Ph.D. | AY 2015 – Su 2016 |
| 2. Allison Barry, Ph.D. | AY 2018 – Su 2019 |
| 3. A. David Boffey, Ph.D. | AY 2021 – Su 2022 |

PROFESSIONAL RESEARCH DEVELOPMENT

- | | |
|---------------------------------------------------------------------------------------------------------------------------|-----------|
| 1. Science of Aging Series – Experimental Muscle Mechanics in Aging and Disease
American Physiological Society Webinar | Fall 2021 |
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