

Jordan M. Taylor, M.Ed., Ph.D. (Hon.), CSCS, ACE-CPT

University of Kansas Edwards Campus

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Education:

- 2015 Ph.D. (Honors), Rehabilitation Science, University of Kansas Medical Center, Kansas City, KS
- 2006 M.Ed., Exercise Science, Wichita State University, Wichita, KS
- 2004 B.A., Exercise Science, Wichita State University, Wichita, KS
- 1999-2001 Attended Dodge City Community College, Dodge City, KS

Academic Appointments:

- 2018 - Present **Undergraduate Exercise Science Program Director**
Department of Health, Sport and Exercise Sciences, University of Kansas Edwards Campus, Overland Park, KS & University of Kansas Lawrence Campus, Lawrence, KS
- Develop curriculum, conduct program assessment, and schedule courses
 - Involved in strategic planning for implementation of new academic programs
 - Manage annual budgets and assist with hiring of new faculty
 - Plan and assist with marketing of the exercise science programs
 - Build relationships with local high schools, colleges, and the healthcare and exercise science industries
 - Engage in student recruitment and advising
 - Instruct various undergraduate courses (specific courses listed in subsequent section)
- 2015 - Present **Lecturer/Academic Program Associate**
Department of Health, Sport and Exercise Sciences, University of Kansas Edwards Campus, Overland Park, KS & University of Kansas Lawrence Campus, Lawrence, KS
- Undergraduate Courses Instructed:
 - HSES 305 - Methods of Strength Training and Conditioning (summer semester, 2016)
 - HSES 306 - Principles of Personal Training (spring semesters, 2016 – present)
 - HSES 369 - Kinesiology (spring semesters, 2016 – present)
 - HSES 370 - Health and Pathophysiology (fall semesters, 2015 – present)
 - HSES 375 - Neuromuscular Exercise Physiology and Motor Control (fall semesters, 2015 – present)
 - HSES 470 - Biomechanics (fall semesters, 2015 – 2017)
 - HSES 472 - Exercise Physiology (summer semester, 2016)
 - HSES 474 - Exercise Biochemistry (fall semesters, 2016 – present)
 - HSES 480 - Physical Activity and Exercise Management for Individuals with Disabilities (spring semesters, 2016 – present)
 - HSES 371 - Medical Terminology for Health Professionals (spring semesters, 2017 – 2018 & summer semesters, 2017 – present)
 - Actively engaged in student recruitment

2017

Lecturer/Adjunct Faculty Member

Department of Physical Therapy Education, Rockhurst University, Kansas City, MO

- Graduate Courses Instructed:
 - PT 6112 - Exercise Physiology Lecture
 - PT 6114 - Exercise Physiology Lab

2012 - 2015

Course Coordinator (PTRS 715- Applied Musculoskeletal Anatomy)

Department of Physical Therapy and Rehabilitation Science, University of Kansas Medical Center, Kansas City, KS

- Designed curriculum
- Instructed on-line classes for Post-Professional Doctorate of Physical Therapy students
- Engaged students in web-based discussion forums covering a variety of topics related to musculoskeletal anatomy in physical therapy practice
- Provided guidance on the appropriate application of current evidence-based research to clinical physical therapy situations

2009 - 2015

Graduate Research Assistant

Department of Physical Therapy and Rehabilitation Science, University of Kansas Medical Center, Kansas City, KS

- *Dissertation Title:* “Improving Traumatic Brain Injury Outcomes Through Gene Therapy and Exercise”
- Evaluated the feasibility of using smartphone technology (Concussion Manager iOS app; Capacity Sports, Inc.) to evaluate neural functions that are commonly impaired post-concussion
- Assisted in a clinical research project: “Exercise as an adjunct to smoking cessation treatment for African American women”
 - Provided weekly smoking cessation counseling to all study subjects
 - Measured vital signs
 - Supervised exercise sessions
- Investigated cardiopulmonary responses and the safety of maximal exercise testing in people during the chronic stage of stroke recovery

2009 & 2013

Graduate Teaching Assistant (PTRS 825- Exercise Physiology)

Department of Physical Therapy and Rehabilitation Science, University of Kansas Medical Center, Kansas City, KS

- Instructed Doctorate of Physical Therapy Students
- Lectures Presented:
 - Exercise Testing and Prescription in Older Adults, 1 hour lecture, November 2013
 - Adaptations to Resistance Exercise, 1 hour lecture, October 2013
 - Principles of Muscle Contraction, 1.5 hour lecture, September 2013
 - Neural Control of Exercising Muscle, 1 hour lecture, September 2013
 - Carbohydrate Metabolism, 2 hour lecture, September 2013
 - Lipid and Protein Metabolism, 2 hour lecture, September 2013 & 2009
 - Nutrition, Ergogenic Aids, and Environment, 2 hour lecture, October 2009
- Laboratory Sessions Instructed:
 - Submaximal Exercise Tests to Predict VO₂ max (Treadmill, NuStep, Step Test), 2 hour Laboratory Session, November 2013 & 2009

- Submaximal Exercise Tests to Predict VO₂ max (Rockport 1-Mile Walk Test & 6-Minute Walk Test), 1 hour Laboratory Session, November 2013 & 2009
- Blood Flow and Vascular Function, 1 hour Laboratory Session, October 2013
- Brain Blood Flow, 1 hour Laboratory Session, October 2013
- Assessment of Maximal Oxygen Consumption (Bruce Treadmill Protocol), 3 hour Laboratory Session, October 2013
- Strength and Balance Testing for Older Adults, 2 hour Laboratory Session, September 2013
- Introduction to Exercise Testing, Cardiac Risk Stratification, and Anthropometric Measures, 2 Hour Laboratory Session, August 2013 & 2009
- Body Composition Analysis, 2 hour Laboratory Session, October 2009

2006 - 2007

Lead Instructor for the National Strength and Conditioning Association Personal Training Certification Program

Professional Fitness Institute, Las Vegas, NV

- Designed curriculum and instructed classes in:
 - Anatomy and Physiology
 - Kinesiology
 - Nutrition
 - Pathology
 - Exercise Prescription
- Instructed Laboratory Sessions

2004

Weight Training Instructor (Introduction to Weightlifting)

Department of Kinesiology and Sport Studies, Wichita State University, Wichita, KS

- Instructed students on proper weightlifting technique and resistance training program design
- Designed a resistance training manual for students

Career History:

2008 - 2009

Personal Trainer

Gold's Gym, San Antonio, TX

- Designed and implemented training programs for a variety of clientele (general population, youth, elderly, and athletes)
- Provided health, fitness, and nutritional advice for clients
- Conducted fitness testing

2007 - 2008

Exercise Physiologist

Pressing On, San Antonio, TX

- Designed a comprehensive Spinal Cord Injury Recovery and Exercise manual for clients and staff
- Planned and implemented exercise programs for clients suffering from spinal cord injury
- Provided educational information about spinal cord injury and assisted with web-site design
- Evaluated new clients and led facility tours

- 2006 **Spinal Cord Injury Educator/Consultant**
Every Step Counts, College Station, TX
- Lectured, designed, and provided educational materials related to spinal cord injury and exercise for new employees at a spinal cord injury rehabilitation center
 - Educated staff on appropriate exercise prescription for clients recovering from spinal cord injury
 - Trained staff on the proper use of exercise equipment for clients with spinal cord injury

- 2003 - 2006 **Strength and Conditioning Coach/Personal Trainer**
Player Development Solutions and Lerch Personal Fitness, Wichita, KS
- Designed and implemented training programs for a variety of clientele (general population, youth, elderly, and athletes)
 - Provided health, fitness, and nutritional advice for clients
 - Conducted fitness testing

- 2003, 2005 - 2006 **Professional Football Player**
- Wichita Stealth Arena Football Team (2003), A Member of the Arena Football 2 (AF2) League, Wichita, KS
 - Wichita Aviators Indoor Football Team (2005-2006), A Member of the American Professional Football League (APFL), Wichita, KS

Certifications:

- 2006 – Present Certified Strength and Conditioning Specialist, Certified by the National Strength and Conditioning Association (NSCA)
- 2003 – Present Certified Personal Trainer, Certified by the American Council on Exercise (ACE)

University Service:

- 2018 Member of the University of Kansas Edwards Campus Student Engagement and Inclusion Coordinator Search Committee

Other Professional Service:

- 2018 – Present Serve on the J.C. Harmon Sports Medicine & Exercise Science Academy Advisory Board
- 2017 Expert Legal Witness for Case No. 2016-CV-000296, Division No. 4, District Court of Leavenworth County, KS. “Sharon A. Miller vs. Genesis Health Clubs of Leavenworth, LLC; and Kim Lutgen”
- 2011 Provided poster tours and explained current research on traumatic brain injury and spinal cord injury, to visiting high school students at the National Neurotrauma Symposium. Westin Diplomat Resort and Spa, Fort Lauderdale, FL. July, 2011.

Master and Doctoral Committees:

- 2019 Master’s Thesis Committee Member: Stephanie Sontag, M.S. Student. University of Kansas, Department of Health, Sport, and Exercise Sciences, Lawrence, KS.
- 2018 Doctoral Dissertation Committee Member: Justin Nicoll, Ph.D. Student. University of Kansas, Department of Health, Sport, and Exercise Sciences, Lawrence, KS.
Dissertation Title: “MAPK signaling and intracellular hormone receptor phosphorylation at rest and following resistance training.”

Journal Review Experience:

- Ad hoc reviewer for:
 - International Journal of Sports Medicine

Honors and Awards:

- Nominated as a finalist for the *Honors for Outstanding Progressive Educators* (HOPE) award by the University of Kansas Senior Class, 2016
- Graduated with Honors (Ph.D. in Rehabilitation Science) from the University of Kansas Medical Center, 2015
- Graduate Student Poster Competition Finalist (abstract/poster was in the top 20 out of 379 submitted) at the National Neurotrauma Symposium, 2011
- Travel Grant Award Winner (\$500.00) for the National Neurotrauma Symposium, 2011
- Awarded an athletic scholarship to play football at Dodge City Community College, 1999

Research Activities:

My areas of research interest include: Conducting basic science research to understand the neuroprotective effects of exercise prior to and after TBI. Specifically, I am interested in examining how exercise may improve TBI outcomes by modulating neuroprotective genes and proteins (EPO, HO-1, VEGF) within the brain. I am also interested in studying exercise interventions for recovery from spinal cord injury and other neurological disorders and diseases in humans.

Laboratory Skills:

- *Behavioral testing (mice)*
 - Gridwalk for evaluation of sensorimotor function
 - Radial Arm Water Maze for assessment of spatial learning memory
- *Surgical procedures (mice)*
 - Controlled cortical impact for induction of traumatic brain injury
 - Transcardiac perfusion
 - Dissection of various brain regions (e.g., cortex, hippocampi, cerebellum) and lower hind-limb muscles (e.g., gastrocnemius, soleus, tibialis anterior, and extensor digitorum longus)
- *Bench Work*
 - Quantitative Reverse Transcription Polymerase Chain Reaction
 - Histology
 - Stereology
 - Microscopy and image analysis
- *Clinical Assessments*
 - Sport Concussion Assessment Tool 3 (SCAT3) testing
 - Concussion Manager App. for assessment of neural function (i.e., balance, memory, reaction time)
 - VO_{2max} , VO_{2peak} , and anaerobic threshold
 - Cardiovascular and pulmonary responses to exercise
 - Body Composition - DEXA
 - Dynamometry

Computer Skills:

- Microsoft Office
 - Word, Excel, PowerPoint
- SPSS
- Adobe Photoshop
- Image J
- Endnote

Publications:

- Burghart, M., Radel, J., Twumasi-Ankrah, P., and **Taylor, J.M., (in preparation)**. Experimental Smartphone Technology to Evaluate Concussion Symptoms.
- **Taylor, J.M.**, Montgomery, M.H., Gregory, E.J., and Berman, N.E.J. Exercise Preconditioning Improves Traumatic Brain Injury Outcomes. *Brain Research*. 1622: 414-429, 2015. doi:10.1016/j.brainres.2015.07.009.
- **Taylor, J.M.**, Kelley, B., Gregory, E.J., and Berman, N.E.J. Neuroglobin Overexpression Improves Sensorimotor Outcomes in a Mouse Model of Traumatic Brain Injury. *Neuroscience Letters*. 577: 125-129, 2014. Published as a Plenary Article. doi: 10.1016/j.neulet.2014.03.012.
- Billinger, S.A., **Taylor, J.M.**, and Quaney, B.M. Cardiopulmonary Response to Exercise Testing in People with Chronic Stroke: A Retrospective Study. *Stroke Research and Treatment*. vol. 2012, Article ID 987637, 8 pages, 2012. doi: 10.1155/2012/987637.

Published Abstracts:

- **Taylor, J.M.**, Gregory, E., and Berman, N.E.J. (2014). Changing the Outcome of Traumatic Brain Injury in Mice: No Genes, No Drugs. *Journal of Neurotrauma*. vol. 31 (12), page A102. July, 2014.
- Burghart, M., **Taylor, J.M.**, and Radel, J. (2013). Sideline Screening for Balance and Neurocognition-there's an app for that... *2013 Sports Neuropsychology Society Annual Meeting and Symposium Program*. May, 2013.
- Burghart, M., **Taylor, J.M.**, and Radel, J. (2013). A Novel Tool for Screening of Concussion Symptoms. *35th Annual Student Research Forum Program*. April, 2013.
- **Taylor, J.M.**, Gregory, E., and Berman, N.E.J. (2012). Chronic Aerobic Exercise Training Performed Prior to Traumatic Brain Injury (TBI) Increases Post-TBI Vascular Endothelial Growth Factor-A (VEGF-A) Gene Expression and Improves Locomotor Recovery. Program No. 769.17. *2012 Neuroscience Meeting Planner*. New Orleans, LA: Society for Neuroscience, October, 2012. Abstract Online.
- **Taylor, J.M.**, Gregory, E., and Berman, N.E.J. (2012). Exercise Promotes Functional Recovery from Traumatic Brain Injury and Increases Erythropoietin Gene Expression. *34th Annual Student Research Forum Program*. March, 2012.
- **Taylor, J.M.**, Kelley, B., Gregory, E., and Berman, N.E.J. (2011). Expression of Neuroprotective Globin Genes Following Traumatic Brain Injury in Adult Mice. *Journal of Neurotrauma*. vol. 28 (6), page A13. July, 2011.

Platform Presentations:

- **Taylor, J.M.** "Too Much of a Good Thing: Exercise and Overtraining." World Gym Health Information Session, World Gym, Merriam, KS. April, 2016.
- **Taylor, J.M.** "The Damaging Pathophysiological Effects Related to Excessive Consumption of Fructose." World Gym Health Information Session, World Gym, Merriam, KS. October, 2015.
- **Taylor, J.M.** "From the Field to the Lab: Perspectives on Head Injury from a Former Football Player and Current Scientist." Community of Reason Seminar Series, University of Missouri-Kansas City, Kansas City, MO. August, 2014.
- **Taylor, J.M.** "Pathophysiology of Traumatic Brain Injury." Neuroscience (PTRS-850) Course, University of Kansas Medical Center, Kansas City, KS. December 2013, November 2012, & November 2011.
- Burghart, M., **Taylor, J.M.**, and Radel, J. "A Novel Tool for Screening of Concussion Symptoms." 35th Annual Student Research Forum, University of Kansas Medical Center, Kansas City, KS. April, 2013.
- **Taylor, J.M.**, Gregory, E., and Berman, N.E.J. "Exercise Promotes Functional Recovery from Traumatic Brain Injury and Increases Erythropoietin Gene Expression." 34th Annual Student Research Forum, University of Kansas Medical Center, Kansas City, KS. March, 2012.
- **Taylor, J.M.** "Sports-Related Head Injuries: Using Exercise to Improve Outcomes." Human Anatomy (BIOL-0141) Course, Kansas City Kansas Community College, Kansas City, KS. March, 2012.

- **Taylor, J.M.** “Sports-Related Concussions.” Science Pioneers: Saturday Science Seminar, Union Station Extreme Screen Theater, Kansas City, MO. February, 2012.
- **Taylor, J.M.**, and Blochlinger, N. “Spinal Cord Injury and Exercise: Part 2.” Every Step Counts; Spinal Cord Injury Recovery Center Employee Training, College Station, TX. May, 2008.
- **Taylor, J.M.**, and Blochlinger, N. “Spinal Cord Injury and Exercise: Part 1.” Every Step Counts; Spinal Cord Injury Recovery Center Employee Training, College Station, TX. April, 2008.
- **Taylor, J.M.** “Drugs, Supplements, and the Athlete.” Professional Fitness Institute Boot Camp and NSCA-CPT Test Review, Las Vegas, NV. February, 2007.
- **Taylor, J.M.** “Training Clients with Orthopedic, Injury, and Rehabilitation Concerns.” Professional Fitness Institute Boot Camp and NSCA CPT Test Review, Las Vegas, NV. February, 2007.
- **Taylor, J.M.** “Initial Client Consultation, Health Appraisal, and Fitness Assessment.” Professional Fitness Institute Boot Camp and NSCA CPT Test Review, Las Vegas, NV. December, 2006.
- **Taylor, J.M.** “Exercise Recommendations for Clients with Nutritional and Metabolic Concerns.” Professional Fitness Institute Boot Camp and NSCA CPT Test Review, Las Vegas, NV. December, 2006.
- **Taylor, J.M.** “Resistance Training Adaptations and Program Design.” Professional Fitness Institute Boot Camp and NSCA CPT Test Review, Las Vegas, NV. October, 2006.
- **Taylor, J.M.** “Aerobic Endurance Training Adaptations and Program Design.” Professional Fitness Institute Boot Camp and NSCA CPT Test Review, Las Vegas, NV. October, 2006.
- **Taylor, J.M.** “Fundamentals of Resistance Training.” Professional Fitness Institute Boot Camp and NSCA CPT Test Review, Las Vegas, NV. August, 2006.
- **Taylor, J.M.** “Plyometric and Speed Training Program Design.” Professional Fitness Institute Boot Camp and NSCA CPT Test Review, Las Vegas, NV. August, 2006.

Poster Presentations:

- **Taylor, J.M.**, Gregory, E., and Berman, N.E.J. “Changing the Outcome of Traumatic Brain Injury in Mice: No Genes, No Drugs.” 32nd Annual National Neurotrauma Symposium, sponsored by the National Neurotrauma Society. San Francisco Marriot Marquis, San Francisco, CA. June, 2014.
- Burghart, M., **Taylor, J.M.**, and Radel, J. “Sideline Screening for Balance and Neurocognition- there’s an app for that…” 2013 Sports Neuropsychology Society Annual Meeting and Symposium. Double Tree by Hilton Hotel Bloomington, Minneapolis, MN. May, 2013.
- **Taylor, J.M.**, Gregory, E., and Berman, N.E.J. “Chronic Aerobic Exercise Training Performed Prior to Traumatic Brain Injury (TBI) Increases Post-TBI Vascular Endothelial Growth Factor-A (VEGF-A) Gene Expression and Improves Locomotor Recovery.” Society for Neuroscience 42nd Annual Meeting, sponsored by the Society for Neuroscience. Morial Convention Center, New Orleans, LA. October, 2012.
- **Taylor, J.M.**, Kelley, B., Gregory, E., and Berman, N.E.J. “Expression of Neuroprotective Globin Genes Following Traumatic Brain Injury in Adult Mice.” 29th Annual National Neurotrauma Symposium, sponsored by the National Neurotrauma Society. Westin Diplomat Resort and Spa, Hollywood, FL. July, 2011.
- Call, E., **Taylor, J.M.**, and Billinger, S.A. “Gender Differences in Hemodynamic and Cardiopulmonary Responses at Peak Oxygen Uptake in People with Chronic Stroke.” Exercise and Physical Activity in Aging Conference, sponsored by the American Physical Therapy Association. University of Indianapolis, Indianapolis, IN. July, 2010.

Affiliations:

2012 – Present	Member of the Society for Neuroscience
2006 – Present	Member of the National Strength and Conditioning Association (NSCA)
2003 – Present	Member of the American College of Sports Medicine (ACSM)
2003 – Present	Member of the American Council on Exercise (ACE)